



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: SILVER SPRINGS REGIONAL AIRPORT, LLC
PO BOX 313
SILVER SPRINGS, NV 89429

Permit Number: NS0099017

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: SILVER SPRINGS REGIONAL AIRPORT, LLC, LYON
1991 HIGHWAY 50 WEST, SILVER SPRINGS, NV 89429
LATITUDE: 39.40, LONGITUDE: -119.25
TOWNSHIP: 18N, RANGE: 24E, SECTION: 23, 24, 25, 26

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	IRRIGATION	Land Application Site		39.40	-119.25	GROUNDWATER
002	MW-3	Monitoring Well		39.410210	-119.231350	GROUNDWATER
003	MW-3R	Monitoring Well		39.410050	-119.230690	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Silver Springs Regional Airport (SSRA), LLC, has applied for the renewal of Permit NS0099017, located at 1991 U.S. Highway 50, in Silver Springs, within Lyon County, Nevada. The Permittee proposes to continue to use reclaimed water for applied irrigation use within the parcel's boundary.

This permit was first issued on November 20, 2000. The most recent permit was issued on February 1, 2016, and expired on January 31, 2021; the permit has been administratively continued since.

Facility Overview

The SSRA utilizes reclaimed water supplied by the Silver Springs Water Reclamation Facility (SSWRF) (permit NS0099012).

The SSRA is permitted to irrigate at a 30-day average flow rate of up to 0.499 million gallons per day (MGD), with a daily maximum flow rate of 0.60 MGD. The irrigated areas and reuse irrigation activities are managed and operated by Dayton Valley Turf, Inc., who leases the land from the SSRA. There are four 8-acre agricultural fields, a barn for hay storage, a tailwater pond, and equipment storage area that makes up the applied use site.

The crop in the agricultural fields is generally Kentucky bluegrass, which is harvested as sod rolls, but during drought years, the crop has been orchard grass, which is cut and baled for hay. Irrigation occurs seasonally. When the treated effluent is not pumped to the irrigation site for reuse, or if site conditions do not allow for application, the effluent is stored in the effluent storage basin at the SSWRF. Winter disposal in infiltration swales along the airport runway is allowed if the SSWRF storage basin is near capacity.

When being utilized, the reclaimed water travels from the SSWRF, to their onsite effluent storage basin,

where it is diverted through a pump station, then into a 12-inch transmission main to the SSRA site, where it enters a distribution system for applied irrigation at the SSRA site using either a wheel-line or impact sprinklers. The reuse site is fenced off with barbed wire and signs are posted along the street warning of the reclaimed water usage.

The SSRA was required to submit a Reclaimed Water Management Plan (RWMP) during the original permit issuance, with an updated RWMP received and approved by the Division on May 27, 2016. 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 May 27, 2026.

Outfall Summary

Outfall 001 – This land use application outfall is for the discharge of reclaimed water onto the SSRA's agricultural fields and landscaped areas surrounding airport.

Outfall 002 – This outfall is monitoring well, MW-3, and is located east of the airport within the irrigated agricultural fields and is downgradient from the airport.

Outfall 003 – This outfall is monitoring well, MW-3R, and is located 200-feet east of Outfall 002, being east of both the airport and MW-3 and is downgradient from the airport.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from November 2019 to October 2024, was reviewed as part of this permit renewal process. The long-term daily maximum for Outfall 001 was 0.43 MGD, with a M&R (monitor and report) quantity discharge limitation. The 30-day average flow rate for Outfall 001 was 0.13 million gallons per day (MGD). The 30-day average flow rate for Outfall 001 is limited to 0.499 MGD. There were no exceedances.

The SSWRF provides tertiary treated, denitrified, and disinfected reclaimed water which meets Category B bacteriological quality per Nevada Administrative Code (NAC) 445A.276 to the SSRA; therefore, the reclaimed water should meet, at a minimum, a daily maximum fecal coliform of 23 colony forming units (CFU) / 100 milliliters (mL) and a 30-day geometric mean of 2.2 CFU / 100 mL. The long-term average for the daily maximum fecal coliform reported was 0.60 CFU / 100 mL.

Outfall 001 also had the following averaged, reported level of the following during the 5-year period reviewed:

Nitrogen: 3.41 mg/L (milligrams per liter)

Outfall 002 had the following averaged, reported levels of the following during the 5-year period reviewed:

Chloride: 540 mg/L

Nitrogen, Total: 73.67 mg/L

Total Dissolved Solids (TDS): 2,860 mg/L

Outfall 003 had the following averaged, reported levels of the following during the 5-year period reviewed:

Chloride: 466 mg/L

Nitrogen, Total: 51.61 mg/L

Total Dissolved Solids (TDS): 1572.22 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 for 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 50 feet

below ground surface (bgs); thus, requiring the installation of monitoring wells for reporting pollutants of concern and varying water levels.

Compliance History

The facility was in substantial compliance during the November 2019 to October 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 (Downgradient Monitoring Well Mw-3) To Be Reported Annually

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	Annual ^[1]	DISCRT
Depth to water level ft below landsurface ^[3]	Daily Minimum	M&R Feet (ft)		Groundwater	002	Annual ^[1]	VISUAL ^[2]
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	002	Annual ^[1]	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	002	Annual ^[1]	DISCRT
Water level relative to mean sea level ^[4]	Daily Maximum	M&R Feet (ft)		Groundwater	002	Annual	CALCTD

Notes (Groundwater Monitoring Wells Table):

1. Measured annually during the 4th quarter and reported in the 4th quarter Discharge Monitoring Report
2. Field measurement
3. Depth to Groundwater (ft).
4. Groundwater Elevation (ft. amsl).

Groundwater Monitoring Wells Table for Sample Location 003 (Downgradient Monitoring Well Mw-3R) 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	003	Quarterly	DISCRT
Depth to water level ft below landsurface ^[2]	Daily Minimum	M&R Feet (ft)		Groundwater	003	Quarterly	VISUAL ^[1]
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	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. Field measurement
2. Depth to Groundwater (ft).
3. Groundwater Elevation (ft. amsl).

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Coliform, fecal, colony forming units ^[1]	30 Day Geometric Mean		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL) ^[2]	Prior to Irrigation	001	Monthly	DISCRT
Coliform, fecal, colony forming units ^[1]	Daily Maximum		<= 23 Colony Forming Units per 100ml T (CFU/100mL) ^[2]	Prior to Irrigation	001	Monthly	DISCRT
Flow rate	Daily Maximum	<= 0.60 Million Gallons per Day (Mgal/d)		Prior to Irrigation	001	Continuous	METER
Flow rate	30 Day Average	<= 0.499 Million Gallons per Day (Mgal/d)		Prior to Irrigation	001	Continuous	METER
Nitrogen, total ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Irrigation	001	Monthly	DISCRT

Notes (Re-use Discharge Limitations Table):

1. Sample results to be reported by the Permittee may be obtained from the SSWRF (NS0099012).
2. 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
Nitrogen, total	Annual Mass Loading	M&R Pounds per Year (lb/yr) ^[1]		Prior to Irrigation	001	Annual	CALCTD
Nitrogen, total ^[2]	Minimum Value		M&R Percent (%)	Prior to Irrigation	001	Annual	CALCTD

Notes (Re-use Discharge Limitations Table):

- To be reported as pounds per acres per year (lbs/acre/year), refer to Page 20 of WTS1B: General Criteria for Preparing a Reclaimed Water Management Plan. This formula is below:
Effluent N Applied = (MGD Applied x Effluent N Conc. (mg/l) x 8.34 x # days/mo.) ÷ # Acres.
- Report the percentage of nitrogen uptake. Refer to Technical Sheets WTS1B: General Criteria for Preparing a Reclaimed Water Management Plan and WTS1C: Nutrient Management for Reuse & Biosolids Sites.

Summary of Changes From Previous Permit

Coordinates were updated:

Outfall 002, MW-3, coordinates were revised to show true location of the well, being: Lat 39.41021°, Long -119.23135°.

Outfall 003, MW-3R, coordinates were revised to show actual location of well, being: Lat 39.41005°, Long -119.23069°.

The following was either added to, revised, or removed from, the Reuse Discharge Limitation Table to be Reported Monthly:

- The description of Outfall 001 was changed from “External Outfall” to “Land Use Application”.
- Nitrogen, Total parameter was changed from a “30-Day Average” base to a “Daily Maximum” base.
- Flow Rate, “Daily Maximum” base was changed from an “M&R Million Gallons per Day” quantity to “0.60 Million Gallons per Day” quantity. This change was made based on current Division standards and associated fee schedule determination.

Reason: This quantity was described in the SSWRF’s Operation and Maintenance Manual, page 39, which states, “that the anticipated discharge will be 600,000 gallons per day (GPD) at full design flow.”

- Footnote 2 was added stating, “CFU or MPN/100 mL.”

The following was either added to, revised, or removed from, the Groundwater Monitoring Wells Table for Outfall 002, MW-3, to be Reported Annually:

- Water level relative to mean sea level parameter was added, with a “Annual Maximum” base, an “M&R (Monitor & Report) Feet (ft)” quantity, “Groundwater” monitoring location, “Annual” measurement frequency, and a “DISCRT” sample type.
- Footnote 3 was added stating, “Depth to Groundwater (ft).”
- Footnote 4 was added stating, “Groundwater Elevation (ft.amsl).”

The following was either added to, revised, or removed from, the Groundwater Monitoring Wells Table for Outfall 002, MW-3R, to be Reported Quarterly:

- Water level relative to mean sea level parameter was added, with a “Daily Maximum” base, an “M&R (Monitor & Report) Feet (ft)” quantity, “Groundwater” monitoring location, “Quarterly” measurement frequency, and a “DISCRT” sample type.
- Footnote 3 was added stating, “Depth to Groundwater (ft).”
- Footnote 4 was added stating, “Groundwater Elevation (ft.amsl).”

A new Re-Use Discharge Limitation Table to be Reported Annually was added:

- Flow, total was added, with a “Annual Total” base, a “Equal/Less Than 41.71 Million Gallons (Mgal)”,

with a "Prior to Irrigation" monitoring location, an "Annual" measurement frequency, and a "Meter" sample type.

- Footnote 1 was added stating, "32 Acre-Feet/year."

A new Re-Use Discharge Limitation Table to be Reported Annually was added for Outfall 001:

- Nitrogen, total was added, with an "Annual Mass Loading" base, a "M&R Pounds per Year (lb/yr)", with a "Prior to Irrigation" monitoring location, an "Annual" measurement frequency, and a "Calctd" sample type.
- Nitrogen, total was added, with a "Minimum Value" base, a "M&R Percent (%)" concentration, with a "Prior to Irrigation" monitoring location, an "Annual" measurement frequency, and a "Calctd" sample type.

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)

Proposed 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 and for the protection of human health and the environment.

The proposed permit establishes the requirement to report the total nitrogen applied to ensure groundwater of the State is not being degraded.

The proposed permit establishes the requirement to report the total nitrogen uptake to ensure groundwater of the State is not being degraded.

The continued reporting frequency of "Annually" for MW-3 (Outfall 002) and "Quarterly" for MW-3R (Outfall 003) are being maintained for this permit renewal. These reporting frequencies were established based on discussions, done in late 2007, between Joe Maez, of the Division's Technical Compliance and Enforcement Branch, and Skeet Sellers, the wastewater superintendent for Lyon County Utilities Department, via a written request from Skeet Sellers, asking that the new well, MW-3R, be reported quarterly, while decreasing the frequency of reporting for MW-3 to an annual time period (refer to letter dated October 24, 2007 - Division Tech File).

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 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 the Special Approvals/Conditions Table as specified below:

SA – Special Approvals / Conditions Table

Item #	Description
1	Due to the historically elevated concentration of total nitrogen in the groundwater, which is attributed to the use of individual septic disposal systems in the area, the Permittee is exempt from permit section B.MW.3.

Discharges From Future Outfalls/ Planned Facility Changes

The Permittee does not anticipate discharges from any future outfalls, or any others changes to the facility.

Corrective Action Sites

There are no active Bureau of Corrective Actions (BCA) sites located within a one-mile radius of the discharge location.

Wellhead Protection Program

There is a Public Water Supply (PWS) well located approximately 1810 feet to the east to the closest outfall placing the well in a Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well and in a Wellhead Protection Area (WHPA), which represents an approximate 10-year capture zone of a well. The well is drilled within a confined aquifer at a depth of 628 feet. The well has a sanitary seal at 100 feet, a static water level depth of 57.16 feet and the screen depth is 160 feet. The well is at minimal risk based on the well structure and distance.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two (2) copies (one hard copy and one electronic copy) of a Reclaimed Water Management Plan (RWMP) to the Division for review and approval. The RWMP shall follow guidance document WTS1B: General Design Criteria for Preparing a Reclaimed Water Management Plan	5/27/2026

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	7/28/2025
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. **3/7/2025**, 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: **1/30/2025**

Title: **Staff II Engineer**