



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: LYON COUNTY PUBLIC WORKS DEPARTMENT

PO BOX 1699
DAYTON, NV 89403

Permit Number: NS2007502

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: SCEIRINE RANCH, LYON
3 MILES NORTH OF YERINGTON, YERINGTON, NV 89447
LATITUDE: 39.044167, LONGITUDE: -119.193333
TOWNSHIP: 14 N, RANGE: 25 E, SECTION: 28

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	TREATED EFFLUENT	Land Application Site		39.044167	-119.193333	GROUNDWATER
002	MONITORING WELL # 5	Monitoring Well		39.0441	-119.1933	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Lyon County Public Works Department, has applied for the renewal of Permit NS2007502 for the Sceirine Ranch (the Ranch), located at 0 Silverado Road, approximately three miles north of Yerington, in Mason Valley, Lyon County, Nevada. The Permittee proposes to continue to use reclaimed water for applied irrigation use within the parcel's boundary, specifically within the southern portion of said parcel, being a 35-acre field within the Sceirine Ranch's boundary.

This permit was first issued on January 30, 2007. The most recent permit was issued on March 7, 2012, and expired on March 6, 2017; the permit has been administratively continued since.

Facility Overview

The Ranch utilizes reclaimed water supplied by the Willow Creek General Improvement District (GID) Wastewater Treatment Plant (WWTP) (permit NS0040039).

The Ranch is irrigated by secondary treated effluent supplied by the Willow Creek GID WWTP to the subject property (Outfall 001) via pipeline, which is pumped and metered from storage pond #3 of the Willow Creek GID WWTP. The treated effluent will be land applied, via flood irrigation, onto a 35-acre portion of the Sceirine Ranch. Tailwater control is not required due to the field being located in an area of depression, along with having elevated berms surrounding it. Irrigation is supplemental and will be conducted in the Spring and the Fall of the growing season. Surface water from the Walker River, under the Division of Water Resources' Permit 25017, Certificate 8860, via ditch delivery, provides irrigation during the summer months. Due to public access being prohibited, the buffer zone being maintained, and flood irrigation being utilized thus eliminating aerosolization of water droplets, there is no concern of any public

contact with the reclaimed water based on the requirements and limitations as set forth under Nevada Administrative Code (NAC) 445A.2771.

The Ranch was required to submit a Reclaimed Water Management Plan (RWMP) during the original permit issuance, which was received and approved by the Division on November 2011. The Technical, Compliance, and Enforcement (TCE) Branch of the Bureau of Water Pollution Control requires RWMPs be updated every two (2) permit cycles which equates to every ten (10) years so a revised plan will be due on April 28, 2025.

Outfall Summary

Outfall 001 – This land use application outfall is for the discharge of reclaimed water onto the Sceirine Ranch’s applied place of use.

MW5 – This external outfall is located approximately 10 feet away from Outfall 001, being Monitoring Well 5.

Note: The other outfalls are located on the neighboring parcel, near the Willow Creek GID WWTP, and are not part of this permit.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from July 2019 to June 2024, was reviewed as part of this permit renewal process. The long-term average discharge flow rate for Outfall 001 was either not delivered, due to low plant production, or below a reportable amount (one instance). The daily maximum discharge flow rate for Outfall 001 is limited to 0.049 MGD. There were no reported exceedances of this limit.

The Willow Creek GID WWTP provides secondary treated reclaimed water which meets Category E bacteriological quality, per Nevada Administrative Code (NAC) 445A.276, to the Ranch; therefore, the reclaimed water does not need to meet any limits for fecal coliform, but additional safety precautions are required – including, but not limited to, prohibiting public access to the area. The long-term average for the daily maximum fecal coliform reported was below detection for the one instance of discharge.

Since Willow Creek GID WWTP’s reclaimed water is not denitrified, nitrogen balances are required along with effluent nutrient reporting using analyses provided by Willow Creek GID WWTP. Due to the depth to groundwater and nutrient management required, monitoring wells are required. There are four total monitoring wells in the area for both Willow Creek and Sceirine Ranch. Three of the monitoring wells are within the Willow Creek property, and there is an additional well down gradient of the reuse site.

Parameter	July 2019 – July 2024
Flow (MGD):	Below reportable level
Chloride (mg/L):	24.14 mg/L based on 7 instances of measurable levels
Fecal Coliform (mg/L):	Below reportable level
Nitrogen, nitrate total (mg/L): 0.044 mg/L at MW-5	Below Reportable level at Outfall 001 and 7 instances, averaging
Total Dissolved Solids (TDS)	171 mg/L, based on 5 measurable quarters at MW-5

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 reclaimed water are chloride, fecal coliform, nitrogen, and total dissolved solids (TDS).

Receiving Water

Receiving water is groundwater of the State. Depth to groundwater at the site is approximately 15-20 feet below ground surface (bgs).

Compliance History

The facility was in substantial compliance during the July 2019 to June 2024 reporting period.

Proposed Effluent Limitations

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

Groundwater Monitoring Wells Table for Sample Location 002 (Monitoring Well) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	002	Quarterly	DISCRT
Depth to water level ft below landsurface ^[1]	Daily Maximum	M&R Feet (ft)		Groundwater	002	Quarterly	DISCRT
Nitrogen, total	Daily Maximum		<= 10 Milligrams per Liter (mg/L)	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 ^[2]	Daily Maximum	M&R Feet (ft)		Groundwater	002	Quarterly	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Depth to Groundwater (ft).
2. Groundwater Elevation (ft. amsl).

Re-use Discharge Limitations Table for Sample Location 001 (Land Application Site) To Be Reported Monthly

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Coliform, fecal general	30 Day Geometric Mean		M&R Colony Forming Units per 100ml T (CFU/100mL) ^[1]	Prior to Irrigation	001	Monthly	DISCRT
Coliform, fecal general	Daily Maximum		M&R Colony Forming Units per 100ml T (CFU/100mL) ^[1]	Prior to Irrigation	001	Monthly	DISCRT
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Irrigation	001	Continuous	METER
Flow rate	Daily Maximum	<= 0.049 Million Gallons per Day (Mgal/d)		Prior to Irrigation	001	Continuous	METER
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Irrigation	001	Monthly	DISCRT
Nitrogen, total	Monthly Average		M&R Milligrams per Liter (mg/L)	Prior to Irrigation	001	Monthly	DISCRT

Notes (Re-use Discharge Limitations Table):

1. CFU or MPN/100 ml.

Re-use Discharge Limitations Table for Sample Location 001 (Land Application Site) To Be Reported Annually

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow, total	Annual Total	<= 24.087 Million Gallons (Mgal) ^[1]		Prior to Irrigation	001	Annual	METER

Notes (Re-use Discharge Limitations Table):

1. 73.92 Acre-Feet/year.

Summary of Changes From Previous Permit

Under the Re-Use Limitations Table for Outfall 001, Monthly Reporting, the following items were revised:

- Fecal Coliform was changed **from** "Monthly Average" **to** "30 Day Geometric Mean" under the Base column.
- Fecal Coliform was changed **from** "Monthly Maximum" **to** "Daily Maximum" under the Base column.
- Total Nitrogen was changed **from** "Monthly Maximum" **to** "Daily Maximum" under the Base column.

The above changes were made to adhere to current Division reporting standards.

Technology Based Effluent Limitations

Technology based effluent limitations are not applicable to this permit.

Water Quality Based Effluent Limitations

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

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

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

Basis for Effluent Limitations

Fecal coliform is required to be monitored to assess the quality of reclaimed water being applied for the protection of human health and the environment.

Anti-backsliding

To prevent backsliding, effluent limitations in reissued permits are required to be as stringent as those in the previous permit with this permit keeping the same reporting limitations with the exception of the bases, which were updated to current reporting requirements.

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 reclaimed water discharged within the compliance limits of the proposed permit.

Special Conditions

See Special Approvals/Conditions Table below:

SA – Special Approvals / Conditions Table

Item #	Description
1	The RWMP should provide a proposed Agronomic balance that if the Willow Creek GID was built out to 0.049 MGD and discharging 74 AF/yr at a given Total Nitrogen level, there would be sufficient crop uptake to prevent groundwater nitrification.

Discharges From Future Outfalls/ Planned Facility Changes

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

Corrective Action Sites

There are no active Corrective Action sites located within a one-mile radius of the discharge location.

Wellhead Protection Program

The nearest Public Water Supply (PWS) well is located approximately four (4) miles to the south of the outfall. 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 electronic copy, one hard copy) of an updated RWMP (prev. EMP) for review and approval by the Division. The submitted RWMP shall include any changes made to the treatment system since the last Division approved edition.	4/28/2025

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	4/28/2025
2	Annual DMRs	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. **1/11/2025**, 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 Marr**
 Date: **12/2/2024**
 Title: **Staff II Engineer**