



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: Tournament Players' Club (TPC) – Summerlin
1700 Village Center Circle
Las Vegas, Nevada 89134

for the

TPC – Summerlin Golf Course
1700 Village Center Circle
Las Vegas, Nevada 89134

Permit Number: NEV99001

Location: Section 18, T20S, R60E; Latitude: 36°12'55"N, Longitude: 115°18'08"W

General: TPC – Summerlin operates the TPC – Summerlin Golf Course, located at 1700 Village Center Circle in the Northwest area of Las Vegas, Clark County, Nevada. This facility has one 18-hole course, covering approximately 184 acres. The facility uses one PVC-lined, aerated reservoir fed by the recycled water supply line for storage of irrigation water. There are also three PVC-lined decorative water features utilizing reclaimed water at this facility. The decorative water features are aerated, and are maintained as wildlife habitat.

TPC – Summerlin Golf Course receives tertiary treated, denitrified, disinfected effluent from the Durango Hills Water Resource Center (DHWRC) wastewater treatment facility (WWTF) for irrigation of turf, greens and landscaped areas. The DHWRC is regulated under NDEP Permit NEV98005. The DHWRC recycled water is blended with potable water to provide the course with the volume of water required. The relative percentages of potable and recycled water will vary with the seasonal irrigation demand.

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 several public water supply wells located near the golf course which puts the reuse site within 3,000 feet Drinking Water Protection Areas for those wells. The wells are considered moderately vulnerable to contamination.

Flow: The permitted 30-day average flow is 2.32 MGD blended effluent, which is the maximum anticipated amount for the hot summer months. The annual average usage will be approximately 1.09 MGD per month, due to lower usage in the cooler months.

Receiving Water Characteristics: Groundwater in the vicinity of the course is estimated to be at 500 to 700 feet below ground surface, as reported in the Effluent Management Plan (EMP) prepared by Greeley and Hansen, January 1999, and by measurements taken at the Las Vegas Valley Water District Well #093. Groundwater flow direction is reported to be southeast. There are no monitoring wells required at this facility due to the depth to groundwater.

Discharge Limitations: As noted in Table I.1 below, TPC – Summerlin will use high-quality disinfected reclaimed water from DHWRC 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 Las Vegas and reported by the Permittee. Discharge Monitoring Reports (DMRs) are to be submitted by the Permittee with copies of backup data of the water quality calculation summaries maintained at DHWRC’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 ¹ (MG)	Monitor & Report MG/Day	Monitor & Report MG/Month	Continuous	Flow meter
Annual Application Volume ² (AF)	1,242 acre-feet/year (x 0.326=Million gallons)		Cumulative annual total	Flow Meter (totalizer)
Fecal Coliform ³ (CFU/MPN)	2.2 CFU (MPN)/100 mL	23 CFU (MPN)/ 100 mL	Weekly	Discrete
Total Nitrogen Applied (pounds/acre/year)	475 ⁽⁴⁾ 260 ⁽⁴⁾		Annually ⁽⁵⁾	Calculate

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 NEV98005 and reported by Permittee.
4. Nitrogen Uptake value of 475 lb/acre/year used in determining nutrient balance for Fairways/Roughs/Tees turf areas. Green nitrogen uptake estimated at 260 lbs/acre/year.
5. Report in 4th quarter DMR.

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, 2010**, that notification has been made to the local health agency, of the Permittee's use of effluent at this facility. The documentation shall describe the 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, 2009** an Effluent Management Plan (EMP) that follows the requirements listed in WTS-1B. The revised EMP and other compliance items shall be submitted to the following addresses:

Technical Services Branch
Bureau of Water Pollution Control
NDEP
2030 E. Flamingo Road, Ste. 230
Las Vegas, NV 89119-0837

and

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 DHWRC, 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 I.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 DHWRC and the Las Vegas Valley Water District. Copies of the backup data or water quality calculation summaries are to be maintained at the reuse site for inspection by the Division upon request. DMRs are to be submitted by the Permittee to the Division 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** 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, October 26, 2009.**

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
September 22, 2009