

Department of Conservation & Natural Resources

Joe Lombardo, *Governor*James A. Settelmeyer, *Director*Jennifer L. Carr, *Administrator*

FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: ANTHEM COUNTRY CLUB, INC.

1 CLUB SIDE DRIVE HENDERSON, NV 89052

Permit Number: NS0098023

Permit Type: GROUNDWATER DISCHARGE

Designation: GROUNDWATER

New/Existing: EXISTING

Location: ANTHEM COUNTRY CLUB GOLF COURSE, CLARK

1 CLUB SIDE DRIVE, HENDERSON, NV 89052 LATITUDE: 35.965833, LONGITUDE: -115.083056 TOWNSHIP: 23 S, RANGE: 62 E, SECTION: 06, 07, 08

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Latitude	Longitude	Receiving Water
001	GOLF COURSE	Land Application Site		35.965833	-115.083056	GROUNDWATER

Permit History/Description of Proposed Action

The Permittee, Anthem Country Club, Inc., has applied for the renewal of Permit NS0098023 for the Anthem Country Club Golf Course (ACCGC), located at 1 Club Side Drive, in 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 March 5, 1999. The most recent permit was issued on August 1, 2016, and expired on July 31, 2021; the permit has been administratively continued since.

Facility Overview

The Anthem Country Club Golf Course is composed of an 18-hole golf course, with common areas, encompassing approximately 106 acres total. The golf course is irrigated with reclaimed water supplied 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, including the ACCGC.

The reclaimed water is delivered from KRSWRF, via the GVRWDS and the SWRF, up to a daily maximum of 0.917 million gallons per day (mgd), through a pipeline to the first of four reclaim water storage lakes. From there, it is pumped throughout the golf course using the on-site irrigation pump station for the irrigation of 95 acres of irrigated turf - this includes a driving range, tee boxes, fairways, and greens. In addition to this acreage, numerous areas along the perimeter of all the tees, fairways, and greens are desert landscaped and utilize a drip irrigation system. There are also three potable water lake systems, being the Entry lake, Lake 9, and Lake 10. The potable water system is used to supply the entry system, the common area, and six decorative ponds between Holes 9 and 10. The remaining acreage within the golf course

boundary are non-irrigated native plants. The lakes are each lined with a earthen covering, then a PVC liner, and plating material.

The site's Reclaimed Water Management Plan (RWMP) (formerly known as an Effluent Management Plan) was last reviewed and approved by the Division on January 10, 2018. 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. The RWMP shall follow guidance document, WTS1B General Design Criteria for Preparing a Reclaimed Water Management Plan.

Outfall Summary

Outfall 001 – This outfall is 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 July 2019 to July 2024, was reviewed as part of this permit renewal process. The long-term average discharge flow rate for Outfall 001 was 0.76 million gallons per day (MGD). The daily maximum discharge flow rate for Outfall 001 is limited to 0.917 MGD. There were no reported exceedances for this limit.

The KRSWRF, via the GVRWDS and the SWRF, provides tertiary treated, denitrified, and disinfected reclaimed water which meets Category B bacteriological quality per NAC 445A.276 to the Anthem Country Club Golf Course; 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 reported bacteriological quality, as reported by the treatment facilities under their discharge permit (NS0080003), during the July 2019 to July 2024 period, had a long-term average for the daily maximum fecal coliform of 2.79 CFU/100 mL, with the majority of the reported levels being less than the detectable limit.

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. A common pollutant of concern for denitrified reclaimed water is fecal coliform and nitrogen.

Receiving Water

The receiving water is groundwater of the State. Depth to groundwater in the area is between 325 feet and 375 feet below ground surface. No adverse effects are expected to occur as a result of this effluent reuse. Due to the depth to groundwater, monitoring wells are not required.

Compliance History

The facility was in compliance during the July 2019 to June 2024 reporting period based on a review of DMR reported data and inspections done by the Division's compliance group.

Proposed Effluent Limitations

The discharge shall be limited, sampled, and monitored by the permittee as specified below:

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

	Monitoring Requirements						
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Coliform, fecal general ^[1]	Daily Maximum		<= 23 Colony Forming Units per 100ml T (CFU/100mL) ^[2]	Prior to Reuse	001	Weekly	DISCRT
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
Flow rate	Daily Maximum	<= 0.917 Million Gallons per Day (Mgal/d)		Prior to Reuse	001	Continuous	METER
Flow rate	30 Day Average	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	001	Continuous	METER

Notes (Re-use Discharge Limitations Table):

^{1.} Sample results shall be obtained from NS0080003 and reported by Permittee.

^{2.} CFU/100 mL 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	-	Measurement Frequency	Sample Type
Nitrogen, total ^[3]	Minimum Value		M&R Percent (%)	Prior to Irrigation	001	Annual	CALCTD
Nitrogen, total ^[1]	Mace	M&R Pounds per Year (lb/yr) ^[2]		Prior to Irrigation	001	Annual	CALCTD

Notes (Re-use Discharge Limitations Table):

- 1. Cumulative Annual Nitrogen Applied (pounds/acre/year). This includes all sources of nitrogen applied (e.g., fertilizer, etc.).
- 2. To be reported as pounds per acre per year (lbs/acre/year).
- 3. Report the percentage of nitrogen uptake.

Summary of Changes From Previous Permit

The daily maximum for the Flow Rate parameter under the August 2016 permit was 1.4 MGD. Review of the RWMP under Permit NS0080003, and prior issued permits for this facility, all state 0.917 MGD for this same flow rate. This permit has been revised back to the original permitted flow rate requiring the daily maximum to be less than or equal to 0.917 MGD.

The correct legal survey sections within which the golf course is located are Sections 6, 7, and 8, T.23N., R.62E., M.D.B.&M.

The requirement to report the annual mass loading for nitrogen to ensure groundwater of the State is not being degraded was added.

The requirement to report the total nitrogen uptake to ensure groundwater of the State is not being degraded was added.

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 and for the protection of human health and the environment.

The proposed permit establishes the requirement to report the annual mass loading for nitrogen 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

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

There are no special approvals or conditions associated with this permit.

SA – Special Approvals / Conditions Table

There are no Special Approval / Condition items

Discharges From Future Outfalls/ Planned Facility Changes

The Permittee does not anticipate any discharges from any future outfalls or any other 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

The nearest Public Water Supply (PWS) well is located approximately two (2) miles to the west of the facility. There are other PWS wells located to the north and west of the facility. The facility 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.	2/1/2028

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	1/28/2025
2	Annual DMRs	Annually	1/28/2025

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. 11/23/2024, 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: **10/21/2024**

Title: Staff II Engineer