



STATE OF NEVADA

Department of Conservation & Natural Resources

DIVISION OF ENVIRONMENTAL PROTECTION

Brian Sandoval, Governor

Leo M. Drozdoff, P.E., Director

Colleen Cripps, Ph.D., Administrator

FACTSHEET (pursuant to NAC 445A.236)

Permittee Name: WASHOE COUNTY DEPARTMENT OF WATER RESOURCES
4930 ENERGY WAY
RENO, NV - 89502

Permit Number: NS0096005

Location: SOUTH MEADOWS EFFLUENT REUSE AREA, WASHOE
VARIOUS LOCATIONS, RENO, NV - 89511
LATITUDE: 39.457563, LONGITUDE: -119.744038
TOWNSHIP: 17N, 18N, RANGE: 18E, 19E, 20E, SECTION: 1-2, 11-14, 22-25; 1-22, 30; 4-7, 18; 13-15, 22-26, 35-36; 3-4, 9-10, 13; 7-8, 17-21, 28-33

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		RENO	NV	89511	WASHOE	39.457563	-119.744038	GROUNDWATER OF THE STATE

General:

This permit renewal allows for the continued discharge of tertiary treated effluent for the irrigation of the South Meadows Effluent Reuse Area (SMERA), which includes the following areas:

Double Diamond Business Park and Double Diamond Home Development streetscapes;
Damonte Ranch common areas, streetscapes, parks, and Damonte Ranch High School;
Double Diamond common areas, parks, elementary school, and middle school;
Damonte Ranch truck fill station, construction and dust control uses at approved sites;
Future reuse sites, subject to Division approval

The reuse area is located east of U.S. Highway 395 and south of the South Truckee Meadows Water Reclamation Facility (STMWRF). The reclaimed water is supplied by the STMWRF and is used for a combination of drip and spray irrigation, truck fill, construction, and ornamental features within the permitted sites. Reclaimed water usage for the entire area is estimated to be less than 2,000 acre-feet per year (AF/YR) and less than 3 million gallons per day (MGD). Irrigation is mostly seasonal and weather dependent.

Discharge Characteristics:

The STMWRF supplies disinfected, denitrified reclaimed water that meets Category A quality (NAC 445A.276). The total nitrogen concentration in this effluent is typically below 10 mg/L.

Receiving Water:

The receiving water is groundwater of the State underlying the reuse sites. The groundwater depth at select Washoe County water wells within the SMERA ranges from 7 feet to 10 feet.

Summary of Changes From Previous Permit:

Mechanical changes made to the system since issuance of the 2008 permit include the addition of a new control system and new analytical instruments.

The quantity of reclaimed water to be used has changed from 1,800 AF/YR to 2,000 AF/YR and from 5 MGD to 3 MGD.

Due to the new naming conventions at the Nevada Division of Environmental Protection, Bureau of Water Pollution Control, the permit number has been changed from NEV96005 to NS0096005. This change does not reflect a change in the type of permit being issued. NEV and NS permits are for groundwater discharges to the state of Nevada. These are not to be confused with NV permits which are reserved for NPDES permitting.

Proposed Effluent Limitations:

The discharge shall be limited and monitored by the Permittee as specified below:

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

Discharge Limitations				Monitoring Requirements			
Parameter	Base	Quantity	Concentration	Monitoring Loc	Sample Loc	Measurement Frequency	Sample Type
Coliform, total general ^[1]	Monthly Maximum		<= 23 Colony Forming Units per 100ml T (CFU/100mL) ^[2]	Prior to Reuse	001	Weekly	DISCRT
Coliform, total general ^[1]	30 Day Average		<= 2.2 Colony Forming Units per 100ml T (CFU/100mL) ^[2]	Prior to Reuse	001	Weekly	DISCRT
Flow rate ^[4]	Monthly Maximum ^[3]	M&R Million Gallons per Day (Mgal/d)		Prior to Reuse	001	Continuous	METER
Flow rate ^[4]	30 Day Average	<= 3 Million Gallons per Day (Mgal/d)		Prior to Reuse	001	Continuous	METER

Notes (Re-use Discharge Limitations Table):

1. Sample results to be reported by the Permittee may be obtained from the STMWRF (NS0040024).
2. In accordance with NAC 445A.276, total coliform may be reported in c.f.u. or mpn/100mL.
3. Monthly maximum based upon highest usage month determined from consumptive use balance + 10 % allowance and in accordance with the Effluent Management Plan.
4. Flow rate calculations may be either physical or mathematical composites.

Rationale for Permit Requirements:

Monitoring is required to document the effluent quality being provided and to ensure that the flow rate limit is not exceeded in order to prevent ponding, runoff, and negative impacts to the receiving groundwater.

Total coliform is monitored to ensure that the concentration of total coliform in the treated effluent does not exceed the allowable concentration for Reuse Category A in accordance with NAC 445A.276.

Special Conditions:

SA – Special Approvals / Conditions Table

Item #	Description
1	<p>Effluent reuse is permitted at the following sites within the South Meadows Effluent Reuse Area:</p> <p>Double Diamond Business Park and Double Diamond Home Development streetscapes; Damonte Ranch common areas, streetscapes, parks, and Damonte Ranch High School; Double Diamond common areas, parks, elementary school, and middle school; Damonte Ranch truck fill station, construction and dust control uses at approved sites</p> <p>Upon request by the Permittee, the Nevada Division of Environmental Protection (NDEP) may add additional reuse sites through a minor modification of this permit.</p>
2	<p>Each quarter, the Permittee shall submit a document confirming adherence to the 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 Effluent Management Plan were adhered to."</p>

Flow:

The 30-day average flow rate may not exceed 3 million gallons per day.

Corrective Action Sites:

There is one Bureau of Corrective Actions (BCA) remediation site located within a one-mile radius of the SMERA. The remediation site is located at 9302 Prototype Drive and is the result of a diesel fuel release in 1998. The BCA has indicated that it does not anticipate continued reuse activities to affect remediation activities at this site.

Wellhead Protection Program:

Approximately 350 acres of the northwestern portion of the SMERA are within 5-, 10-, and 20-year Wellhead Protection Areas, and approximately 25 acres of the western portion of the SMERA are within 2-, 5-, and 10-year Wellhead Protection Areas. There are several 6,000 ft., 3,000 ft., 1,000 ft., and 150 ft. Drinking Water Protection Areas located within the SMERA. Continued reuse activities are not expected to have any negative impact on the Wellhead Protection Areas or Drinking Water Protection Areas.

Schedule of Compliance:

SOC – Schedule of Compliance Table

Item #	Description	Due Date
1	The Permittee shall submit a revised Effluent Management Plan (EMP) to the Division within 90 days of permit issuance. The EMP shall be prepared and wet-stamped by a Nevada Registered Professional Engineer.	5/1/2015

Deliverable Schedule:

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

Item #	Description	Interval	First Scheduled Due Date
1	Quarterly DMRs	Quarterly	4/28/2015
2	Annual Report	Annually	1/28/2016

Procedures for Public Comment:

The Notice of the Division's intent to issue 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 **Reno Gazette 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. **1/12/2015**, 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.605.

Proposed Determination:

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

Prepared by: **Alan Pineda**

Date: **12/2/2014**

Title: **Staff I Associate Engineer**