

# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## FACT SHEET

(pursuant to NAC 445A.236)

**Permittee Name:** Clark County Department of Parks and Community Services  
2601 East Sunset Road  
Las Vegas, Nevada 89120

**Location:** Rhodes Ranch 28-Acre Park  
El Capitan and Arby Avenue  
Las Vegas, Nevada - Clark County

Latitude: 36° 03' 45"N; Longitude: 115° 17' 30"W  
Section 5, T.22 South, R.60 East MDB&M

**Permit Number:** NEV2005507

**General:** The Rhodes Ranch 28-Acre Park proposes to receive tertiary treated disinfected effluent for reuse irrigation supplied by the Clark County Water Reclamation District's Desert Breeze Water Reclamation Facility (DBWRF #NEV2001509). The reclaimed water will be used for spray and drip irrigation of 20 acres of turf grasses and trees/shrubs. The park irrigation system has been designed for reuse effluent irrigation. This is a new Clark County park to be constructed in the vicinity of Rhodes Homes development in southwest Las Vegas.

**Receiving Water Characteristics:** Groundwater in the vicinity of the park is approximately 350 to 400 feet below ground surface with groundwater flow direction to the east. Groundwater quality in the area is potable. Desert Breeze effluent is only partially denitrified with an average of 14 mg/l as Total Nitrogen, so nitrogen balances are required along with effluent nutrient reporting using analyses provided by Desert Breeze WRF. No groundwater monitoring is required due to the depth to groundwater and the nutrient management required.

**Description of the Location of the Discharge:** The future Rhodes Ranch 28-Acre Park will have two irrigated baseball diamonds, open areas of turf grass used primarily as playing fields and other similar recreational uses, a perimeter, promenades and parking areas flanked by trees and shrubs, and a 9-hole executive golf course. The park also has other facilities that do not have effluent reuse. The irrigation system is controlled by a RainBird automated system designed to manage high wind shut downs and irrigation timing. Drinking water is available at drinking water fountains and restroom facilities where the facilities are covered during irrigation or are entirely protected in a building. Cross connection and backflow prevention issues/concerns will be addressed during piping installation and required inspections. The Clark County's Desert Breeze Water Reclamation Facility will supply the treated effluent for irrigation via the park irrigation systems.

**Flow:** The permitted 30-day ave. flow is 2.0 MGD, which is the maximum anticipated amount for the hot summer months. The annual average usage will be approximately 0.15 MGD per

month, due to lower usage in the cooler months. Flows are measured at the onsite reclaimed meter vault.

**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 30 day period following the date of the public notice, by January 16, 2006. the comment period can be extended at the discretion of the Administrator.

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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 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.

**Discharge Limitations:** As noted in Table I.1 below, the DBWRF will be providing the facility with tertiary treated, partially denitrified, disinfected reclaim water to irrigate the park complex. The Total Coliform requirement is set at 2.2 CFU or MPN/100 ml, 30-day average. Therefore, in accordance with NAC 445A.277, a buffer zone and control of public access are not required. Posting is required.

**TABLE I.1: Discharge Limitations**

<u>PARAMETERS</u>	<u>EFFLUENT DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	30 Day Ave.	Daily Max.	Measurement Frequency	Sample Type
Flow:	2.0 MGD	M & R MGD	Continuous	Flow meter
Total Coliform:	2.2 CFU or MPN/100 ml	23 CFU or MPN/100 ml	Weekly	Discrete
Total Nitrogen as N: <sup>(1)</sup>	Monitor and Report mg/L		Monthly	Calculate
Total Kjeldahl Nitrogen as N:	Monitor and Report mg/L		Monthly	Composite
Total Oxidized Nitrogen as N: (Nitrate + Nitrite)	Monitor and Report mg/L		Monthly	Composite
Ammonia as N:	Monitor and Report mg/L		Monthly	Composite

Total Nitrogen: (lbs/ac/year)	475 lbs/ac/year (Bermuda grass) See Part I.B.4.	4th Quarter	Calculate
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(1) Total Nitrogen as N can be reported as the sum of Total Oxidized Nitrogen and Total Kjeldahl Nitrogen

CFU = Colony Forming Unit; MPN = Most Probable Number

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Monitoring requirements may be satisfied by data collected by the Clark County Water Reclamation District's Desert Breeze WRF. Discharge Monitoring Reports are to be submitted by the Permittee. Copies of backup data or water quality calculation summaries are to be maintained by the Permittee.

**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 of Compliance.

a. The Permittee shall achieve compliance with the discharge limitations upon issuance of the permit;

b. The Permittee shall not reuse treated effluent prior to having an approved EMP per NAC 445A.275; the Permittee shall not reuse treated effluent prior to providing cross connection documentation per Part I. B.12. of the permit.

**c. Any compliance deliverables shall be submitted to Mr. Nadir Sous, NDEP-LV, 1771 East Flamingo Road, Suite 121-A, Las Vegas, Nevada 89119. A copy shall also be submitted to Ms. Diana Silsby, Compliance Coordinator, NDEP, 901 South Stewart Street, Suite 4001, Carson City 89701.**

**Rationale for Permit Requirements:** Reclaimed water monitoring is required to assess the level of treatment being provided by the DBWRF, to assess the management of recycled water usage, and to protect the local groundwater quality. Total Coliform and nitrogen species are required for monitoring the quality of reclaim water being applied, and for protection of human health and the environment.

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

Prepared by: Icyll C. Mulligan, ES MS  
October 2005  
December 2005 revised

