



# STATE OF NEVADA

Department of Conservation & Natural Resources

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

## DIVISION OF ENVIRONMENTAL PROTECTION

Colleen Cripps, Ph.D., Administrator

### FACTSHEET (pursuant to NAC 445A.236)

**Permittee Name:** SUN CITY MACDONALD RANCH COMMUNITIES ASSOC INC  
2020 HORIZON RIDGE PKWY  
HENDERSON, NV - 89012

**Permit Number:** NS0095038

**Location:** DESERT WILLOW GOLF COURSE, CLARK  
2048 HIGH MESA DR., HENDERSON, NV - 89012  
LATITUDE: 36.006389, LONGITUDE: -115.076667  
TOWNSHIP: T22S, RANGE: R62E, SECTION: S29

Outfall / Well Num	Outfall / Well Name	Location Type	Well Log Num	Outfall City	Outfall State	Outfall Zip	Outfall County	Latitude	Longitude	Receiving Water
001	EFFLUENT REUSE	External Outfall		HENDERSON	NV	89012	CLARK	36.006389	-115.076389	GROUNDWATER

**General:**

The applicant, Sun City MacDonald Ranch Communities Association Inc., has applied for renewal of groundwater discharge permit NS0095038 which authorizes the discharge of tertiary-treated, partially denitrified effluent (reclaimed water) at Desert Willow Golf Course (DWGC), an 18-hole executive golf course located in Henderson, Nevada.

DWGC uses reclaimed water supplied by the City of Henderson (NEV80003) for irrigation of approximately 82 acres of turf and landscaping. The reclaimed water is disinfected to meet reuse Category B (NAC 445A.2764) requirements prior to delivery to two synthetic-lined aerated storage ponds at DWGC. The reclaimed water is pumped from the storage ponds as needed and is applied via bubblers, pop-up spray, and rotary sprinklers.

All reuse activities shall be conducted in accordance with a Division-approved Effluent Management Plan.

**Discharge Characteristics:**

During the term of the previous 12 month reporting period, July 2012 through June 2013, the following average discharge characteristics were reported:

1. Flow - 0.423 MGD.
2. Fecal Coliform - <1.1 MPN/mL.
3. Total Nitrogen - 15.1 mg/L

**Receiving Water:**

Groundwater at this facility has previously been listed as in excess of 300 feet below ground surface. Due to the depth of groundwater, monitoring is not required.

**Summary of Changes From Previous Permit:**

In order to maintain consistency with current NDEP policy and the monitoring requirements of similar facilities, the following permit changes have been made:

1. The requirement to report the Annual Application Volume has been removed from this permit.
2. The requirement to submit a quarterly EMP adherence statement has been added to this permit.
3. The requirement to report the amount of total nitrogen in the reclaimed water has been added to this permit.
4. Due to a new permit naming convention at NDEP, Bureau of Water Pollution Control, the permit ID has been changed from NEV95038 to NS0095038. This change does not reflect a change in the type of permit being issued.

**Proposed Effluent Limitations:**

The discharge shall be limited and monitored by the Permittee as specified in the following table:

**Re-use Discharge Limitations Table for Sample Location 001 (External Outfall) To Be Reported Monthly**

Parameter	Discharge Limitations			Monitoring Requirements			
	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Flow rate	30 Day Average	< 1.0 Million Gallons per Day (Mgal/d)		Prior to Irrigation	001	Continuous	METER
Flow rate	Daily Maximum	< 1.0 Million Gallons per Day (Mgal/d)		Prior to Irrigation	001	Continuous	METER
Coliform, fecal general	30 Day Average		<= 2.2 Most Probable Number per 100ml T (MPN/100m L)	Prior to Irrigation <sup>[1]</sup>	001	Weekly	DISCRT
Coliform, fecal general	Weekly Maximum		<= 23 Most Probable Number per 100ml T (MPN/100m L)	Prior to Irrigation <sup>[1]</sup>	001	Weekly	DISCRT
Nitrogen, total	Value		M&R Milligrams per Liter (mg/L)	Prior to Irrigation <sup>[1]</sup>	001	Monthly	DISCRT

Notes (Re-use Discharge Limitations Table):

- The Permittee may use the monitoring data submitted under Permit NS0080003 (NEV80003), but shall report the data separately in the Discharge Monitoring Reports associated with this permit.

**Rationale for Permit Requirements:**

Monitoring is required to allow the Permittee to track the amount of nitrogen being applied to the turf and landscaping, and confirm the level of disinfection being provided by the reclaimed water supplier.

**Fecal Coliform:**

NAC 445A.276 requires reuse Category B reclaimed water to meet a 30-day average maximum concentration of 1.1 MPN/100mL and a daily maximum concentration of 23 MPN/100mL.

**Special Conditions:**

## SA – Special Approvals / Conditions Table

Item #	Description
1	Each quarter, the Permittee shall submit a document confirming adherence to the approved EMP. This document shall be signed, and shall contain the following certification. “I certify that, for each month during the previous quarterly reporting period, all operational procedures and calculated application rates outlined in the approved Effluent Management Plan were adhered to.”
2	The Permittee shall maintain a minimum freeboard depth of 2 feet in all storage lakes/ponds unless otherwise approved by the Division.

**Flow:**

The Permittee has requested a 30-day average flow of <1.0 MGD.

**Corrective Action Sites:**

There are no NDEP Bureau of Corrective Actions remediation sites within a one-mile radius of this facility.

**Wellhead Protection Program:**

This facility is not located within a Drinking Water Protection Area or a Wellhead Protection Area established for any well sources.

**Schedule of Compliance:**

## SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit two (2) copies of an updated Effluent Management Plan (EMP) for review and approval by the Division. The EMP shall be prepared by a Nevada Registered Professional Engineer or other qualified person. If no updates or revisions are required, the Permittee shall submit a letter by the due date stating that there have been no changes to the previously approved EMP. <sup>[1]</sup>	12/30/2013

Notes (Schedule of Compliance Table):

1. If the EMP is prepared by a Nevada Registered Professional Engineer, it must be signed and stamped in accordance with NAC 625.610.

**Deliverable Schedule:**

## DLV– Deliverable Schedule for Reports, Plans, and Other Submittals

Item #	Description	Interval	First Scheduled Due Date
1	Discharge Monitoring Reports	Quarterly	10/28/2013
2	Annual Reports	Annually	1/28/2014

**Procedures for Public Comment:**

The Notice of the Division's intent to reissue a permit authorizing the facility to discharge to 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 until 5:00 P.M. **9/27/2013**, 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 to accordance with NAC 445A.238.

The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.650.

**Proposed Determination:**

The Division has made the tentative determination to issue / re-issue the proposed 5-year permit.

Prepared by: **Arthur Marr III**

Date: **7/23/2013**

Title: **P.E.**