



# 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

## NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

### FACT SHEET

(pursuant to NAC 445A.236)

**Permittee Name:** Lyon County Public Works Department, Utilities Division  
PO Box 1699  
Dayton, NV 89403

**Location:** Sceirine Ranch  
Approximately 3 miles North of Yerington, Lyon County, Nevada  
Latitude: 39° 02' 39"N; Longitude 119° 11' 36"W  
T. 14N., R. 25E., Section 28 MDB&M

**Permit Number:** NEV2007502

**Public Water Supply:** There are no public supply wells within one mile of this facility.

**Corrective Action Sites:** There are no Bureau of Corrective Actions remediation sites located within a one-mile radius from the center-point of the property.

**Wellhead Protection Area:** This facility is located outside of the 6,000 feet Drinking Water Protection Area (DWPA) and is not within a delineated wellhead capture zone for any public supply well.

**General:** Sceirine Ranch is proposing to receive treated effluent from the Willow Creek General Improvement District (GID) Wastewater Treatment Plant (WWTP). Willow Creek GID WWTP produces secondary treated effluent that has historically shown an average Total Nitrogen of 12.4 mg/L. The Willow Creek GID WWTP effluent meets Category E requirements, which does not require a buffer zone for flood irrigation, per **NAC 445A.2771**. The reclaimed water is used for flood irrigation of clover-grass and orchardgrass.

**Receiving Water Characteristics:** Groundwater in the vicinity of the reuse site is estimated to be at approximately 15 to 20 feet below ground surface. Groundwater flow direction is reported to be in a northeasterly direction, toward the Walker River. Willow Creek effluent is not denitrified, so nitrogen balances are required along with effluent nutrient reporting using analyses provided by Willow Creek GID WWTP. Due to the depth to groundwater and nutrient management required, monitoring wells are required. There are five total monitoring wells in the area for both Willow Creek and Sceirine Ranch. Four of the monitoring wells are within the Willow Creek property, and there is an additional well down gradient of the reuse site.

**Description of the Location of the Discharge:** Sceirine Ranch is directly to the north of Willow Creek GID WWTP. The reuse site is a triangular-shaped field, and is bordered on the west and south by a Walker River Irrigation District (WRID) drainage ditch and to the east by the Campbell Ditch. The Campbell Ditch is used for stock water and irrigation throughout the Mason Valley all year long. The WRID drainage ditch is used as a control measure for storm drainage.

**Flow:** The Permittee has requested an average flow of 0.049 MGD. The Permittee plans to water via flood irrigation two times per year, once in the spring, and once in the fall. A flow meter between the storage pond and the reuse site will be used to measure the flow rate each time the site is irrigated.

**Discharge Limitations:** The Willow Creek GID WWTP produces effluent that meets Category E requirements, which sets no limit for coliform. Therefore, in accordance with NAC 445A.2771, a buffer zone is not required for flood irrigation, and public access is prohibited.

Samples taken in compliance with the monitoring requirements specified below shall be taken at the following location(s): (1) prior to irrigation, (2) Monitoring Well #5 (down gradient of the reuse site), (3) Discharge from the treatment plant. The discharge shall be limited and monitored by the Permittee as specified below:

**TABLE I.1: Discharge Limitations (1) (3)**

<u>PARAMETERS</u>	<u>EFFLUENT DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	30-Day Ave.	Daily Max.	Measurement Frequency	Sample Type
Flow (MGD)	0.049	M & R	Continuous	Flow meter
Annual Application Volume (Acre-Feet)	73.92		Cumulative	Flow Meter
Total Nitrogen as N (mg/L)	Monitor and Report		Monthly	Discrete
Fecal Coliform (CFU or MPN /100 mL)	Monitor and Report		Monthly	Discrete

**TABLE I.2: Groundwater Monitoring (2)**

<u>PARAMETERS</u>	<u>EFFLUENT DISCHARGE LIMITATIONS</u>		<u>MONITORING REQUIREMENTS</u>	
	30 Day Ave.	Daily Max.	Measurement Frequency	Sample Type
Total Dissolved Solids (mg/L)	Monitor and Report		Quarterly	Discrete
Chlorides (mg/L)	Monitor and Report		Quarterly	Discrete
Total Nitrogen as N (mg/L)	Monitor and Report		Quarterly	Discrete
Depth to Groundwater (ft)	Monitor and Report		Quarterly	Discrete
Groundwater Elevation (ft amsl)	Monitor and Report		Quarterly	Discrete

**Sampling:** Samples taken in compliance with the monitoring requirements specified in Table I.1 shall be collected prior to reclaimed water reuse. Samples taken in compliance with the monitoring requirements specified in Table I.2 shall be collected from Monitoring Well #5, down gradient from the reuse site. Monitoring requirements may be satisfied by data collected by the Willow Creek GID WWTP. Discharge Monitoring Reports shall be submitted by the Permittee. 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.

**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 effluent limitations upon issuance of the permit; the Permittee shall notify NDEP within 14 days of initiation of reuse activities.

**Rationale for Permit Requirements:** Reclaimed water nitrogen monitoring is required to document the level of total nitrogen treatment being provided by the Willow Creek GID WWTP, to assess the management of reclaimed water usage, and to protect the local

groundwater quality. Total nitrogen species are required for monitoring the quality of recycled water being applied, and for protection of the environment. Comparing the down gradient monitoring well water quality against the up gradient monitoring well water quality will inform the Division of any degradation to groundwater quality that may be occurring due to reuse activities. An EMP was received by NDEP on October 25, 2011. Therefore, an updated EMP will not be required for this permit cycle.

**Procedures for Public Comment:** The Notice of the Division's intent to renew the 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 **Reno Gazette-Journal** and the **Mason Valley News** for publication. The notice is also 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 thirty (30) days following the date of publication of the public notice in the newspaper. The comment period can be extended at the discretion of the Administrator. The deadline date and time by which all written comments are to be postmarked (via mail) or transmitted to the Division via facsimile or e-mail is **February 24, 2012**.

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.

**Determination:** The Division has made the determination to renew the proposed permit for a five-year period.