



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: BEATTY WATER & SANITATION DISTRICT

P.O. BOX 99
BEATTY, NV 89003

Permit Number: NS0070010

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: BEATTY WASTEWATER TREATMENT PLANT, NYE
HWY 95 3/4 MILES SOUTH OF BEATTY, BEATTY, NV 89003
LATITUDE: 36.8950, LONGITUDE: -116.753889
TOWNSHIP: 12 S, RANGE: 47 E, SECTION: 18

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	INFLUENT	Internal Outfall		36.895070	-116.753150	NOT APPLICABLE
002	EFFLUENT	External Outfall		36.872222	-116.756944	GROUNDWATER
003	MONITORING WELL # 1	Monitoring Well		36.89502790	-116.753891	GROUNDWATER
004	EMERGENCY PONDS	External Outfall		36.8950	-116.753889	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Beatty Water & Sanitation District, has applied for the renewal of Permit NS0070010 for the Beatty Wastewater Treatment Facility (BWWTF), at Highway 95, a quarter mile south of Beatty, being within Nye County, Nevada. The Permittee proposes to continue to discharge treated wastewater to groundwater of the State via rapid infiltration basins (RIBs).

This permit was first issued on May 29, 1993. The most recent permit was issued on April 24, 2012, and expired on April 23, 2017; the permit has been administratively continued since.

Facility Overview

The BWWTF is located on Highway 95, a quarter mile south of Beatty, within Nye County, Nevada. The BWWTF receives domestic sewage from a population of approximately 1,100 residents and 425 sewer connections. The wastewater influent is derived from domestic and commercial sources with no reported industrial facilities. The Permittee proposes to continue to discharge treated wastewater to groundwater of the State via RIBs.

The BWWTF is made up of two pond systems, each composed of a primary treatment pond and a secondary treatment pond, where the domestic sewage is treated using a facultative process, with an aerobic layer overlying an anaerobic layer. This process allows for partial removal of 5-day Carbonaceous Biochemical Oxygen Demand (CBOD5) and Total Suspended Solids (TSS), along with other pollutants. The treated wastewater is then discharged into the RIBs where additional biological degradation, sorption, and ion exchange occurs as the wastewater percolates through permeable soils. The treatment plant was

designed for an average monthly flow rate of 0.25 million gallons per day (Mgal/d).

Wastewater flows from Beatty via a lift station, through various sewer pipes, to the treatment facility which is located approximately quarter mile south of town. The lift station is located near a small mobile home park on Cottonwood Lane. Most of Beatty's sewer system is made up of a polyethylene pipes, ranging in size from 6 to 10 inches in diameter. Wastewater flows via gravity from the lift station south of Beatty, which in turn pumps wastewater to BWWTF. Wastewater enters the headworks through a static bar screen which is manually cleaned daily. Screened influent flows through a weir into a wet-well equipped with two pumps. The lift station is equipped with a standby generator, and system control and data acquisition (SCADA) telemetry to monitor influent flow, wet well level, and alarm conditions. Flow from the lift station is split between two separate pond systems.

Wastewater is pumped through a flow meter and into a diversion vault, where flows into the ponds (Ponds #1, #2, #3, and #4) is controlled. Pond #1 and Pond #3 are the primary ponds, operated in parallel. Flow is then conveyed through secondary ponds #2 and #4. Each pond is lined with high-density polyethylene (HDPE) and are considered partial-mix ponds, each with a total depth of nine feet and three feet of freeboard. Pond #1 is equipped with an oversized floating 7.5 HP aerator, while Ponds #2, #3, and #4 are each equipped with 5.0 HP mixing aerators. To the south, are two old ponds which are now considered wetlands due to the presence of water and natural vegetation. These old ponds can receive flow in the event of an emergency, by utilizing the emergency diversion vault.

Treated pond effluent is discharged into two RIBs located 1.5 miles south of BWWTF. Previously, effluent was discharged to the RIBs twice per week. Currently, effluent is constantly discharged, at a low flow rate, to maintain a certain height in the secondary ponds. The south and north RIBs are alternated in use, with the unused RIB dried and scarified to prepare for its next use. Key additional processes that occur at the RIBs include nitrification-denitrification for nitrogen removal, filtration and adsorption to remove suspended solids and trace metals, and microbial action to degrade toxic organics.

There is one groundwater monitoring well (MW-1) located downgradient from Ponds #1 and #2, utilized at BWWTF, to monitor potential impacts associated with operations.

Outfall Summary

Outfall 001 – This internal outfall is for measuring the influent entering the plant.

Outfall 002 – This effluent outfall is for measuring the treated effluent discharged from the treatment ponds and into the RIBs.

Outfall 003 – This downgradient monitoring well (MW1) is located near Ponds #1 and #2.

Outfall 004 - This external outfall is measuring any treated effluent discharged to the emergency ponds.

Facility Upgrades since last issued permit

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

Solids Handling

Solids are removed, on an "as needed" basis, and disposed of at the Pahrump landfill. Solids were previously removed from the ponds in 2007.

Effluent Management and Reuse

Treated effluent is discharged to the RIBs for percolation into groundwater of the State. There is no reuse.

Design Flow (and basis) and Measurement & Current Capacity

Note:

M&R = Monitor and Report

The BWWTF was designed for an average monthly flow rate of 0.25 million gallons per day (Mgal/d).

The permitted average 30-day flow rate is 0.25 Mgal/d, with the daily maximum flow rate being changed to 0.25 Mgal/d during this permit renewal. There have been no reported exceedances and the limitations were maintained from the previous permit.

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

The BWWTF's Operation and Maintenance Manual (O&M Manual) was last reviewed and approved in March 21, 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 and being due within ninety (90) days from the permit issuance date.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from July 2020 to June 2025, was reviewed as part of this permit renewal process.

The BWWTF treats domestic sewage from 425 service connections. The following treated wastewater averages were taken from the July 2020 to June 2025 reporting period:

Notes:

ft. = Feet

mg/L = Milligrams per Liter

Mgal/d = Million Gallons per Day

S.U.= Standard Units

CBOD5 = Carbonaceous Biochemical Oxygen Demand, 5-Day

N = Nitrogen

TDS = Total Dissolved Solids

TSS = Total Suspended Solids

Outfall 001 (Influent):

Flow Rate: 0.14 Mgal/d

Outfall 002 (Effluent):

CBOD5: 16.43 mg/L

Nitrate as N: 1.80 mg/L

Nitrogen: 19.77 mg/L

pH: 7.4 S.U.

TSS: 73.60 mg/L

Outfall 003 (Monitoring Well #1):

Chloride: 94.08 mg/L

Depth to water level ft. below land surface: 166.5 Feet

Nitrogen: 2.17 mg/L

TDS: 883 mg/L

Based on the most recent lab results submitted through NetDMR for Outfall 001 (Influent), being April 22, 2025, calculated removal rates are approximately 72% for CBOD and 78% 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 from wastewater treatment facilities are Chloride, Fecal Coliform, Nitrogen, pH, and TDS, along with potential inorganic chemicals and metals (Profile 1 contaminants).

Receiving Water

Discharge is to groundwater of the State via percolation in the RIBs. Groundwater at the RIBs is reported to be more than 200 feet below ground surface. Based on this depth, groundwater monitoring wells are not proposed at the RIB location. Groundwater at the BWWTF has been reported to be as shallow as 6 feet below ground surface; therefore, groundwater monitoring is required at the treatment plant. Groundwater flow at the BWWTF is reported to be to the south.

Compliance History

The facility has been in compliance between the years reviewed for this permit with consistent reporting of their effluent lab results, but have not submitted the required reporting of their influent concentrations.

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-Internal Outfall) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	Daily Maximum	<= 0.25 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER
Flow rate	30 Day Average	<= 0.25 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	001	Continuous	METER

WWTP Discharge Limitations Table for Sample Location 001 (Influent-Internal Outfall) To Be Reported Quarterly^{[1][2]}

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
BOD, carbonaceous, 05 day, 20 C	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Quarterly	DISCRT
BOD, carbonaceous, 05 day, 20 C	Quarterly Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Quarterly	DISCRT
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Quarterly	DISCRT
Solids, total suspended	Quarterly Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	001	Quarterly	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Sampling for CBOD, 5-day and total suspended solids (TSS) should be done concurrently when effluent (Outfall 002) is sampled to determine the exact percentages of removal achieved. If there is no discharge from Outfall 002, then no sampling of the influent is required.
2. Sampling should be done prior to any treatment being done.

WWTP Discharge Limitations Table for Sample Location 002 (Effluent-External Outfall) To Be Reported Quarterly^[1]

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
BOD, carbonaceous, 05 day, 20 C	Daily Maximum		<= 60 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
BOD, carbonaceous, 05 day, 20 C	Quarterly Average		<= 40 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
pH, maximum	Daily Maximum ^[2]		<= 9.0 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
pH, minimum	Daily Minimum ^[2]		>= 6.0 Standard Units (SU)	Effluent Gross	002	Quarterly	DISCRT
Solids, total suspended	Daily Maximum		<= 135 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
Solids, total suspended	Quarterly Average		<= 90 Milligrams per Liter (mg/L)	Effluent Gross	002	Quarterly	DISCRT
BOD, carb-5 day, 20 deg C, percent removal ^[3]	Quarterly Minimum ^[4]		>= 65 Percent (%)	Effluent Gross	002	Quarterly	CALCTD
Solids, suspended percent removal ^[3]	Quarterly Minimum ^[4]		>= 65 Percent (%)	Effluent Gross	002	Quarterly	CALCTD

Notes (WWTP Discharge Limitations Table):

1. If no discharge takes place from this outfall during the reporting period, enter NODI code "C" (no discharge) on the DMR for this outfall.
2. If fewer than two samples are taken during the monitoring period, enter the single result as both the minimum and maximum value.
3. Sampling for CBOD, 5-day and total suspended solids (TSS) should be done concurrently when the influent (Outfall 001) is sampled to determine exact percentages of removal achieved.
4. Quarterly Average Minimum.

WWTP Discharge Limitations Table for Sample Location 002 (Effluent-External Outfall) 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 CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Alkalinity, total (as CaCO ₃)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Aluminum, total (as Al) ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Antimony, total (as Sb) ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Arsenic, total (as As) ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Barium, total (as Ba) ^[1]	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, total (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Calcium, total (as Ca) ^[1]	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, total (as Cr) ^[1]	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-External Outfall) 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, total (as Fe) ^[1]	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, total (as Mg) ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Manganese, total (as Mn) ^[1]	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
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
pH, maximum	Daily Maximum		M&R Standard Units (SU)	Effluent Gross	002	Once Per Permit Term	DISCRT
pH, minimum	Daily Minimum		M&R Standard Units (SU)	Effluent Gross	002	Once Per Permit Term	DISCRT
Potassium, total (as K) ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Selenium, dissolved [as Se]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Silver, total (as Ag) [1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Sodium, total (as Na)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Sulfate, total (as SO ₄)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	002	Once Per Permit Term	DISCRT
Thallium, total (as Tl)[1]	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

Notes (WWTP Discharge Limitations Table):

1. Analysis is for the dissolved fraction.

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

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	003	Quarterly	DISCRT
Depth to water level ft below landsurface ^[2]	Daily Minimum	M&R Feet (ft)		Groundwater	003	Quarterly	VISUAL
Nitrogen, total	Daily Maximum		<= 10.0 Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT
pH	Value		M&R Standard Units (SU)	Groundwater	003	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT
Water level relative to mean sea level ^[3]	Daily Maximum	M&R Feet (ft)		Groundwater	003	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. If the monitoring well is found to be dry during the reporting period, report as "Dry" in the DMR database for this outfall.
2. Depth to groundwater.
3. Static water level.

Ponds / Rapid Infiltration Basins for Sample Location 004 (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	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	004	Daily When Discharging	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	004	Daily When Discharging	METER

Notes (Ponds / Rapid Infiltration Basins):

1. Daily discharges should be reported on an monthly basis, with the use of NODI code "C", in the NetDMR database, when no discharge occurs.

Summary of Changes From Previous Permit

Note:

M&R = Monitor and Report

Under Outfall 001 (Influent) the following changes were made:

BOD, carbonaceous, 05-day, 20 C, with a "Quarterly Maximum" base was CHANGED to a "Daily Maximum" base, with the other discharge limitations and monitoring requirements remaining unchanged.

Solids, total suspended, with a "Quarterly Maximum" base was CHANGED to a "Daily Maximum" base, with the other discharge limitations and monitoring requirements remaining unchanged.

The following footnotes were ADDED:

1. Sampling for CBOD, 5-day and total suspended solids (TSS) should be done concurrently when effluent (Outfall 002) is sampled to determine the exact percentages of removal achieved. If there is no discharge from Outfall 002, then no sampling of the influent is required.
2. Sampling should be done prior to any treatment being done.

Under Outfall 002 (Effluent) the following CHANGES were made:

The reporting period for this outfall was CHANGED from "Monthly" reporting to "Quarterly" reporting to match Division reporting standards and to allow for determination of actual removal rates achieved through treatment.

BOD, carbonaceous, 05-day, 20 C, with a "Monthly Maximum" base was CHANGED to a "Daily Maximum" base, with the measurement frequency changed from "Monthly" to "Quarterly", the other discharge limitations and monitoring requirements remain unchanged.

BOD, carbonaceous, 05-day, 20 C, with a "Monthly Average" base was CHANGED to a "Quarterly Average" base, with the measurement frequency changed from "Monthly" to "Quarterly", the other discharge limitations and monitoring requirements remain unchanged.

Nitrogen, total, with a "Monthly Maximum" base was CHANGED to a "Daily Maximum" base, with a measurement frequency changed from "Monthly" to "Quarterly", the other discharge limitations and

monitoring requirements remain unchanged.

pH, minimum, with a "Monthly Minimum" base was CHANGED to a "Daily Minimum" base, with a measurement frequency changed from "Monthly" to "Quarterly", the other discharge limitations and monitoring requirements remain unchanged.

pH, maximum, with a "Monthly Maximum" base was CHANGED to a "Daily Maximum" base, with a measurement frequency CHANGED from "Monthly" to "Quarterly", the other discharge limitations and monitoring requirements remain unchanged.

Solids, total suspended, with a "Monthly Maximum" base was CHANGED to a "Daily Maximum" base, with the measurement frequency CHANGED from "Monthly" to "Quarterly", the other discharge limitations and monitoring requirements remain unchanged.

Solids, total suspended, with a "Monthly Average" base was CHANGED to a "Quarterly Average" base, with the measurement frequency CHANGED from "Monthly" to "Quarterly", the other discharge limitations and monitoring requirements remain unchanged.

The following parameters were ADDED:

BOD, carb-5 day, 20 deg C, percent removal, with a "Quarterly (Average) Minimum" base, with a " ≥ 65 (%)" concentration, an "Effluent Gross" monitoring location, a "002" sample location, a "Quarterly" measurement frequency, and a "Calctd" sample type.

Solids, suspended percent removal, with a "Quarterly (Average) Minimum" base, with a " ≥ 65 (%)" concentration, an "Effluent Gross" monitoring location, a "002" sample location, a "Quarterly" measurement frequency, and a "Calctd" sample type.

The following footnotes were ADDED:

1. If no discharge takes place from this outfall during the reporting period, enter NODI code "C" (no discharge) on the DMR for this outfall.
2. If fewer than two samples are taken during the monitoring period, enter the single result as both the minimum and maximum value.
3. Sampling for CBOD, 5-day, and total suspended solids (TSS) should be done concurrently when the influent (Outfall 001) is sampled to determine exact percentages of removal achieved.
4. Quarterly Average Minimum.

The following parameters were DELETED:

DELETED - Nitrogen, total, with a "Monthly Average" base, an "M&R Milligrams per Liter (mg/L)", an "Effluent Gross" monitoring location, an "002" sample location, a "Monthly" measurement frequency, and a "Discret" sample type.

DELETED - Nitrogen, nitrate total (as N), with a "Monthly Average" base, an "M&R Milligrams per Liter (mg/L)", an "Effluent Gross" monitoring location, an "002" sample location, a "Monthly" measurement frequency, and a "Discret" sample type.

DELETED - Nitrogen, nitrate total (as N), with a "Monthly Maximum" base, an "M&R Milligrams per Liter (mg/L)", an "Effluent Gross" monitoring location, an "002" sample location, a "Monthly" measurement frequency, and a "Discret" sample type.

Under Outfall 002 (Effluent), an additional reporting period was added for a "Once During the Permit Term" period with the following parameters and footnotes ADDED:

Profile 1 pollutants, with a "Daily Maximum" base, an "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 "Discret" sample type.

Along with the footnote:

1. Analysis is for the dissolved fraction.

Under Outfall 003 (Monitoring Well #1) the following parameters were CHANGED:

Chloride, (as Cl), with a "Quarterly Maximum" base, was CHANGED to a "Daily Maximum" base, the other discharge limitations and monitoring requirements remain unchanged.

Depth to water level ft below landsurface, with a "Quarterly Maximum" base, was CHANGED to a "Daily Minimum" base and the sample type CHANGED from "Discret" to "Visual", the other discharge limitations and monitoring requirements remain unchanged.

Nitrogen, total, with a "Quarterly Maximum" base, was CHANGED to a "Daily Maximum" base, the other discharge limitations and monitoring requirements remain unchanged.

Solids, total dissolved, with a "Quarterly Maximum" base, was CHANGED to a "Daily Maximum" base, the other discharge limitations and monitoring requirements remain unchanged.

The following parameters and footnotes were ADDED:

Parameters ADDED:

pH, with a "Value" base, an "M&R Standard Units (S.U.)" concentration, an "Groundwater" monitoring location, a "003" sample location, a "Quarterly" measurement frequency, and a "Discret" sample type.

Water level relative to mean sea level, with a "Daily Maximum" base, an "M&R Feet (ft)" quantity, an "Groundwater" monitoring location, a "003" sample location, a "Quarterly" measurement frequency, and a "Calcd" sample type.

The following footnotes were ADDED:

1. If the monitoring well is found to be dry during the reporting period, report as "Dry" in the DMR database for this outfall.
2. Depth to groundwater.
3. Static water level.

The following footnotes were DELETED:

DELETED - 1. Depth to Groundwater, ft.

DELETED - 2. Field measurement.

Outfall 004 (Emergency Ponds) was ADDED with the following parameters:

Flow Rate, with a "Daily Maximum" base, a "M&R Million Gallons per Day (Mgal/d)" discharge limitation, an "Effluent Gross" monitoring location, a "004" sample location, an "Monthly" measurement frequency, and a "Meter" sample type.

Flow Rate, with a "30 Day Average" base, a "M&R Million Gallons per Day (Mgal/d)" discharge limitation, an "Effluent Gross" monitoring location, a "004" sample location, an "Daily When Discharging" measurement frequency, and a "Meter" sample type.

Along with the footnote:

1. Daily discharges should be reported on an monthly basis, with the use of NODI code "C", in the NetDMR database, when no discharge occurs.

Technology Based Effluent Limitations

The U.S. EPA published federal equivalent to secondary treatment standards under Title 40 of the Code of Federal Regulations (CFR) Section 133.105, based on an evaluation of performance data for Publicly Owned Treatment Works (POTWs) practicing a combination of physical and biological treatment. Facilities primarily using biological treatment technologies, such as trickling filters or waste stabilization ponds, can achieve significant reductions in CBOD5 and TSS, but might not consistently achieve secondary treatment standards for these parameters.

Because of this, the U.S. EPA promulgated regulations at 40 CFR Section 133.105 that includes alternative standards that apply to facilities using equivalent to secondary treatment. As allowed by 40 CFR 133, the Division has adopted these standards for groundwater discharges from facilities using equivalent to secondary treatment. Additionally, the Division uses a daily maximum limit in place of the 7-day limit.

The following equivalent to secondary treatment standards are applicable to this permit:

CBOD5: The daily maximum threshold is limited to 60 mg/L. The quarterly minimum average threshold is limited to 40 mg/L.

pH daily maximum threshold is limited to 9.0 standard units (S.U.) and the daily minimum limit is 6.0 S.U.

Federal regulations also allow states to adjust the maximum allowable TSS concentration for waste stabilization ponds, upwards from those specified in the secondary treatment standards, to conform to TSS concentrations achievable with waste stabilization ponds. The approved alternate TSS requirement in the state of Nevada is 90 mg/L as a 30-day average, implemented as an average quarterly limit. Furthermore, the daily maximum TSS limit was calculated using a factor of 1.5 times the average monthly limitation ($90 \text{ mg/L} \times 1.5 = 135 \text{ mg/L}$). Thus, the following TSS limit is applicable:

TSS: The daily maximum threshold is limited to 135 mg/L. The quarterly minimum average threshold is limited to 90 mg/L.

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

CBOD5 percent removal standard, based on quarterly average, must meet a minimum limit is 65%.

TSS percent removal standard, based on a quarterly average, must meet minimum limit is 65%.

Limits Based on Facility's Design Criteria Review:

30-day average flow rate is limited to $\leq 0.25 \text{ Mgal/d}$.

Daily maximum flow rate is limited to $\leq \text{M\&R Mgal/d}$.

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)

Proposed 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 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 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, a permit may not

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.

The requirement to monitor the effluent for Profile 1 pollutants 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. Although cyanide and uranium are not expected to be present in the effluent, the proposed permit requires the Permittee sample these constituents once during the permit term as they are included in the Profile 1 list, and they have not been sampled before.

Influent and Effluent Monitoring Requirements:

Quarterly influent and effluent monitoring for CBOD5 and TSS are included to assess the treatment performance of the BWWTF. A quarterly sampling frequency for CBOD5 and TSS is sufficient for determining compliance with the applicable effluent limitations. The percent removal requirements for CBOD5 and TSS were established in the permit as quarterly average minimums of 65%, based on equivalent-to-secondary treatment standards.

Some wastewater treatment processes can increase or decrease wastewater pH; therefore, monthly 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, apart from the removal of the requirement to sample and report the following parameter under Outfall 002 (Effluent) for Total Nitrate Nitrogen. The Total Nitrogen (as N) parameter encompasses all forms of nitrogen, including organic, ammonia, nitrite, and nitrate.

In addition, the proposed reporting requirement under Outfall 002 (Effluent) was changed to a less restrictive one, being from "Monthly" reporting to "Quarterly". The reporting period was changed to match the reporting requirement for Outfall 001 (Influent) to allow for determination of actual removal rates. Also, the quarterly reporting period is consistent with Division reporting requirements for smaller wastewater treatment facilities. For the past five years, the reported effluent parameters have fallen within normal equivalent to secondary treatment limits with the exception of Total Nitrogen, although the higher levels were reported in the treated effluent, the downgradient monitoring well shows low levels of Total Nitrogen occurring showing the concentrations are less as the groundwater travels away from the ponds.

Even with the two exceptions listed above, no backsliding will be caused by these removals or change to reporting requirement.

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 applicable Special Approvals/Conditions for this permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Discharges From Future Outfalls/ Planned Facility Changes

dfThere are currently 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 treatment plant.

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 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.).	4/1/2026

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	4/28/2026
2	Annual Report	Annually	1/28/2026

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. **12/8/2025**, 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: **10/29/2025**

Title: **Staff II Engineer**

10010

116°45'9"W 36°53'52"N



Sewer System

1" = 200'

FARR WEST
ENGINEERING

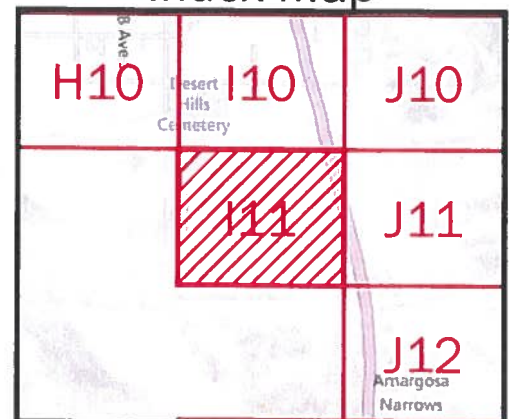
Legend

	Lateral Cleanout	Sewer Pipe Type
	Main Line Cleanout	Gravity Main
	Sewer Manhole	Lateral
	Sewer Inlet	Casing
	Sewer Outlet	Sewer Pond

Notes:

Background Imagery & Street
Information Data pulled from
Bing Online Imagery & Streets

Index Map



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116°45'9"W 36°53'32"N