FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: SPRING CREEK UTILITY CO.

1005 TERMINAL WAY SUITE 294
RENO, NV 89502

Permit Number: NS2002511

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: SPRING CREEK WASTEWATER TREATMENT PLANT #1, ELKO
0 SPRING CREEK PARKWAY, BETWEEN 239 AND 255 SPRING CREEK PARKWAY, SPRING CREEK, NV 89815
LATITUDE: 40.749567, LONGITUDE: -115.598350
TOWNSHIP: 33 N, RANGE: 57 E, SECTION: 18

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	EFFLUENT - PRIOR TO DISPOSAL IN LEACHFIELD	External Outfall		40.750833	-115.599167	GROUNDWATER
002	MW-1	Monitoring Well		40.751142	-115.598269	GROUNDWATER
INF	INFLUENT METER	Internal Outfall		40.750833	-115.599167	NOT APPLICABLE

Permit History/Description of Proposed Action

The Permittee, Spring Creek Utility Co., has applied for the renewal of Permit NS2002511 for the Spring Creek Wastewater Treatment Plant #1 (SCWWTP #1), at 0 Spring Creek Parkway, between 239 and 255 Spring Creek Parkway, west of the Spring Creek Parkway and Country Club Parkway intersection, in Spring Creek, in Elko County, Nevada. The Permittee proposes to continue to discharge treated wastewater to groundwater of the State via leach field infiltration.

This permit was first issued on November 18, 2002. The most recent permit was issued on August 1, 2013, and expired on July 31, 2018; the permit has been administratively continued since.

Facility Overview

The SCWWTP #1 is a 50,000 gallon per day (Gal/d) MAR-WOOD package treatment plant located in a residential development in Spring Creek, Elko County, Nevada. In 1988, a 25,000-gallon septic tank and leach field were installed on this site to serve single and multi-family residences, along with commercial developments in the area, being approximately 127 residential units and seventeen (17) commercial businesses.

Improvements were done in 2002, following several years of at or near capacity flow, and pending the development of the remaining vacant lots and parcels, the existing leach field was abandoned, and the original treatment septic tank was replaced with a MAR-WOOD package treatment plant along with a new

leach field that uses infiltration chambers. In the event the SCWWTP #1 is offline, the original septic tank can be temporarily used for influent storage.

Domestic sewage is transported through a sanitary sewer collection system consisting of a network of gravity collection lines and force mains, ranging from 4 to 8 inches in diameter, that take the water to the treatment plant. The raw sewage enters the anoxic zone after passing through a manually-cleaned bar screen. The anoxic zone is provided to reduce the nitrate nitrogen by eliminating the oxygen supply. The anoxic zone has no aeration, but has a slow speed mixer to keep the solids in suspension. The settled sludge from the clarifier is recycled to the anoxic zone where, along with the raw wastewater entering the plant, creates a huge demand for the oxygen in the nitrates which are recycled from the aeration chamber. When the oxygen is depleted from the nitrate, nitrogen gas is allowed to escape from the process.

The aeration basin is aerated continuously during normal operation to maintain a dissolved oxygen (DO) concentration at a minimum level of 2.0 milligrams per liter (mg/L). It is at this DO level that biological growth of the activated sludge floc is most favorable. The growth process is also dependent upon the food-to-mass (F/M) ratio and the mixed liquor suspended solids (MLSS) concentration. Excess MLSS are removed from the extended aeration system through wasting the solids to an aerobic digester. The aerated sewage flows to a settling tank or clarifier. The sewage separates behind a baffle, and the stabilized sludge settles to the bottom, to be returned through the air lift pumps to the inlet of the plant. A portion of the aerated sewage rises behind the baffle and must be hosed or agitated to cause it to settle. This material is partially treated, air filled, and may need skimming by plant personnel. The clear liquid rising on the opposite side of the baffle is further filtered by a layer of biological sludge which is visible four or five feet down in the settling compartment. The clear liquid then flows over a weir and to the effluent lift station as treated sewage effluent.
A scum baffle in front of the weir serves as a precaution against hydraulic surges, which may carry solids over the weir, up through the sludge blanket. When particles are carried to the surface of the settling tank, the skimmer is used to return them to the aeration tank.
The final treated effluent flows by gravity to the leach field for infiltration. Wasted sludge from the digester is removed from the plant and trucked to a local permitted landfill for disposal or to the Elko Water Reclamation Facility.

A groundwater monitoring well (compliance point) is located about 150 feet downgradient (north) from the edge of the leach field. Two other monitoring wells exist on the property but are not used.

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

Outfall 001 – This external outfall is for measuring the treated effluent discharged from the SCWWTP #1, and into the leach field.

Outfall 002 – This downgradient monitoring well (MW1) is located northeast of the SCWWTP #1.

Facility Upgrades since last issued permit
There have been no upgrades to the plant since the last issued permit, with the exception for a berm being constructed around the leach field along with the installation of a new Ultrasonic flow meter.

The WWTP #1 has reached 85% capacity, with a preliminary engineering report (PER) being presented to the Division in 2021, for the proposed expansion of the WWTP #1, along with replacement of the MAR-WOOD package with a 75,000 Gal/d Aero-Mod SEQUOX WWTP. Additional development in the Spring Creek area is projected to be handled by the Ruby Vista Ranch WWTP, permitted under NS2017504.

Solids Handling
The wasted sludge is trucked to a permitted landfill in Battle Mountain, Nevada for disposal.

Effluent Management and Reuse
Treated effluent is discharged to groundwater via percolation in the leach field. There is no reuse of the wastewater.

Design Flow (and basis) and Measurement & Current Capacity
WWTP #1 was designed for an Average Day flow rate of 0.05 million gallons per day (Mgal/d).

The Daily Maximum influent flow rate for Outfall INF will be limited to 0.05 Mgal/d based on discussions with the Operator. This outfall was added to the permit during this renewal period.

Under the previous permit, the permitted 30-Day Average flow rate for Outfall 001 was limited to 0.05 Mgal/d. The Daily Maximum flow rate was based on an M&R Mgal/d quantity. The revised flow rates under this outfall will be based on an "Monitor & Report" (M&R) basis for both the 30-Day Average and Daily Maximum during this renewal period.

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 WWTP #1's Operation and Maintenance (O&M) Manual was last reviewed and approved in September 2013. 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 equates to every ten (10) years, with an updated O&M Manual being due within ninety (90) days from the permit issuance date.

Effluent Characterization
Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from January 2020 to October 2024, was reviewed as part of this permit renewal process.

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:
BOD5: 9.84 mg/L
Flow Rate: 0.046 Mgal/d
Nitrogen: 8.36 mg/L
pH: 7.67 S.U.
TSS: 12.61 mg/L

Outfall 002:
Chloride: 62.37 mg/L
Depth to water level below land surface: 32.00 Feet
Nitrogen: 3.78 mg/L
TDS: 384.21 mg/L

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 that denitrify are Chloride, Nitrogen, pH, and TDS, along with potential inorganic chemicals and metals (Profile 1 contaminants).

Receiving Water
The receiving water is groundwater of the State. Groundwater is found at a depth ranging from approximately 31 feet below ground surface with a northwesterly flow. In 2005, a new monitoring well was drilled to replace the existing monitoring well (MW-1). The new well is approximately 190 feet downgradient from the leach field.

Compliance History
The plant has been in compliance between the years reviewed for this permit. There is an at capacity issue that has limited the plant from allowing new customers to tie into the sewer system, so other options are being offered in that area, with the plant continuing to function as efficiently as possible based on its limitations.

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

WWTP Discharge Limitations Table for Sample Location 001 (Effluent-External 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	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Effluent Gross	001	Continuous	METER
BOD, 5-day	Daily Maximum[2]		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT
BOD, 5-day	30 Day Average[2]		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT
Nitrogen, total	Daily Maximum[2]		<= 10 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT
pH, maximum	Daily Maximum[3]		<= 9.0 Standard Units (SU)	Effluent Gross	001	Monthly	DISCRT
pH, minimum	Daily Minimum[3]		>= 6.0 Standard Units (SU)	Effluent Gross	001	Monthly	DISCRT
Solids, total suspended	Daily Maximum[2]		<= 45 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT
Solids, total suspended	30 Day Average[2]		<= 30 Milligrams per Liter (mg/L)	Effluent Gross	001	Monthly	DISCRT
BOD, 5-day, percent removal[1]	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	001	Monthly	CALCTD
Solids, suspended percent removal[1]	Monthly Average Minimum		>= 85 Percent (%)	Effluent Gross	001	Monthly	CALCTD

Notes (WWTP Discharge Limitations Table):

1. Sampling for BOD, 5-day and total suspended solids (TSS) should be done concurrently when the influent (Outfall INF) is sampled to determine exact percentages of removal achieved.
2. If only one sample is taken during the monitoring period, enter the result as both the 30-day average and daily maximum.
3. If only one sample is taken during the monitoring period, enter the result as both the monthly minimum and monthly maximum.

WWTP Discharge Limitations Table for Sample Location 001 (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 CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Alkalinity, total (as CaCO3)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Aluminum, total (as Al)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Antimony, total (as Sb)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Arsenic, total (as As)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Barium, total (as Ba)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Beryllium, dissolved (as Be)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cadmium, dissolved (as Cd)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Calcium, total (as Ca)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Chromium, total (as Cr)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
			M&R				

WWTP Discharge Limitations Table for Sample Location 001 (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	001	Once Per Permit Term	DISCRT
Fluoride, total (as F)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Iron, total (as Fe)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Lead, dissolved (as Pb)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Magnesium, total (as Mg)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Manganese, total (as Mn)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Mercury, dissolved (as Hg)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Nitrite plus nitrate total 1 det. (as N)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
pH, maximum	Daily Maximum		M&R Standard Units (SU)	Effluent Gross	001	Once Per Permit Term	DISCRT
pH, minimum	Daily Minimum		M&R Standard Units (SU)	Effluent Gross	001	Once Per Permit Term	DISCRT
Potassium, total (as K)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT

WWTP Discharge Limitations Table for Sample Location 001 (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	001	Once Per Permit Term	DISCRT
Silver, total (as Ag) [1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Sodium, total (as Na)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Sulfate, total (as SO4)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Thallium, total (as Tl)[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Uranium, natural, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Cyanide, weak acid, dissociable	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT
Zinc, dissolved (as Zn)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Effluent Gross	001	Once Per Permit Term	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Analysis shall be for the dissolved fraction.

WWTP Discharge Limitations Table for Sample Location Inf (Influent Meter-Internal Outfall) To Be Reported Monthly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	Daily Maximum	<= 0.05 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	INF	Continuous	METER
Flow rate	30 Day Average	<= 0.05 Million Gallons per Day (Mgal/d)		Raw Sewage Influent	INF	Continuous	METER
BOD, 5-day	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	DISCRT
BOD, 5-day	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	DISCRT
Solids, total suspended	Daily Maximum		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	DISCRT
Solids, total suspended	30 Day Average		M&R Milligrams per Liter (mg/L)	Raw Sewage Influent	INF	Monthly	DISCRT

Notes (WWTP Discharge Limitations Table):

1. Sampling for BOD, 5-day and total suspended solids (TSS) should be done concurrently when effluent (Outfall 001) is sampled to determine exact percentages of removal achieved.

Groundwater Monitoring Wells Table for Sample Location 002 (Monitoring Well) 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	002	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	002	Quarterly	VISUAL
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	Groundwater	002	Quarterly	DISCRT
pH	Value		M&R Standard Units (SU)	Groundwater	002	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	002	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	002	Quarterly	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. If the monitoring well is found to be dry during the reporting period, report as "Dry" on the DMR for this outfall.
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

Summary of Changes From Previous Permit

Based on information received from the Operator, the Daily Maximum Flow Rate was updated to 0.05 Million Gallons per Day (Mgal/d) and is reflected in the Permit and Fact Sheet.

The INF Outfall was added for incoming influent monitoring, with a “Monthly” reporting period, and the following parameters:

BOD, 5-day, with a “Daily Maximum” base, a “M&R Milligrams per Liter (mg/L)” concentration unit, a “Raw Sewage Influent” monitoring location, a “Monthly” measurement frequency, and a “Discrt” sample type.

BOD, 5-day, with a “30-Day Average” base, a “M&R Milligrams per Liter (mg/L)” concentration unit, a “Raw Sewage Influent” monitoring location, a “Monthly” measurement frequency, and a “Discrt” sample type.

Flow Rate, with a “Daily Maximum” base, a “0.05 Million Gallons per Day (Mgal/d)” quantity unit, a “Raw Sewage Influent” monitoring location, a “Continuous” measurement frequency, and a “Meter” sample type.

Flow Rate, with a “30-Day Average” base, a “0.05 Million Gallons per Day (Mgal/d)” quantity unit, a “Raw Sewage Influent” monitoring location, a “Continuous” measurement frequency, and a “Meter” sample type.

Solids, total suspended, with a “Daily Maximum” base, a “M&R Milligrams per Liter (mg/L)” concentration unit, a “raw Sewage Influent” monitoring location, a “monthly frequency” and a “Discrt” sample type.

Solids, total suspended, with a “30-Day Average” base, a “M&R Milligrams per Liter (mg/L)” concentration unit, a “raw Sewage Influent” monitoring location, a “monthly frequency” and a “Discrt” sample type.

Along with the footnote:
1. Sampling for BOD, 5-day and total suspended solids (TSS) should be done concurrently when the effluent (Outfall 001) is sampled to determine exact percentages of removal achieved.

The naming convention of Outfall 001 was updated from “After Treatment Prior to Disposal in Leach field” to “Effluent – Prior to Disposal in Leach field” to more specifically delineate what is being reported.

Under Outfall 001, the following parameters were added or revised based on current Division reporting requirements:
Added parameters:

BOD, 5-day, with a “Daily Maximum” base, a “Less than or Equal to 45 Milligrams per Liter (mg/L)” concentration unit, a “Effluent Gross” monitoring location, a “Monthly” measurement frequency, and a “Discrt” sample type.

Solids, total suspended, with a “Daily Maximum” base, a “Less than or Equal to 45 Milligrams per Liter (mg/L)” concentration unit, a “Effluent Gross” monitoring location, a “Monthly” measurement frequency, and a “Discrt” sample type.

BOD, 5-day, percent removal, with a “Monthly Average Minimum” base, a “Greater than or Equal to 85 Percent (%)” concentration unit, a “Effluent Gross” monitoring location, a “Monthly” measurement frequency, and a “Calctd” sample type.

Solids, suspended percent removal, percent removal, with a “Monthly Average Minimum” base, a “Greater than or Equal to 85 Percent (%)” concentration unit, a “Effluent Gross” monitoring location, a “Monthly” measurement frequency, and a “Calctd” sample type.

Along with the footnote:
1. Sampling for BOD, 5-day and total suspended solids (TSS) should be done concurrently when the influent (Outfall INF) is sampled to determine exact percentages of removal achieved.

The following parameters were revised:

BOD, 5-day, was revised from a “Value” base to a “30-Day Average” base with the same concentration, monitoring location, measurement frequency, and sample type.

Flow Rate, with a “30-Day Average” base was changed from “0.05 Million Gallons per Day (Mgal/d)” to a “M&R Million Gallons per Day (Mgal/d)”.

Nitrogen, total, was changed from a “Value” base to a “Daily Maximum” base, with the same concentration, monitoring location, measurement frequency, and sample type.

Solids, total suspended, was revised from a “Value” base to a “30-Day Average” base with the same concentration, monitoring location, measurement frequency, and sample type.

Under Outfall 001, an additional measurement period of “Once Per Permit Term” was added along with “M&R Milligrams per Liter (mg/L)” or “Standard Units (S.U.)” concentration units for Profile 1 Pollutants.

Along with the footnote:
1. Analysis is for the dissolved fraction.

For the MW1 Outfall, the following revisions were made:

Chloride, the base was changed from “Value” to “Daily Maximum”, with the concentration, monitoring

location, measurement frequency, and sample type remaining the same.

Depth to water level ft below land surface, the base was changed from “Value” to “Daily Minimum”, with the concentration, monitoring location, measurement frequency, and sample type remaining the same.

Nitrogen, total, the base was changed from “Value” to “Daily Maximum”, with the concentration, monitoring location, measurement frequency, and sample type remaining the same.

Solids total dissolved, the base was changed from “Value” to “Daily Maximum”, with the concentration, monitoring location, measurement frequency, and sample type remaining the same.

The following parameter was added:

Water level relative to mean sea level, with a “Daily Maximum” base, a “M&R Feet (ft)” quantity unit, a “Groundwater” monitoring location, a “Quarterly” measurement frequency, and a “Calctd” sample type.

Along with the following footnotes:
1. If the monitoring well is found to dry during the reporting period, report as “Dry” on the DMR for this outfall.
2. Depth to groundwater.
3. Groundwater elevation above mean sea level (AMSL).

The value for pH, minimum parameter was changed to 6.0 S.U. based on EPA's standards for secondary treatment ranges.

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 and suspended solids in the effluent, and the ability to maintain pH. Federal secondary treatment standards are defined under 40 CFR 133 for maximum BOD5 as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L and for maximum TSS as a 30-day average of 30 mg/L and a 7-day average of 45 mg/L. In addition to describing the minimum levels of effluent quality attainable by secondary treatment, 40 CFR 133.102 states that the 30-day average percent removal of BOD5 and TSS shall not be less than 85%. The Division has adopted these standards for groundwater dischargers, and 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-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 <= 0.05 Mgal/d.

Daily maximum flow rate for influent is limited to <=0.05 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, “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.”

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:
Monthly influent and effluent monitoring for BOD5 and TSS are included to assess the treatment performance of SCWWTP #1. A monthly sampling frequency for BOD5 and TSS is sufficient for determining compliance with the applicable effluent limitations. The recent 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, 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.

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

As this permit is for discharges of 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 permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

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

Corrective Action Sites
There are no active Bureau of Corrective Action (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 the Division's guidance document, WTS2 Minimum Information Required for an Operation and Maintenance Manual for a Wastewater Treatment Plant, and be prepared and wet stamped by a licensed, qualified Nevada engineer (P.E.).	11/1/2025

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly Reports	Quarterly	10/28/2025
2	Annual Reports	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. **6/23/2025,** 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: **5/14/2025**
Title: **Staff II Engineer**