



# STATE OF NEVADA

Department of Conservation & Natural Resources

*Jim Gibbons, Governor*

*Allen Biaggi, Director*

DIVISION OF ENVIRONMENTAL PROTECTION

*Leo M. Drozdoff, P.E., Administrator*

## FACT SHEET

(pursuant to NAC 445A.236)

**Permittee Name:** Foothill Partners  
1730 W. Horizon Ridge Parkway, Suite 100  
Henderson, Nevada 89012

for the

Dragon Ridge Country Club Golf Course  
1530 Foothills Village Drive  
Henderson, Nevada 89012

**Permit Number:** NEV97007

**Location:** Sections 26, 27 & 28, T22S, R62E; Latitude: 36°00'50"N, Longitude: 115°03'45"W

**General:** The Dragon Ridge Country Club Golf Course is an 18-hole course located at 1530 Foothills Village Drive in Henderson. Approximately 138 acres of the golf course and common areas are irrigated year-round with reclaimed water via spray and drip. Annual reclaimed water usage for the property is estimated to be 859 acre-feet per year (767,240 gallons per day). The facility has authorization to use up to 1,078 acre-feet per year (962,521 gallons per day).

Dragon Ridge Country Club Golf Course receives tertiary-treated and disinfected effluent (reclaimed water) from the City of Henderson Water Reclamation Center (Permit No. NEV80003), and uses it to irrigate turf grass and landscaped areas. This facility provides reclaimed water that meets Category B quality (NAC 445A.276) and is denitrified (at or below 10 mg/L N). The reclaimed water storage lakes have UV ozonation aeration systems installed that provide necessary oxygen to prevent upsets, and/or stratification by maintaining a balance of dissolved oxygen in the water column. Multiple injection sites in the bottom of the "lakes" are designed to provide needed dissolved oxygen to eliminate any pond odors, reduce algal growth and to increase water clarity. Application of reuse water is via spray irrigation in accordance with the Effluent Management Plan and as required by the permit.

**Corrective Actions Sites:** There is no Bureau of Corrective Actions remediation site located within a one-mile radius of the reuse site.

**Wellhead Protection Area:** There are no individual or municipal drinking water wells located within 6,000 feet of a municipal water supply well Drinking Water Protection Area.

**Receiving Water Characteristics:** Depth to groundwater in the area is between 325 feet and 375 feet. 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.

**Description of the Location of the Discharge:** This golf course consists of an 18-hole course. Dragon Ridge has approximately 138 acres of golf course fairways and perimeter landscaping available for reuse. The facility has an upper reservoir (Lake #1) that receives the reclaimed water. The reclaimed water then flows over a control weir to two lower lakes (Lakes #2 and #3) where it is pumped to irrigate the golf course. The reclaimed water transmission connection point is located at the intersection of Valle Verde Road and Horizon Ridge Parkway. A separate potable water system is used to irrigate the greens. Irrigation is normally done at night when there are no players on the course.

**Annual Application Volume:** The permitted annual application rate 1,078 acre-feet annually, which is 351.3 million gallons annually or 0.9625 million gallons per day.

**Schedule of Compliance:** The Permittee shall implement and comply with the provisions of the following schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the Schedule:

- a. The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit; and
- b. The Permittee, or its Agent shall adequately address any and all updates to the EMP as a revision of the EMP **by June 29, 2009**; and
- c. All compliance deliverables shall be submitted to BWPC, Technical Services Branch, NDEP-LV, 2030 East Flamingo Road, Suite 230, Las Vegas, Nevada 89119-0837, with copies to the Compliance Coordinator in NDEP's Carson City office.

**Discharge Limitations:** As noted in Table I.1 below, Dragon Ridge will use high-quality disinfected reclaimed water from the City of Henderson's Water Reclamation Center to irrigate the golf course. The 30-day average coliform requirement is set at 2.2 Colony forming units (CFU) or the most probable number (MPN)/100 mL of Fecal Coliform. This makes it Category B reuse water and in accordance with NAC 445A.277, a buffer zone and control of public access are not required.

Samples taken in compliance with the monitoring requirements specified in Table I.1 are collected and analyzed by the City of Henderson and reported by the Permittee. DMRs are to be submitted by the Permittee with copies of backup data of the water quality calculation summaries maintained at Dragon Ridge's reuse site.

#### **TABLE I.1: Discharge Limitations**

<u>PARAMETERS</u>	<u>EFFLUENT DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	30-Day Average	Monthly Maximum	Measurement Frequency	Sample Type
Irrigation Rate Flow Million Gallons <sup>2</sup> (MG)	Monitor & Report MG/Day	Monitor & Report MG/Month	Continuous	Flow meter
Annual Application Volume <sup>3</sup> (AF)	1,078 acre-feet/year (x 0.326=Million gallons)		Cumulative annual total	Flow Meter (totalizer)
Fecal Coliform <sup>1</sup> (CFU/MPN)	2.2 CFU (MPN)/100 mL	23 CFU (MPN)/ 100 mL	Weekly	Discrete

1. Sample results shall be obtained from NEV80003 and reported by Permittee.
2. Monthly application rates in the Effluent Management Plan should be used as a guide.
3. Is based upon 110% of the Application Volume determined from the consumptive use balance in the Effluent Management Plan and shall be submitted with the 4th Quarter DMR.  
MG = Million Gallons CFU = Colony Forming Units, MPN = Most Probable Number, mL = Milliliter

**Rationale for Permit Requirements:** Reclaimed water monitoring is required to determine the level of treatment being provided by the City of Henderson Water Reclamation Center, to assess the management of recycled water usage and to protect the local groundwater quality. Fecal coliform monitoring assesses the quality of reclaimed water being applied and for the protection of human health and the environment.

**Determination:** The Division has made the determination to reissue the proposed permit for a five (5) year period.

**Procedures for Public Comment:** The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to the groundwater of the State of Nevada subject to the conditions contained within the permit is being sent to the **Las Vegas Review-Journal** 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 for a 30-day period following the date of the public notice **by June 29, 2009**. 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 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 was 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 determines 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.

Prepared by: Steve McGoff, P.E.  
Staff Engineer III  
May 20, 2009