



FACTSHEET
(pursuant to NAC 445A.236)

Permittee Name: RIO SECCO GOLF CLUB LLC
2851 GRAND HILLS DRIVE
HENDERSON, NV 89052

Permit Number: NS0096010

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: RIO SECCO GOLF CLUB, CLARK
2851 GRAND HILLS DRIVE, HENDERSON, NV 89052
LATITUDE: 35.975833, LONGITUDE: -115.110833
TOWNSHIP: 23S; 22S, RANGE: 61E, SECTION: 1; 36

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	GOLF COURSE	External Outfall		35.97496910	-115.110983	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Rio Secco Golf Club LLC, has applied for the renewal of Permit NS0096010 for the Rio Secco Golf Club (RSGC), located at 2851 Grand Hills Drive, in Henderson, within Clark County, Nevada. The Permittee proposes to continue to use reclaimed water to irrigate golf course landscaping and fill associated pond areas falling within the course’s boundary.

This permit was first issued on January 24, 1997. The most recent permit was issued on April 1, 2015, and expired on March 31, 2020; the permit has been administratively continued since.

Facility Overview

The RSGC is composed of a clubhouse, restaurant, 18-hole course and driving range, with common areas encompassing approximately 89 acres total. The golf course and common areas, including water features, are irrigated with reclaimed water supplied by the Kurt R. Segler Water Reclamation Facility (KRSWRF), which discharges to the Green Valley Reclaimed Water Distribution System (GVRWDS) and the Southwest Water Reclamation Facilities (SWRF), under KRSWRF permit NS0080003, then into a reclaimed water transmission main for applied use at various reuse sites throughout Henderson.

The reclaimed water is brought into the RSGC via connection to the City of Henderson’s reclaimed water transmission main. A 16”-diameter PVC lateral conveys the reclaimed water onto the site and discharges into the HDPE (high density polyethylene) lined lower pond, where it is stored and can be pumped into the irrigation distribution system, first going through a screen to remove suspended solids, and then out into the system.

Prior to last year, the golf course’s reclaimed water system had two ponds, an upper pond and a lower

pond, but in 2024, the upper pond was closed to allow for conservation efforts, the liner removed, and the piping re-routed to the lower pond.

Reclaimed water is used to irrigate the golf course, with the exception of the greens, where a separate potable irrigation system is in place to water those areas. Automatic irrigation is normally done at night when the course is not being played.

The site's Reclaimed Water Management Plan (RWMP) (formerly known as an Effluent Management Plan) was last reviewed and approved by the Division in 2004. 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. A due date was established of January 28, 2024, under final findings of the August 2022 site inspection, which has not been adhered to.

Outfall Summary

Outfall 001 – This external outfall is located at the lower pond for the discharge of reclaimed water for irrigation of the golf course.

Effluent Characterization

Nevada State Network Discharge Monitoring Report (NetDMR) data, as reported from September 2019 to August 2024, was reviewed as part of this permit renewal process. Reported numbers for flow, fecal coliform, and nitrogen were secured from the reporting submitted under the KRSWRF permit (NS0080003). The long-term average discharge flow rate for Outfall 001 was 1.10 million gallons per day (MGD). The daily maximum discharge flow rate for Outfall 001 is limited to 0.95 MGD. There were 42 reported exceedances for this limit.

The KRSWRF and SWRF provides tertiary treated and disinfected reclaimed water which meets Category B bacteriological quality per Nevada Administrative Code (NAC) 45A.276 to the RSGC; therefore, the reclaimed water should meet, at a minimum, a daily maximum fecal coliform of 23 colony forming units (CFU) / 100 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 one reportable instance of 5.2 CFU / 100 mL and 59 instances of reported levels being less than the detectable limit.

For the same reporting period, the average monthly maximum for total nitrogen was 15.91 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 denitrified reclaimed water are fecal coliform and total nitrogen.

Receiving Water

Receiving water is groundwater of the State. Depth to groundwater at the site is between 325 feet to 375 feet below ground surface (bgs). No adverse effects are expected to occur because of this effluent reuse. Due to the depth to groundwater, monitoring wells are not required.

Compliance History

The facility was found to be out of compliance during the period reviewed due to non-submittal of required discharge reporting along with non-receipt of an updated RWMP.

Proposed Effluent Limitations

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

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Coliform, fecal general ^[1]	30 Day Geometric Mean		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL) ^[2]	Prior to Reuse	001	Weekly	DISCRT
Coliform, fecal general ^[1]	Daily Maximum		<= 23 Colony Forming Units per 100ml T (CFU/100mL) ^[2]	Prior to Reuse	001	Weekly	DISCRT
Flow rate	Daily Maximum	<= 1.10 Million Gallons per Day (Mgal/d)		Prior to Reuse	001	Continuous	METER
Flow rate	30 Day Average	<= 0.95 Million Gallons per Day (Mgal/d)		Prior to Reuse	001	Continuous	METER
Nitrogen, total ^[1]	Daily Maximum		M&R Milligrams per Liter (mg/L)	Prior to Reuse	001	Monthly	DISCRT

Notes (Re-use Discharge Limitations Table):

1. Sample results to be reported by the Permittee may be obtained from the KRSWRF (NS0080003).
2. In accordance with NAC 445A.276, fecal coliform may be reported in c.f.u. or mpn/100mL.

Re-use Discharge Limitations Table for Sample Location 001 (Golf Course) 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 Reuse	001	Annual	CALCTD
Nitrogen, total ^[2]	Minimum Value		M&R Percent (%)	Prior to Reuse	001	Annual	CALCTD

Notes (Re-use Discharge Limitations Table):

- To be reported as pounds per acre per year (lbs/acre/year), refer to Page 20 of WTS-1B: General Criteria for Preparing a Reclaimed Water Management Plan. This formula is below:

$$\text{Effluent N Applied} = (\text{MGD Applied} \times \text{Effluent N Conc. (mg/L)} \times 8.34 \times \text{\#days/mo.}) \div \text{\# Acres}$$
- Report the percentage of nitrogen uptake. Refer to Technical Sheets WTS-1B: General Criteria for Preparing a Reclaimed Water Management Plan and WTS-1C Nutrient Management for Reuse & Biosolids Sites.

Summary of Changes From Previous Permit

Updated coordinates of facility and outfall locations. New coordinates are below:

Facility: Lat 35.975833, Long -115.110833

Outfall (Lower Pond): Lat 35.9749694, Long -115.1109832

Additional Basis for Effluent Limitations justifications were added for Nitrogen.

Under the RU – Reuse Discharge Limitations Table:

The Nitrogen, total parameter for 30-day average was removed.

The Nitrogen, total parameter was changed from a “Monthly Average” base to a “Daily Maximum” base.

The Flow Rate was changed from a “Monthly Average” base to a “30-Day Average” base.

The Flow Rate was changed from a “Daily Maximum” of "Monitor & Report Million Gallons" to “1.10 MGD” based on the previous five-year average reported flow from the KRSWRF.

Annualized reporting was added to Outfall 001 with the following two parameters being added:

Discharge parameter for Total Nitrogen, with an “Annual Mass” Loading base, a “Monitor & Report (M&R)” quantity, a “Pounds per Year (lb/yr)” quantity unit, “Prior to Reuse” monitoring location, an “Annual” measurement frequency, and a “Calctd” sample type.

Discharge parameter for Total Nitrogen, with a “Minimum Value” base, an “M&R Percent (%)” concentration, a “Prior to Reuse” monitoring location, an “Annual” measurement frequency, and a “Calctd” sample type.

Along with the following footnotes:

1. To be reported as pounds per acre per year (lbs/acre/year), refer to Page 20 of WTS-1B: General Criteria for Preparing a Reclaimed Water Management Plan. This formula is below:

$$\text{Effluent N Applied} = (\text{MGD Applied} \times \text{Effluent N Conc. (mg/L)} \times 8.34 \times \text{\#days/mo.}) \div \text{\# Acres}$$

2. Report the percentage of nitrogen uptake. Refer to Technical Sheets WTS-1B: General Criteria for Preparing a Reclaimed Water Management Plan and WTS-1C Nutrient Management for Reuse & Biosolids Sites.

The title, and associated acronym, for the Effluent Management Plan and EMP, was updated to Reclaimed Water Management Plan and RWMP. A new due date was assigned due to the 10-year update requirement being not adhered to (See SOC Schedule of Compliance Table).

Based on the removal of the upper pond's liner, an additional special condition was added to the permit requiring the Permittee to contact the State of Nevada Environmental Protection's Bureau of Sustainable Materials Management.

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.

Anti-backsliding

Antibacksliding is not only for removing, or lessening, limits, it can also apply to the removal, or lessening, of the sampling frequency. The removal of the 30-day average nitrogen sampling and reporting requirement is considered backsliding. Although the permit will not be less restrictive with the removal of the 30-day average nitrogen sampling and reporting requirement, the daily maximum nitrogen limit is now 10 mg/L, which is more restrictive than the requirement to monitor and report for the 30-day average.

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

Refer to the Special Approvals/Conditions Table below.

SA – Special Approvals / Conditions Table

Item #	Description
1	Based on the pond liner being removed from the upper pond, the State of Nevada Department of Environmental Protection's Bureau of Sustainable Materials Management should be contacted to discuss proper disposal.

Discharges From Future Outfalls/ Planned Facility Changes

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

Corrective Action Sites

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

Wellhead Protection Program

The closest Public Water Supply (PWS) well is located approximately 2.0 miles to the west of the outfall. The outfall is 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 (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.	8/1/2025

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. **4/21/2025**, 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: **3/13/2025**

Title: **Staff II Engineer**