



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: SILVER SPRINGS AIRPORT, LLC
PO BOX 311
SILVER SPRINGS, NV - 89429

Permit Number: NS0099017

Location: SILVER SPRINGS AIRPORT, 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	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	IRRIGATION	External Outfall		SILVER SPRINGS	NV	89429	LYON	39.40	-119.25	GROUNDWATER
002	MW-3	Monitoring Well		SILVER SPRINGS	NV	89429	LYON	39.40	-119.25	GROUNDWATER
003	MW-3R	Monitoring Well		SILVER SPRINGS	NV	89429	LYON	39.40	-119.25	GROUNDWATER

General:

This permit renewal allows the Silver Springs Airport in Silver Springs, Nevada to continue discharging tertiary-treated, denitrified, disinfected reclaimed water supplied by the Silver Springs Water Reclamation Facility (SSWRF), NS0099012, for spray irrigation of airport landscape as well as turf grasses in adjacent agricultural fields. The crop in the agricultural fields is generally Kentucky bluegrass, which is harvested as sod rolls, but recently, due to drought, 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. The irrigated areas and reuse irrigation activities are managed and operated by Dayton Valley Turf, Inc. The Silver Springs Airport is permitted to irrigate at a 30-day average flow rate of up to 0.499 million gallons per day (MGD).

Discharge Characteristics:

The SSWRF supplies tertiary-treated, denitrified, disinfected reclaimed water that meets Category B quality in accordance with NAC 445A.276.

Receiving Water:

The receiving water is groundwater of the State underlying the reuse site. Groundwater in the area reportedly flows in an easterly direction. Average values for groundwater monitoring results from downgradient groundwater monitoring well MW-3R from the first quarter of 2010 through the second quarter of 2015 are listed below:

Depth to Groundwater: 49.9 feet
Total Dissolved Solids: 614 mg/L
Nitrate: 13.9 mg/L
Total Nitrogen: 14.0 mg/L

Chloride: 136 mg/L

The historically elevated levels of nitrate and total nitrogen in the groundwater are attributed to the use of individual septic disposal systems in the area. The Permittee is considered to be in substantial compliance with the permit.

Summary of Changes From Previous Permit:

The 30-day average irrigation flow rate limit of 0.449 MGD has been changed to 0.499 MGD. The new limit is based on the flow limit requested in the permit renewal application.

The requirement to monitor and report the annual average flow rate has been removed and the requirement to monitor and report the daily maximum flow rate has been added.

The 30-day average flow limit of 0.600 MGD and requirement to monitor and report the daily maximum flow for the discharge from the SSWRF have been removed. The discharge from the SSWRF is limited in permit NS0099012.

The requirement to monitor and report nitrate has been removed; nitrate is a component of total nitrogen, which is monitored and reported monthly.

The requirement to report the concentration of biochemical oxygen demand and total suspended solids in the effluent has been removed; this data is reported by the SSWRF in accordance with permit NS0099012.

Item #1 has been added to the special approvals / conditions table due to the historically elevated levels of total nitrogen in the groundwater, which are attributed to the use of individual septic disposal systems in the area and not to the permitted effluent reuse activity.

The following changes have been made to groundwater monitoring requirements:

- The requirement to monitor and report the groundwater elevation has been removed.
- The nitrate limit of 10 mg/L has been removed; monitoring and reporting of nitrate is not required because nitrate is a component of total nitrogen, which is monitored and reported quarterly at monitoring well MW-3R and annually at monitoring well MW-3.

Due to the new naming conventions at the Nevada Division of Environmental Protection (NDEP), Bureau of Water Pollution Control, the permit number has been changed from NEV99017 to NS0099017. This change does not reflect a change in the type of permit being issued.

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 Mw-3) To Be Reported Annually

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

Notes (Groundwater Monitoring Wells Table):

1. Measured annually during the 4th quarter and reported in the 4th quarter Discharge Monitoring Report
2. Field measurement

Groundwater Monitoring Wells Table for Sample Location 003 (Monitoring Well Mw-3R) To Be Reported Quarterly

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Depth to water level ft below landsurface	Quarterly Maximum	M&R Feet (ft)		Groundwater	003	Quarterly	VISUAL ^[1]
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT
Nitrogen, total	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT
Chloride (as Cl)	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT

Notes (Groundwater Monitoring Wells Table):

1. Field measurement

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

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

Rationale for Permit Requirements:

Flow rate is limited to prevent ponding and runoff of the discharge.

Fecal coliform is limited to ensure that the concentration of fecal coliform in the treated effluent does not exceed the allowable concentration for Reuse Category B in accordance with NAC 445A.276.

Total nitrogen is monitored and reported to prevent leaching and consequential degradation of the underlying groundwater.

Groundwater monitoring is required to ensure that the groundwater underlying the Silver Springs Airport is not degraded by the discharge.

Fecal Coliform:

Daily Maximum ≤ 23 c.f.u. or mpn/100mL

30-Day Average ≤ 2.2 c.f.u. or mpn/100mL

Special Conditions:

Substantial compliance with the current permit is a condition of permit renewal.

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.

Flow:

30-Day Average Flow Rate ≤ 0.499 MGD

Corrective Action Sites:

There are no Bureau of Corrective Actions remediation sites located within a one-mile radius of the Silver Springs Airport.

Wellhead Protection Program:

Approximately 45 acres of the Silver Springs Airport are located within 10-year Wellhead Protection Areas (WHPAs). Approximately 115 acres of the Silver Springs Airport are located within two 3,000-foot Drinking Water Protection Areas (DWPAs). Continued reuse activities are not expected to negatively impact the WHPAs or DWPAs.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit a new Effluent Management Plan (EMP) to the Division. The EMP shall be prepared and wet-stamped by a Nevada Registered Professional Engineer in accordance with guidance document <i>WTS-1B: General Criteria for Preparing an Effluent Management Plan</i> .	5/28/2016

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	4/28/2016
2	Annual Report	Annually	1/28/2017

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 sent to the **Reno Gazette Journal, Mason Valley News** for publication. The notice is being mailed to interested persons on our mailing list. Anyone wishing to comment on the proposed permit can do so in writing until 5:00 P.M. **1/15/2016**, 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 to 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: **Alan Pineda**

Date: **11/20/2015**

Title: **Staff I Associate Engineer**