



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: PAHRUMP UTILITY COMPANY, INC.

5250 HAFEN RANCH RD
PAHRUMP, NV 89061

Permit Number: NS0091004

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: ARTESIA AT HAFEN RANCH WWRF1, NYE
6591 JANE AVENUE, PAHRUMP, NV 89061
LATITUDE: 36.127389, LONGITUDE: -115.930306
TOWNSHIP: 21 S, RANGE: 54 E, SECTION: 17

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	INFLUENT	Internal Outfall		36.1270	-115.93	GROUNDWATER
002	EFFLUENT	External Outfall		36.1240	-115.93	GROUNDWATER
003	MONITORING WELL 1 (MW - 1)	Monitoring Well		36.12681520	-115.930594	GROUNDWATER
004	MONITORING WELL 2 (MW - 2)	Monitoring Well		36.12412670	-115.931127	GROUNDWATER
005	MONITORING WELL 3 (MW - 3)	Monitoring Well		36.12528570	-115.931233	GROUNDWATER
006	MONITORING WELL 4 (MW - 6)	Monitoring Well		36.12418330	-115.929673	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Pahrump Utility Company, Inc. (PUCI), has applied for the renewal of groundwater discharge permit NS0091004 for the Artesia at Hafen Ranch Wastewater Reclamation Facility 1 (WWRF1) located at 6591 Jane Avenue in Pahrump, within Nye County, Nevada. PUCI proposes to continue discharging treated and denitrified wastewater to groundwater of the State via infiltration into ten onsite rapid infiltration basins (RIBs). The total design influent capacity continues to be 0.8 million gallons per day (Mgal/d).

The permit was first issued on November 15, 2011. The most recent permit was issued on April 29, 2020, and expires on April 30, 2025; the permit has been administratively continued since.

Facility Overview

The Permittee owns and operates a MAR-WOOD activated sludge package treatment plant which serves the Pleasant Valley, Burson Ranch, and the Artesia and Cottonwoods developments as well as the Lakeside Casino and RV Park and two elementary schools. The plant currently consists of a manually cleaned bar screen, one anoxic mixing basin, three extended aeration basins, three clarifiers, a chlorine contact chamber, and an aerobic digester. The plant utilizes drying beds to dewater sludge before transporting the dewatered solids to a permitted landfill.

The process begins with the raw sewage influent (Outfall 001) flowing into the headworks, which contain bar

screens that traps most of the bigger solids such as rags, rocks, wipes, or other debris. The influent then flows into the aeration basins, where ammonia nitrogen is reduced through nitrification under aerobic conditions. This is followed by an anoxic zone where nitrate levels are reduced through denitrification, before the flow enters a distribution channel leading into a settling tank or clarifier. The clarified effluent then flows into the contact chamber for disinfection before being discharged through the effluent channel (Outfall 002) for discharge into the onsite RIBs.

The facility completed the construction of a 0.2 Mgal/d expansion during the previous permit cycle, which brings up the total treatable wastewater capacity to 0.8 Mgal/d. The current design of the plant meets the 30-day average effluent limits of 30 mg/L 5-day biological oxygen demand (BOD₅), 30 mg/L total suspended solids (TSS), and 10 mg/L total nitrogen (TN).

In 2006, the Bureau of Water Pollution Control (BWPC) approved plans for the proposed expansion of the plant to a design influent capacity of 2.6 Mgal/d. The approved expansion included a new 628,000 gallon dualflow equalization chamber, the installation of a new odor controlled headworks, and possibly adding two disc filters (one in service and one on standby). Effluent from the expansion had been approved to be discharged into the existing 10 RIBs; 16 additional RIBs (26 total) were also approved as part of the expansion if needed. However, an unexpected downturn in the housing market growth has slowed housing development in the Pahrump area; therefore, the expansion was never constructed. Due to the extended time frame since the initial approval, the BWPC is requesting the Permittee submit updated plans for review and approval before construction of the expansion takes place. Once the plans have been approved by the BWPC, the Permittee may request a modification to their permit to increase the flow from 0.8 Mgal/d to 2.6 Mgal/d.

In case of power failure, the facility owns and maintains a 500 kilowatt (kW) backup generator capable of running the entire plant, the influent lift station, and future expansion.

Outfall Summary

Outfall 001 – This internal outfall is for measuring the domestic sewage (influent) entering the plant.

Outfall 002 – This external outfall is for measuring the discharged treated effluent from the treatment plant.

Outfall 003 – This downgradient monitoring well outfall (MW-1) is located at the west side of the WWRF1.

Outfall 004 – This downgradient monitoring well outfall (MW-2) is located at the west side of the RIBs and close to the block wall.

Outfall 005 – This downgradient monitoring well outfall (MW-3) is located southwest of the drying beds.

Outfall 006 - This upgradient monitoring well outfall (MW-6) is located east of RIB # 2.

Facility Upgrades since last issued permit

Since the last permit was issued, the Permittee has made the following improvements to the WWRF1:

- Six additional drying beds adjacent to the existing beds to accommodate longer drying times during winter conditions.
- Completed the construction of a 0.2 Mgal/d treatment facility expansion, which brings up the official total treatable wastewater capacity to 0.8 Mgal/d. The latest site inspection report details that the newly constructed facility is maintained offline until further housing development.
- Retrofitted all RIBs with additional infiltration trenches.

Solids Handling

The facility currently has nine concrete drying beds with solid concrete bottoms. Each bed can contain up to 4,000 gallons of sludge, resulting in a sludge layer approximately 1 inch thick. Drying time varies by season; during favorable summer weather, the sludge can dry completely in about three days, while in winter it may

take approximately seven to ten days. If needed, WWRF1 contacts C&S Waste Solutions in Pahrump, Nevada, to haul sludge to their dewatering facility. The resulting solids are then disposed of at the local landfill by C&S Waste Solutions. All solids disposal activities are documented in detail and reported at the end of the year.

Effluent Management and Reuse

Treated effluent is discharged to the ten onsite RIBs for evaporation/percolation with no applicable reuse.

Design Flow (and basis) and Measurement & Current Capacity

The WWRF1 completed a portion of its Phase II expansion plan which increased the designed daily maximum influent flow rate to 0.8 Mgal/d. NetDMR data review (April 2020 to December 2025) shows the average Outfall 001 flow rate as 0.23 Mgal/d with the highest recorded flow of 0.30 Mgal/d.

Pretreatment Program

The Artesia at Hafen Ranch WWRF1 does not meet the U.S. EPA's guidelines requiring them to have a pretreatment program.

Operations & Maintenance (O&M) Manual status

Artesia at Hafen Ranch WWRF1's Operation and Maintenance (O&M) Manual was last reviewed and approved in July 2017. The Technical, Compliance, and Enforcement (TCE) Branch of the Bureau of Water Pollution Control (BWPC) requires O&M Manuals to be updated every ten (10) years from the approval date of the previous O&M Manual.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from April 2020 to December 2025, was reviewed as part of this permit renewal process. During this monitoring period, the wastewater treatment plant discharged secondary treated, denitrified, and disinfected effluent water.

Notes:

mg/L: Milligrams per Liter

S.U.: Standard Units

MPN/100mL: Most Probable Number per 100 Milliliters

TDS: Total Dissolved Solids

The following averages from all outfalls are based on the numbers reported during the same reporting period stated above:

Outfall 001 (Influent):

- BOD₅ = 266.72 mg/L
- TSS = 376.66 mg/L
- Flow rate (30-day Average) = 0.23 Mgal/d
- Flow rate (Daily Maximum) = 0.28 Mgal/d

Outfall 002 (Effluent):

- BOD₅ = 2.98 mg/L
- TSS = 1.28 mg/L
- Nitrogen = 4.96 mg/L
- pH = 7.49 S.U.

The calculated percent removal for both BOD₅ and TSS from Outfall 002 during the reviewed period were 99% and 100% respectively.

Outfall 003 (MW-1):

- Chloride = 33.1 mg/L

- Nitrogen = 4.40 mg/L
- TDS = 648.2 mg/L
- Coliform = 0.60 MPN/100mL
- Depth to water level below land surface = 76.79 feet
- Water level relative to Mean Sea Level = 2,703 feet

Outfall 004 (MW-2):

- Chloride = 254.4 mg/L
- Nitrogen = 6.66 mg/L
- TDS = 794.4 mg/L
- Coliform = 0.60 MPN/100mL
- Depth to water level below land surface = 75.79 feet
- Water level relative to Mean Sea Level = 2,695 feet

Outfall 005 (MW-3):

- Chloride = 227.3 mg/L
- Nitrogen = 7.0 mg/L
- TDS = 859.0 mg/L
- Coliform = 0.50 MPN/100mL
- Depth to water level below land surface = 73.71 feet
- Water level relative to Mean Sea Level = 2,717 feet

Outfall 006 (MW-6):

- Chloride = 253.6 mg/L
- Nitrogen = 6.95 mg/L
- TDS = 816.2 mg/L
- Coliform = 0.6 MPN/100mL
- Depth to water level below land surface = 75.44 feet
- Water level relative to Mean Sea Level = 2,703 feet

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. Common pollutants of concern for the treated wastewater and monitoring wells are:

- Effluent: Nitrogen, pH, along with potential inorganic chemicals and metals (Profile 1 constituents).
- Monitoring Wells: Chloride, Nitrogen, and TDS.

Receiving Water

Receiving water is groundwater of the State. Depth to groundwater is approximately 73 feet below ground surface. Groundwater flow direction is to the west southwest.

Historic groundwater monitoring results have shown high concentrations of TDS 3,320 mg/L and chlorides 249 mg/L from upgradient monitoring well (MW-6). Data collected from the same wells during the previous permit cycle reported the highest concentrations of TDS and chlorides of 1,090 mg/L and 317 mg/L respectively. Similarly, downgradient well (MW-5) have historically exhibited concentrations of TDS at 1,780 mg/L and chlorides at 250 mg/L. Current (2025) downgradient concentrations of TDS are reported at 912 mg/L and chlorides at 233 mg/L from the same well.

Compliance History

The Artesia at Hafen Ranch WWRF1 was in compliance during the reviewed period (April 2020 - December 2025).

Proposed Effluent Limitations

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

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

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	<= 0.8 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER
BOD, 5-day ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	COMPOS
BOD, 5-day ^[1]	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	COMPOS
Solids, total suspended ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	COMPOS
Solids, total suspended ^[1]	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	COMPOS

Notes (WWTP Discharge Limitations Table):

1. BOD, 5-day and TSS should be sampled concurrently when the same parameters are sampled in the effluent (Outfall 002) to determine actual removal rates achieved.

WWTP Discharge Limitations Table for Sample Location 001 (Influent) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Annual Average	<= 0.8 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Monthly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	002	Monthly	DISCRT
pH, minimum	Daily Minimum		>= 6.0 Standard Units (SU)	Effluent Gross	002	Monthly	DISCRT
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
BOD, 5-day ^[3]	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
BOD, 5-day ^[3]	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
Solids, total suspended ^[3]	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
Solids, total suspended ^[3]	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	COMPOS
BOD, 5-day, percent removal	Monthly Minimum ^[1]	>= 85 Percent (%)		Effluent Gross ^[2]	002	Monthly	CALCTD
Solids, suspended percent removal	Monthly Minimum ^[1]	>= 85 Percent (%)		Effluent Gross ^[2]	002	Monthly	CALCTD

Notes (WWTP Discharge Limitations Table):

1. The monthly minimum is actually a 30-day average.
2. Percent removal to be compared to corresponding samples taken from the influent and the effluent.
3. BOD, 5-day and TSS should be sampled concurrently when the same parameters are sampled in the influent (Outfall 001) to determine actual removal rates achieved.

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Annually^[1]

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	002	Annual	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Aluminum, dissolved (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Antimony, dissolved (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Arsenic, dissolved (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Barium, dissolved (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Cadmium, total (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Calcium, total (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Chromium, total (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Annually^[1]

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	002	Annual	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Iron, total (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Magnesium, dissolved (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Manganese, dissolved (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Nickel, total (as Ni)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Phosphorus, total (as P)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Annually¹

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Potassium, dissolved (as K)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Sodium, dissolved (as Na)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Sulfate, total (as SO ₄)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Thallium, dissolved (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Annual	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Annual sampling shall be conducted in the fourth quarter of each calendar year.

Groundwater Monitoring Wells Table for Sample Location 003 (Monitoring Well 1) To Be Reported Annually^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Annual	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Annual	DISCRT
Water level relative to mean sea level ^[2]	Daily Maximum	M&R Feet (ft)		Groundwater	003	Annual	CALCTD
Depth to water level ft below landsurface ^[3]	Daily Maximum	M&R Feet (ft)		Groundwater	003	Annual	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Annual sampling shall be conducted in the 4th quarter of each calendar year.
2. Groundwater elevation (ft. AMSL)
3. Depth to groundwater, ft

Groundwater Monitoring Wells Table for Sample Location 004 (Monitoring Well 2) To Be Reported Annually^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Annual	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Annual	DISCRT
Water level relative to mean sea level ^[2]	Daily Maximum	M&R Feet (ft)		Groundwater	004	Annual	CALCTD
Depth to water level ft below landsurface ^[3]	Daily Maximum	M&R Feet (ft)		Groundwater	004	Annual	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Annual sampling shall be conducted in the fourth quarter of each calendar year.
2. Groundwater elevation (ft. AMSL).
3. Depth to groundwater, ft.

Groundwater Monitoring Wells Table for Sample Location 005 (Monitoring Well 3) To Be Reported Annually^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Annual	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Annual	DISCRT
Water level relative to mean sea level ^[2]	Daily Maximum	M&R Feet (ft)		Groundwater	005	Annual	CALCTD
Depth to water level ft below landsurface ^[3]	Daily Maximum	M&R Feet (ft)		Groundwater	005	Annual	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Annual sampling shall be conducted in the 4th quarter of each calendar year.
2. Groundwater elevation (ft. AMSL).
3. Depth to groundwater, ft.

Groundwater Monitoring Wells Table for Sample Location 006 (Monitoring Well 6) To Be Reported Annually^[1]

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Annual	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Annual	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Annual	DISCRT
Water level relative to mean sea level ^[2]	Daily Maximum	M&R Feet (ft)		Groundwater	006	Annual	CALCTD
Depth to water level ft below landsurface ^[3]	Daily Maximum	M&R Feet (ft)		Groundwater	006	Annual	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Annual sampling shall be conducted in the 4th quarter of each calendar year.
2. Groundwater elevation (ft. AMSL).
3. Depth to groundwater, ft.

Summary of Changes From Previous Permit

The requirement to test for 30-day average total nitrogen was removed from for Outfall 002 (effluent) due to insufficient data point that can accurately represent this average.

The monthly monitoring requirements for BOD₅ and TSS, previously expressed as 7-day average limits, are revised to daily maximum for Outfall 001 and Outfall 002 to maintain consistency with the similar permitted facilities in Nevada.

Annual reported fecal general coliform from all monitoring wells (MWs) have been low and the bureau has removed the requirement to report this parameter for all MWs.

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:

- 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 for influent is limited to Monitor and Report (M&R) Mgal/d.
- Daily maximum flow rate for influent is limited to ≤ 0.8 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 limits 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 NAC 445A.243, which states, "In establishing an effluent limitation to carry out the policy of this State set forth in Nevada Revised Statutes (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 requirement to monitor the effluent for Profile 1 annually is included to evaluate the quality of the effluent and determine whether the effluent has potential to impact the receiving water. 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 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." Although cyanide and uranium are not expected to be present in the effluent, the permit requires the Permittee to sample these constituents annually because they are included in the Profile 1 list.

Data collection from Outfalls 003 through 006 for the facility's monitoring wells continue to be required by the permit in order to collect more data for future permitting decisions. Data review shows that some averages of reported values are higher than historical averages; therefore, continued monitoring is required to assess the level of treatment being provided, and to ensure that groundwater is not degraded. No limits have been set due to the historically poor quality of the groundwater and because the data being collected will be for informational purposes only.

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 Nevada Revised Statute (NRS) 445A.520 and NRS 445A.565 and is consistent with the federal antidegradation policy found at Title 40 in the Code of Federal Regulations (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.

Special Conditions

See table below:

SA – Special Approvals / Conditions Table

Item #	Description
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Item #	Description
1	The Permittee is required to continue to submit their Discharge Monitoring Reports (DMRs) through the Bureau of Water Pollution Control's (BWPC) Nevada NetDMR system.
2	Groundwater monitoring sampling for this facility has been added as a requirement in order to collect data for future permitting decisions. Therefore, Part B.MW.3 and B.MW.4 will not apply to this permit at this time.
3	In 2006, the Permittee was approved to expand the capacity of the facility to 2.6 Mgal/d; however, the expansion never took place. Similar to detail provided in the previous permit, the BWPC will require the Permittee to submit updated plans, stamped by a Nevada registered Professional Engineer, for review and approval due to the extended time frame. Once the plans have been approved by the BWPC, the Permittee may request a major modification to their permit to increase the flow from 0.8 Mgal/d to 2.6 Mgal/d. The major modification must be issued prior to construction commencing.

Discharges From Future Outfalls/ Planned Facility Changes

The Permittee anticipates no discharges from any future outfalls or planned facility changes.

Corrective Action Sites

There are no Bureau of Corrective Actions (BCA) remediation sites within a one-mile radius of the WWRF1.

Wellhead Protection Program

The closest Public Water System (PWS) wells are located north northeast and cross gradient of the RIBs at a distance of approximately 5,300 feet. To the west and downgradient of the RIBs are PWS wells at distances of 4,600 feet or greater. To the east and upgradient of the RIBs are PWS wells at distances of 7,400 feet or greater. The proposed discharge is not likely going to affect any PWS wells due to the confined nature of the aquifer and the distances from the RIBs to the PWS wells.

The RIBs are not located within any Drinking Water Protection Area or Wellhead Protection Area.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit for review and approval two copies (one electronic and one hard copy) of an Operation and Maintenance (O&M) Manual. The O&M Manual shall follow the Division's guidance document, WTS-2: <i>Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant</i> , and be prepared and wet stamped by a licensed, qualified Nevada engineer (P.E.).	8/16/2027

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	7/28/2026
2	Annual DMRs	Annually	1/28/2027

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. **4/29/2026**, 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: **Florida Nasategay**

Date: **3/24/2026**

Title: **Staff I, Associate Engineer**