FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: DESERT UTILITIES, INC

4060 N. BLAGG ROAD, SUITE 110
PAHRUMP, NV 89060

Permit Number: NS0091044

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: DESERT UTILITIES WASTEWATER TREATMENT PLANT # 1, NYE
900 W. SIMKINS ROAD, PAHRUMP, NV 89060
LATITUDE: 36.279444, LONGITUDE: -116.031419
TOWNSHIP: 19 S, RANGE: 53 E, SECTION: 21

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	INFLUENT	Internal Outfall		36.2795	-116.0314	GROUNDWATER
002	EFFLUENT	External Outfall		36.2793	-116.0314	GROUNDWATER
004	MONITORING WELL # MW-1	Monitoring Well		36.2798	-116.0324	GROUNDWATER
005	MONITORING WELL # MW-2	Monitoring Well		36.2785	-116.0324	GROUNDWATER
006	MONITORING WELL # MW-3	Monitoring Well		36.2797	-116.0304	GROUNDWATER

Permit History/Description of Proposed Action
The Permittee, Desert Utilities, Inc., has applied for the renewal of Permit NS0091044 for the Desert Utilities Wastewater Treatment Plant (WWTP) #1, at 900 W. Simkins Road, located in Pahrump, within Nye County, Nevada. The Permittee proposes to continue to discharge reclaimed water to groundwaters of the State via multiple rapid infiltration basins (RIBs).

This permit was first issued on May 18, 1997. The most recent permit was issued on May 5, 2021, and expires on April 30, 2026.

Facility Overview
The Permittee owns and operates a MAR-WOOD activated sludge package treatment plant which receives influent (Outfall 001) from the north end of Pahrump, including the Desert Trails Subdivision, and east along Simkins Road up to Highway 160. The Desert Utilities WWTP #1 has a design treatment capacity of 0.175 million gallons per day (Mgal/d). There are approximately 425 residential and 11 commercial connections. The WWTP #1 consists of two (2) plants. The main portion of the MAR-WOOD plant includes a rag catch basin, a manually cleaned bar screen, an anoxic basin, two extended aeration basins, and a clarifier. The original MAR-WOOD plant was reconfigured as an aerobic digester and a waste activated sludge (WAS) storage tank.

Domestic sewage flows through a rag catch basin that catches small debris (rags, napkins) before entering the wet well. Domestic sewage flows through a set of mesh baskets that traps the small debris. Next, the

domestic sewage flows to the lift station, which is about 25-feet deep and has duplex pumps that alternate between pumping cycles. There are floats to control the on/off functions of the pumps. The commercial connections in the service area include three grease interceptors, which are serviced annually.

The main treatment plant consists of a coarse bar screen and compartments for anoxic mixing (denitrification), extended aeration and clarification. To prevent small animal intrusion, the safety handrails have been covered with wire mesh. This mesh material and filter fabric is also hand lowered in the clarifier as needed for debris removal (skimming).

There are two aeration basins that use two blowers to provide air, and they work on the following schedule: during the day the blowers work for 30 minutes, then are shut off for 15 minutes. During the night, the schedule is reversed so the blowers provide air for 15 minutes and then are shut off for 30 minutes. Air is usually provided to the basins for approximately 11-13 hours per day. A backup generator is onsite to provide power in case of a power outage. Motor controls are housed in steel cabinets that can be locked. A small shed is used as an office and has controls that measure flows.

The original MAR-WOOD treatment plant, that has a smaller capacity than the current plant, now serves as an aerobic digester and a WAS storage tank. The WAS is wasted daily from the plant and allowed to settle out. Decant water is pumped from the digester back into the anoxic zone for further treatment. Every month, Desert Utilities has a pump truck contractor out to the WWTP #1 to remove approximately 4,500 gallons of sludge for disposal.

Treated effluent (Outfall 002) is simultaneously discharged to the three onsite RIBs. The RIBs are underlain by a clay layer approximately 18 feet below the natural ground surface which inhibited their infiltration capacity. Therefore, the Permittee placed drainage holes, approximately 35 feet in depth, in each corner of the basins, running line to the four corners of each basin and backfilled them with small gravel. These holes allow the treated wastewater to drain from the RIBs to the groundwater. The effluent flows can be controlled using 90-degree elbows. The static water level around the Desert Utilities WWTP #1 is approximately 72--feet deep; thus, allowing for a sufficient buffer to further treat the treated effluent before it connects with the groundwater.

There are also three monitoring wells (MWs) located at the Desert Utilities WWTP #1, being monitoring wells MW - 1 (Outfall 004), MW - 2 (Outfall 005), and MW - 3 (Outfall 006).

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

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

Outfall 003 – Outfall Removed. This outfall is no longer being reported and was for proposed reuse irrigation applications. It was removed from the permit during the last renewal cycle (2021).

Outfall 004 – This downgradient monitoring outfall (MW-1) is located at the west side of the Desert Utilities WWTP #1.

Outfall 005 – This downgradient monitoring well outfall (MW-2) is located southwest of the Desert Utilities WWTP #1.

Outfall 006 – This upgradient monitoring well outfall (MW-3) is located east of the Desert Utilities WWTP #1.

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

Solids Handling
WAS is removed and taken to either to Joe’s Sanitation Service's disposal site or to Utilities Inc. Plant #3

where it is processed and then later hauled off to Joe’s Sanitation Service's disposal site.

Effluent Management and Reuse
Treated effluent is discharged to the three onsite RIBs for evaporation/percolation with no applicable reuse.

Design Flow (and basis) and Measurement & Current Capacity
Influent/Incoming Domestic Sewage:
The Desert Utilities WWTP #1 was designed for an average 30-day incoming (influent) flow rate of 0.176 Mgal/d and a daily maximum flow rate of 0.438 Mgal/d.

Effluent/Discharged Treated Wastewater:
The reported long-term average discharge (effluent) flow rate for Outfall 002 was 0.037 Mgal/d. The reported average daily maximum discharge rate was 0.046 Mgal/d.

Based on the incoming flow rates reported, the Desert Utilities WWTP #1 is at approximately 21% capacity.

Pretreatment Program
The Desert Utilities WWTP #1 does not meet the US. EPA’s guidelines requiring them to have a pretreatment program.

Operations & Maintenance (O&M) Manual status
Desert Utilities WWTP #1’s Operation and Maintenance (O&M) Manual was last reviewed and approved in March 2001. The Technical, Compliance, and Enforcement Branch of the Bureau of Water Pollution Control requires O&M Manuals to be updated every ten (10) years, with an updated O&M Manual being due 90 days from the permit reissuance date.

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from August 2020 to October 2025, was reviewed as part of this permit renewal process. The following averages are based on the numbers reported during that same reporting period stated above:

Notes:
mg/L = Milligrams per Liter
Mgal/d = Million Gallons per Day
S.U. = Standard Units
BOD5 = Biochemical Oxygen Demand, 5-Day
TDS = Total Dissolved Solids
TSS = Total Suspended Solids

Outfall 001 (Influent/Domestic Sewage):
BOD5: 67.59 mg/L
Flow Rate: 0.05 Mgal/d
TSS: 51.10 mg/L

Outfall 002 (Effluent):
BOD5: 4.73 mg/L
Flow Rate: 0.05 Mgal/d
Nitrogen: 4.14 mg/L
pH: 7.43 S.U.
TSS: 6.21 mg/L

Outfall 004 (MW-1):
Chloride: 90.78 mg/L
Depth to Water Level below Land Surface: 74.10 Feet
Nitrogen: 4.17 mg/L
TDS: 548 mg/L

Water Level relative to Mean Sea Level: 2,527 Feet

Outfall 005 (MW-2):
Chloride: 88.28 mg/L
Depth to Water Level below Land Surface: 74.25 Feet
Nitrogen: 3.95 mg/L
TDS: 498 mg/L
Water Level relative to Mean Sea Level: 2.427 Feet

Outfall 006 (MW-3):
Chloride: 6.81 mg/L
Depth to water level below land surface: 158.17 Feet
Nitrogen: 5.48 mg/L
TDS: 1099.33 mg/L
Water Level relative to Mean Sea Level: 2,430 Feet

The estimated percentages of removal, calculated from the concentrations reported for both BOD5 and TSS during the period reviewed, were 93% for BOD5 and 88% for TSS.

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 – BOD5, Nitrogen, pH, General Fecal Coliform, 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 72 feet below ground surface. Groundwater flow direction is to the southwest.

Compliance History
The Desert Utilities WWTP #1 was in compliance during the period reviewed (August 2020 - October 2025) with the exception of the compliance schedule requirement of an updated O&M Manual still pending. An updated O&M Manual shall be due within three months from the proposed permit issuance date.

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

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	<= 0.175 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	CALCTD[1]
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	CALCTD[1]
BOD, 5-day[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	DISCRT
BOD, 5-day[2]	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	DISCRT
Solids, total suspended[2]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	DISCRT
Solids, total suspended[2]	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Monthly	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Flow is calculated using influent lift station timers.
2. 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[1]	M&R Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Annual	CALCTD

Notes (WWTP Discharge Limitations Table):

1. Rolling annual average.

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

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	CALCTD
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	002	Continuous	CALCTD
BOD, 5-day[1]	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
BOD, 5-day	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
Solids, total suspended	Daily Maximum		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
Solids, total suspended	30 Day Average		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	002	Monthly	DISCRT
BOD, 5-day, percent removal	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD
Solids, suspended percent removal	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	002	Monthly	CALCTD

Notes (WWTP Discharge Limitations Table):

1. 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 Quarterly

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
pH, maximum	Daily Maximum		<= 9.0 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
pH, minimum	Daily Minimum		>= 6.0 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Alkalinity, bicarbonate (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Alkalinity, total (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Aluminum, dissolved (as Al)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Antimony, dissolved (as Sb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Arsenic, dissolved (as As)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Barium, dissolved (as Ba)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Calcium, dissolved (as Ca)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Chromium, dissolved (as Cr)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Copper, dissolved (as Cu)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Iron, dissolved (as Fe)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Magnesium, dissolved (as Mg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Manganese, dissolved (as Mn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Potassium, dissolved (as K)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Silver, dissolved (as Ag)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 002 (Effluent) To Be Reported Once During The Permit Term

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Sodium, dissolved (as Na)	Daily Maximum		Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Sulfate, total (as SO4)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Thallium, dissolved (as Tl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT

Groundwater Monitoring Wells Table for Sample Location 004 (Monitoring Well 1) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**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	Quarterly	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum		M&R Feet (ft)	Groundwater	004	Quarterly	VISUAL
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Water level relative to mean sea level[2]	Daily Maximum		M&R Feet (ft)	Groundwater	004	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater.
2. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 005 (Monitoring Well 2) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**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	Quarterly	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum		M&R Feet (ft)	Groundwater	005	Quarterly	DISCRT
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Water level relative to mean sea level[2]	Daily Maximum		M&R Feet (ft)	Groundwater	005	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater.
2. Groundwater elevation above mean sea level (AMSL).

Groundwater Monitoring Wells Table for Sample Location 006 (Monitoring Well 3) To Be Reported Quarterly

	Discharge Limitations			Monitoring Requirements			
Parameter	**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	Quarterly	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum		M&R Feet (ft)	Groundwater	006	Quarterly	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Water level relative to mean sea level[2]	Daily Maximum		M&R Feet (ft)	Groundwater	006	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Depth to groundwater.
2. Groundwater elevation above mean sea level (AMSL).

Summary of Changes From Previous Permit
Under Outfall 002, To be Reported Quarterly, the following parameter was deleted:

DELETED - Nitrogen, total, with a "30-Day Average" Base. Current divisional reporting standards do not require that average be reported.

ADDED - Outfall 002, To Be Reported Once a Permit Term, with the following parameters:

Profile 1 constituents were added with a "Daily Maximum" Base, a "M&R Milligrams per Liter (mg/L)" Concentration, an "Effluent Gross" Monitoring Location, a "002" Sample Location, a "Once per Permit Term" Measurement Frequency, and a "Discrt" Sample Type.

Outfalls 004 (MW-1), 005 (MW-2), and 006 (MW-3), the following changes were made:

CHANGED - Depth to water level ft below landsurface, with a "Value" Base, to a "Daily Minimum" Base, with the rest of the monitoring requirements remaining unchanged.

CHANGED - Water level relative to mean sea level, with a "Value" Base, changed to a "Daily Maximum" Base, with the rest of the monitoring requirements remaining unchanged.

Technology Based Effluent Limitations
Technology based effluent limitations (TBELs) are required as promulgated by the United States (U.S.) 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, suspended solids in the effluent, and ensuring pH remains within regulatory limits. 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 discharges from treatment facilities, and has applied the same 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-dau 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 M&R Mgal/d.

Daily maximum flow rate for influent is limited to <=0.175 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 once per permit term 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 once per term because they are included in the Profile 1 list and have not been previously tested.

Influent and Effluent Monitoring Requirements:

Monthly influent and effluent monitoring for BOD5 and TSS are included to assess the treatment performance of the Desert Utilities WWTP #1. A monthly sampling frequency for BOD5 and TSS is sufficient for determining compliance with the applicable effluent limitations. Percent removal requirements for BOD5 and TSS are established in the permit as monthly average minimums of 85%, based on secondary treatment standards.

Some wastewater treatment processes can increase or decrease wastewater pH; therefore, quarterly monitoring for pH is included in assessing compliance with effluent limits of 6.0 S.U. as a daily minimum and 9.0 S.U. as a daily maximum.

Anti-backsliding
None of the proposed permit limits were changed to a less restrictive limit compared to those in the previous permit with the exception of the removal of the 30-day average quarterly reporting requirement for Nitrogen. No backsliding will be caused by this removal as the daily maximum for Nitrogen is still being reported and allows for this permit to adhere to curent Division reporting standards.

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. 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 wastewater discharged within the compliance limits of the proposed permit.

Special Conditions
There are no special approvals/conditions applicable to this proposed permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Discharges From Future Outfalls/ Planned Facility Changes
There are no planned future outfalls or facility changes.

Corrective Action Sites
There are no active Bureau of Corrective Actions (BCA) remediation sites within a one-mile radius of the Desert Utilities WWTP #1.

Wellhead Protection Program
The outfalls are not located within a Wellhead Protection Area, which represents an approximate 10-year capture zone of a well, or within a Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well.

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 the Division's guidance document, WTS-2 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.).	7/1/2026

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 Report	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. **2/27/2026,** a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator.

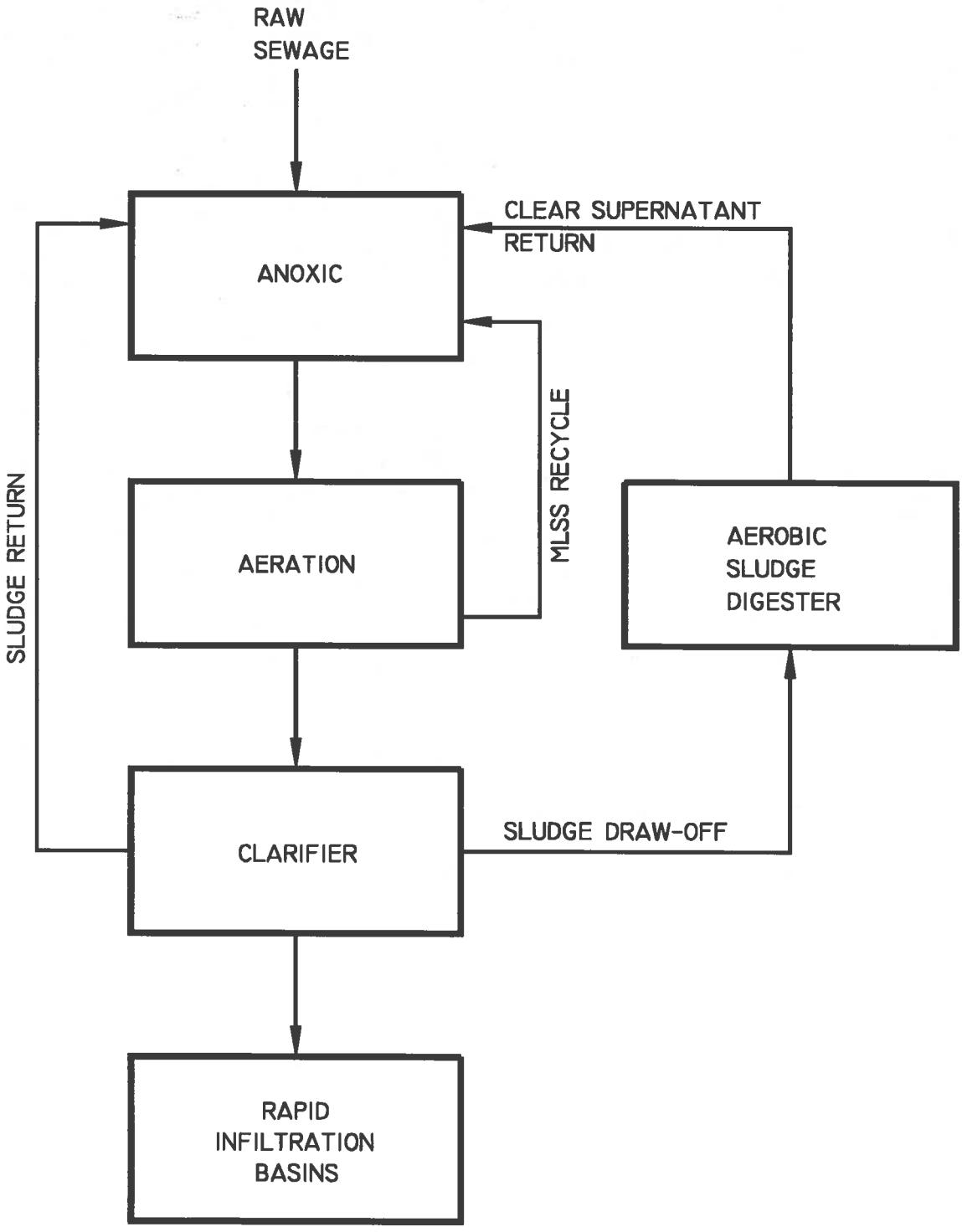
A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator of EPA Region IX or any interested agency, person or group of persons. The request must be filed within the comment period and must indicate 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: **Melissa Hanson**
Date: **1/22/2026**
Title: **Staff II Engineer**



MAR-WOOD
Peoria, Arizona

FLOW DIAGRAM