



# 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:** Mountain Falls Golf Course, LLC  
5001 S. Clubhouse Dr.  
Pahrump, NV 89061

for the

Mountain Falls Golf Course  
5001 S. Clubhouse Dr.  
Pahrump, Nevada 89061

**Permit Number:** NEV2005509

**Location:** Sections 3, 4, 5, 6 & 10, T21S, R54E;  
Latitude: 36° 08' 53" N, Longitude: 115° 55' 23" W

**General:** The developer of the Mountain Falls project is William Lyon Homes, and the project encompasses about 1,050 acres in which the Mountain Falls Golf Course is included, along with a Pahrump Master Plan approval for 3,200 residential units, a casino/hotel complex and other general commercial uses. The Mountain Falls Wastewater Treatment Plant which is owned and operated by Utilities Inc. of Central Nevada (UICN), is designed to supply tertiary treated, denitrified and disinfected effluent for irrigation reuse and disposal at the Mountain Falls Golf Course under authorization of this permit (reuse) and the UICN permit (NEV2005505) for supply. Treated effluent piped from the Mountain Falls Wastewater Treatment Plant is proposed to be disposed via irrigation reuse on the golf course and on other future approved sites (e.g. fairgrounds, additional approved reuse sites as build out continues) where turf grasses, trees and or other landscape plant materials will be irrigated. Another reuse option which is proposed is a truck fill station for construction water and dust control. All reuse irrigation and other effluent use operations shall be conducted and operated in accordance with the approved Effluent Management Plan and the terms and conditions of the this permit. The effluent supply line from the Mountain Falls Wastewater Treatment Plant discharges directly into the effluent irrigation storage pond on the golf course.

Mountains Falls Gold Course, LLC operates the Mountain Falls Golf Course located at 5001 S. Clubhouse in the south end of Pahrump, Nye County, Nevada. This facility has one 18-hole course with approximately 122 acres of with rye grass fairways and bentgrass greens and boundary that is irrigated using a mix of reclaimed water and groundwater. The facility uses one HDPE-lined, aerated reservoir fed by the recycled water supply line for storage of irrigation

water supply and winter storage of effluent. This pond is also supplied with irrigation water from a supply well. In addition, there are five other ponds that are concrete-lined and filled with irrigation water.

**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:** The golf course is not within any wellhead protection areas or within any Drinking Water Protection Areas.

**Flow:** The applicant has applied for a permit to discharge a total of 0.750 MGD 30-Day Average Flow for the eighteen-hole golf course area on a total of 122 acres and other approved sites or uses. The permit requires the reuse water quantity to be monitored and reported. The maximum monthly flow is based upon the highest usage month determined from the consumptive use balance plus 10% allowance, and in accordance with the approved Effluent Management Plan (EMP). The annual application volume is limited to a maximum of 840 acre feet/year for reuse irrigation at the golf course property.

**Receiving Water Characteristics:** The receiving waters are the groundwater of the State of Nevada. Based on historical data, the groundwater in the immediate area is potable and the depth to groundwater is about 20-30 feet below ground surface.

**Discharge Limitations:** The applicant uses tertiary-treated, denitrified and disinfected reuse water provided by UICN's Mountain Falls Wastewater Treatment Plant. UICN will provide reclaimed water that meets new Category A quality per NAC 445A.276, and is denitrified below 10 mg/L of Total Nitrogen. The golf course is an 18-hole championship course; perimeter finish landscaping is not yet completed. The Total Coliform monitoring compliance point is at the end of pipe prior to discharge into the irrigation storage lake; contact time in the pipe from the treatment plant is required to meet the Total Coliform disinfection requirement. Irrigation wells (offsite and one onsite) provide water via an air-gapped pipeline into the irrigation lake which will be supplementing the reuse supply; there is also an air-gapped potable waterline and a pipeline conveying spring water which discharges into the irrigation/pumping/storage lake as a back-up emergency supplemental supply. Currently, the golf course is being watered with a mix of groundwater and treated effluent.

As noted in Table 1 below, Mountain Falls will use high-quality disinfected reclaimed water from UICN to irrigate the golf course. The 30-day average total 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 A 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 UICN and reported by the Permittee. Discharge Monitoring Reports (DMRs) are to be submitted by the Permittee with copies of backup data of water quality calculation summaries maintained at UICN's reuse site.

**TABLE 1: Treated Effluent Discharge Limitations**

Monitoring Parameters	Treated Effluent Discharge Limitations		Monitoring Requirements	
	30-Day Average	Monthly Maximum	Measurement Frequency	Sample Type
Irrigation Rate Flow Million Gallons <sup>1</sup> (MG)	Monitor & Report MG/Day	Monitor & Report MG/Month	Continuous	Flow meter
Annual Application Volume <sup>2</sup> (AF)	840 acre-feet/year (x 0.326=Million gallons)		Cumulative annual total	Flow Meter (totalizer)
Total Coliform <sup>3</sup> (CFU/MPN)	2.2 CFU (MPN)/100 mL	23 CFU (MPN)/100 mL	Weekly	Discrete

1. Monthly application rates in the Effluent Management Plan should be used as a guide.
2. 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.
3. Sample results shall be obtained from NEV2005505 and reported by Permittee.

MG = Million Gallons CFU = Colony Forming Units, MPN = Most Probable Number, mL = Milliliter

**Schedule of Compliance:** The Permittee shall implement and comply with the provisions of the following schedule of compliance:

- a. The Permittee shall continue to achieve compliance with the effluent flow monitoring requirements outlined in this permit;
- b. The Permittee shall provide a documentation update to the Division by **MonthDay, 2011**, that notification has been made to the local health agency, of the Permittee's use of treated effluent at this facility. The documentation shall describe the Mountains Fall's plan for complying with cross-connection control requirements; and
- c. The Permittee, or its representative, shall submit for NDEP's review and approval **on or before MonthDay, 2011**, an updated EMP that follows the requirements listed in WTS-1B. The revised EMP and other compliance items shall be submitted to the following address:

Compliance Coordinator  
Bureau of Water Pollution Control  
NDEP  
901 S. Stewart St, Suite 4001  
Carson City, NV 89701

**Rationale for Permit Requirements:** Reclaimed water monitoring is required to determine the level of treatment being provided by UICN, 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.

Samples taken in compliance with the monitoring requirements specified in Table 1 are to be collected prior to effluent reuse. The quality of the product used by the Permittee may be reported as calculated values based on the blend of treated effluent and potable water. Monitoring requirements may be satisfied by data collected by the UICN. Copies of the backup data or water quality calculation summaries are to be maintained at the reuse site for inspection by the NDEP upon request. DMRs are to be submitted by the Permittee to NDEP at the following address:

Nevada Division of Environmental Protection  
Bureau of Water Pollution Control  
Attn: Compliance Coordinator  
901 S. Stewart St, Suite 4001  
Carson City, NV 89701

**Procedures for Public Comment:**

The Notice of the Division's intent to issue 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** and the **Pahrump Valley Times** 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 period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. **All comments must be received by NDEP by 5:00 pm, March 4, 2011.**

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 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.

Prepared by: Steve McGoff, P.E.  
Staff Engineer III  
January 25, 2011