FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: DUNCAN GOLF MANAGEMENT

1400 WOLF RUN ROAD
RENO, NV 89511

Permit Number: NS0092021

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: EAGLE VALLEY GOLF COURSE, CARSON CITY
3999 CENTENNIAL PARK DRIVE, CARSON CITY, NV 89706
LATITUDE: 39.19333330, LONGITUDE: -119.71
TOWNSHIP: 15 N, RANGE: 20 E, SECTION: 2, 3

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	GOLF COURSE REUSE	Land Application Site		39.19333330	-119.71	GROUNDWATER
002	WEST COURSE UPGRADIENT MONITORING WELL MW-6	Monitoring Well		39.202361	-119.723670	GROUNDWATER
003	EAST COURSE UPGRADIENT MONITORING WELL MW-7	Monitoring Well		39.198436	-119.704654	GROUNDWATER
004	EAST COURSE DOWNGRADIENT MONITORING WELL MW-8	Monitoring Well		39.194860	-119.705075	GROUNDWATER
005	EAST COURSE DOWNGRADIENT MONITORING WELL MW-12	Monitoring Well		39.191062	-119.705265	GROUNDWATER
006	WEST COURSE DOWNGRADIENT MONITORING WELL MW-18	Monitoring Well		39.190870	-119.713015	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Duncan Golf Management has applied for a permit renewal of the existing reclaimed water reuse permit NS0092021, for their facility, Eagle Valley Golf Course, located at 3999 Centennial Park Drive, in Carson City, Nevada. The Permittee proposes to continue using reclaimed water, supplied by the Carson City Water Resource Recovery Facility (CCWRRF) under permit NS0090008 for irrigation purposes at the Eagle Valley Golf Course. The permit authorizes the use of treated effluent for irrigation in accordance with the Reclaimed Water Management plan (RWMP) approved by the Nevada Division of Environmental Protection, Bureau of Water Pollution Control (BWPC). The CCWRRF provides Category B bacteriological quality reclaimed water pursuant to Nevada Administrative Code (NAC) 445A.276. Irrigation of turf and other landscape features on the combined 228 acres by drip and spray methods conforms to NAC 445A.2764 approved uses. Runoff from the sites is prohibited.

This permit was first issued on March 23, 1993. The most recent permit was issued on February 6, 2018, and expired on February 6, 2023; the permit has been administratively continued since.

Facility Overview

Eagle Valley Golf Course is a 36-hole golf course that covers 228 acres divided into 2 areas; 138 acres located on the east side and 90 acres located on the west. The permit authorizes the Permittee to irrigate the 228 acres of turf and landscaping via drip and spray irrigation with reclaimed water that is partially denitrified, filtered and disinfected at the CCWRRF. Per an agreement between the Permittee and the CCWRRF, the Golf Course can receive up to 3,360 acre-feet per year of reclaimed water. The reclaimed water used for irrigation is discharged to groundwater where a downslope gradient is reported to be between 0.011 - 0.016 feet per foot trending south southeast.

The boundary of the permitted area is approximately 928 feet away from a Bureau of Safe Drinking Water (BSDW) Wellhead Protection Area. Groundwater is monitored in five well locations, two wells on the western course, MW-6 to the north and MW-18 to the south. The eastern course is monitored by three wells, MW-7 to the north, MW-8 in the middle, and MW-12 to the south. The GPS coordinates for the monitoring wells are listed above.

Outfall Summary

Outfall 001: This outfall is for the use of reclaimed water for irrigation of the golf course. This outfall is metered for flow rate, and sampled for Fecal Coliform and Nitrogen.

Outfall 002: This outfall is for an upgradient Monitoring Well MW-6 located on the west side of the golf course with quarterly sampling of the following: depth to water, Chloride, Nitrogen, and total dissolved solids (TDS).

Outfall 003: This outfall is for an upgradient Monitoring Well MW-7 located on the east side of the golf course with quarterly sampling of the following: depth to water, Chloride, Nitrogen, and TDS.

Outfall 004: This outfall is for a downgradient Monitoring Well MW-8 located on the east side of the golf course with quarterly sampling of the following: depth to water, Chloride, Nitrogen, and TDS.

Outfall 005: This outfall is for a downgradient Monitoring Well MW-12 located on the east side of the golf course with quarterly sampling of the following: depth to water, Chloride, Nitrogen, and TDS.

Outfall 006: This outfall is for a downgradient Monitoring Well MW-18 located on the west side of the golf course with quarterly sampling of the following: depth to water, Chloride, Nitrogen, and TDS.

Effluent Characterization

Treatment of the reclaimed water is conducted off-site at the CCWRRF, delivering Category B bacteriological quality (NAC 445A.276) reclaimed water to Eagle Valley Golf Course. Being Category B quality, the reclaimed water should meet, at a minimum, a daily maximum fecal coliform concentration of 23 colony forming unit (CFU) per 100mL, and a 30-day geometric mean of 2.2 CFU per 100mL. There will be no treatment of the effluent on site. The permittee is authorized to discharge 3 million gallons per day (Mgal/d), or 3,360 acre-feet per year.

Outfall 004 MW-8 has been consistently above the 10 mg/L limit for total Nitrogen, and in the 1,000 mg/L TDS limit throughout the life of the permit. MW-8 is the only monitoring well to report higher than the limited, and higher than the influent values for total nitrogen.

The averages for the reported Nevada State Network Discharge Monitoring Report (NetDMR) website values for 2020-2025 are listed below:

Outfall 001: Effluent source

Coliform: 30-day geometric mean 0.95 CFU

Coliform: Long term average Daily Max 2.64 CFU

Nitrogen: 12.37 mg/L

30 Day Average Flow: 0.75 Mgal/d

Daily Average Maximum Flow: 1.21 Mgal/d

Outfall 002: Monitoring Well MW-6

Dry Well no data reported

Outfall 003: Monitoring Well MW-7

Depth of water: 20.2’

Water Elevation: 4670.2’ Above Mean Sea Level (AMSL)

Chloride: 40.3 mg/L

Nitrogen: 5.3 mg/L

Nitrate: 5.2 mg/L

TDS: 395.6 mg/L

Outfall 004: Monitoring Well MW-8

Depth of water: 9.18’

Water Elevation: 4658.42’ AMSL

Chloride: 221.3 mg/L

Nitrogen: 17.3 mg/L

Nitrate: 16.9 mg/L

TDS: 1112.5 mg/L

Outfall 005: Monitoring Well MW-12

Depth of water: 4.17’

Water Elevation: 4640.23’ AMSL

Chloride: 9.1 mg/L

Nitrogen: 2.0 mg/L

Nitrate: 1.99 mg/L

TDS: 185.0 mg/L

Outfall 006: Monitoring Well MW-18

Depth of water: 4.369’

Water Elevation: 4635.931’

Chloride: 16.9 mg/L

Nitrogen: 0.4 mg/L

Nitrate: 0.1 mg/L

TDS: 385.0 mg/L

Pollutants of Concern
Pollutants of concern are any pollutants or parameters that are believed to be present in discharge and could affect the physical, chemical, or biological condition of the receiving water. Common pollutants of concern for reclaimed water are fecal coliform and total nitrogen.

Receiving Water
The reclaimed water used for irrigation is discharged to groundwater of the State where a downslope gradient is reported to be between 0.011 - 0.016 feet per foot trending south southeast. The receiving water is monitored by 5 monitoring wells, one of which is reported as dry.

Compliance History
The Permittee is in compliance with the permit.

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

Groundwater Monitoring Wells Table for Sample Location 002 (West Up Gradient Mw-6) To Be Reported Quarterly[3]

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	002	Quarterly	DISCRT
Chloride (as Cl)	Daily Maximum		M&R 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[4]	Daily Maximum	M&R Feet (ft)		Groundwater	002	Quarterly	DISCRT
Depth to water level ft below landsurface[1]	Daily Minimum	M&R Feet (ft)		Groundwater	002	Quarterly	DISCRT[2]

Notes (Groundwater Monitoring Wells Table):

1. Depth to Groundwater (feet).
2. Field measurement.
3. Sampling frequency may be modified or reduced, in whole or in part, at the discretion of the Division, upon demonstration of groundwater concentrations or conditions which warrant or justify alternative monitoring schedules.
4. Groundwater elevation (feet AMSL).

Groundwater Monitoring Wells Table for Sample Location 003 (East Up Gradient Mw-7) To Be Reported Quarterly[1]

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	003	Quarterly	DISCRT
Chloride (as Cl)	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[2]	Daily Maximum	M&R Feet (ft)		Groundwater	003	Quarterly	DISCRT
Depth to water level ft below landsurface[3]	Daily Minimum	M&R Feet (ft)		Groundwater	003	Quarterly	DISCRT[4]

Notes (Groundwater Monitoring Wells Table):

1. Sampling frequency may be modified or reduced, in whole or in part, at the discretion of the Division, upon demonstration of groundwater concentrations or conditions which warrant or justify alternative monitoring schedules.
2. Groundwater elevation (feet AMSL).
3. Depth to Groundwater (feet).
4. Field measurement.

Groundwater Monitoring Wells Table for Sample Location 004 (East Mid Course Mw-8) To Be Reported Quarterly[1]

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Solids, total dissolved	Quarterly Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	004	Quarterly	DISCRT
Water level relative to mean sea level[4]	Daily Maximum	M&R Feet (ft)		Groundwater	004	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	004	Quarterly	DISCRT[3]

Notes (Groundwater Monitoring Wells Table):

1. Sampling frequency may be modified or reduced, in whole or in part, at the discretion of the Division, upon demonstration of groundwater concentrations or conditions which warrant or justify alternative monitoring schedules.
2. Depth to Groundwater (feet).
3. Field measurement.
4. Groundwater elevation (feet AMSL).

Groundwater Monitoring Wells Table for Sample Location 005 (East Down Gradient Mw-12) To Be Reported Quarterly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Nitrogen, total	Daily Maximum		<= 10.0 Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	005	Quarterly	DISCRT
Water level relative to mean sea level[3]	Daily Maximum	M&R Feet (ft)		Groundwater	005	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	005	Quarterly	DISCRT[4]

Notes (Groundwater Monitoring Wells Table):

1. Sampling frequency may be modified or reduced, in whole or in part, at the discretion of the Division, upon demonstration of groundwater concentrations or conditions which warrant or justify alternative monitoring schedules.
2. Depth to Groundwater (feet).
3. Groundwater elevation (feet AMSL).
4. Field measurement.

Groundwater Monitoring Wells Table for Sample Location 006 (West Down Gradient Mw-18) To Be Reported Quarterly[1]

	Discharge Limitations			Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Nitrogen, total	Daily Maximum		<= 10.0 Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Chloride (as Cl)	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Solids, total dissolved	Daily Maximum		M&R Milligrams per Liter (mg/L)	Groundwater	006	Quarterly	DISCRT
Water level relative to mean sea level[4]	Daily Maximum	M&R Feet (ft)		Groundwater	006	Quarterly	DISCRT
Depth to water level ft below landsurface[2]	Daily Minimum	M&R Feet (ft)		Groundwater	006	Quarterly	DISCRT[3]

Notes (Groundwater Monitoring Wells Table):

1. Sampling frequency may be modified or reduced, in whole or in part, at the discretion of the Division, upon demonstration of groundwater concentrations or conditions which warrant or justify alternative monitoring schedules.
2. Depth to Groundwater (feet).
3. Field measurement.
4. Groundwater elevation (feet AMSL).

Re-use Discharge Limitations Table for Sample Location 001 (Land Application Site) To Be Reported Monthly[1]

Discharge Limitations				Monitoring Requirements			
Parameter	**Base**	**Quantity**	**Concentration**	**Monitoring Loc**	**Sample Loc**	**Measurement Frequency**	**Sample Type**
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Beneficial Reuse	001	Continuous	METER
Flow rate	Daily Maximum	<= 3.0 Million Gallons per Day (Mgal/d)		Beneficial Reuse	001	Continuous	METER
Nitrogen, total	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Irrigation	001	Weekly	COMPOS
Nitrogen, total	30 Day Average		M&R Milligrams per Liter (mg/L)	Prior to Irrigation	001	Weekly	COMPOS
Coliform, fecal, colony forming units	Daily Maximum		<= 23 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	001	Weekly	DISCRT
Coliform, fecal, colony forming units	30 Day Geometric Mean		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL)	Prior to Reuse	001	Weekly	DISCRT

Notes (Re-use Discharge Limitations Table):

1. During reclaimed water application periods, sample results may be obtained, weekly, from the Carson City Water Resource Recovery Facility (NS0090008) and reported.

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 Total	<= 230 Pounds per Year (lb/yr)[1]		See Footnote	001	Annual	CALCTD
Flow, total	Cumulative Total	<= 1095 Million Gallons (Mgal)		Beneficial Reuse	001	Annual	METER
Nitrogen, total[2]	Annual Mass Loading	M&R Pounds per Year (lb/yr)		Beneficial Reuse	001	Annual	CALCTD

Notes (Re-use Discharge Limitations Table):

1. To be reported as pounds per acre 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

2. 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
The proposed permit removes the requirement to sample nitrate from the monitoring wells.

The proposed permit establishes the requirement to report the total nitrogen uptake.

Technology Based Effluent Limitations
Technology base effluent limitations are not applicable on 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 limitations are not applicable to this permit.

Basis for Effluent Limitations
The flow is limited to 3.0 Mgal/d at the request of the Permittee and per the contract with the CCWRRF.

Fecal coliform is monitored to assess the quality of the reclaimed water and to protect the health of the public.

Limits on the total nitrogen discharge is to regulate and monitor the amount of nitrogen potentially entering the groundwater supply and are required to be reported to an approved RWMP.

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
For Special Conditions see table below.

SA – Special Approvals / Conditions Table

Item #	Description
1	The Permittee shall continue to submit all DMRs electronically through the Nevada NetDMR website: https://netdmr.ndep.nv.gov/netdmr/public/home/htm
2	The cumulative nitrogen application rate limit, as indicated in the limit set 001-Y, may be changed, upon the written request of the Permittee, via minor modification following the review and approval of any new RWMP / revisions to the current RWMP.

Discharges From Future Outfalls/ Planned Facility Changes
This Permittee does not anticipate changes to the outfalls or to the facilities.

Corrective Action Sites
This permit is within a one-mile radius of one open Bureau of Corrective Actions site, A-000050 the old Carson City Landfill. The listed contaminant descriptions are Dioxins and Furans, polychlorinated biphenyls (PCBs), and total petroleum hydrocarbons (TPH). BCA staff do not expect that the dewatering from irrigation activity, associated with this permit, will have adverse effects on their ongoing remediation sites.

Wellhead Protection Program
The outfall is located 1027 feet Northwest of a Public Water Supply (PWS) well placing the outfall in the Drinking Water Protection Area, which is defined by a 3,000-foot radius around a PWS well. The outfall is

located in the 25-year Wellhead Protection Area (WHPA). The well is located in a confined aquifer at a depth of 460 feet. The well is at minimal risk based on the confined aquifer and the well structure.

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.	5/1/2028

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Annual Report	Annually	1/28/2026
2	Monthly DMRs	Quarterly	1/28/2026
3	Quarterly DMRs	Quarterly	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. **12/22/2025,** 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: **Jason Reichelt**
Date: **11/20/2025**
Title: **Environmental Scientist 3**