

# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## FACT SHEET

(Pursuant to NAC 445A.874)

Permittee Name: **Truckee Meadows Water Authority**  
Permittee Address: **1155 Corporate Blvd. Reno, Nevada 89520**  
Project Name: **Spanish Springs ASR Program – Hawkings Court Well**  
Permit Number: **UNEV2009202**  
Injection Wells (#): **One (1)**

Type of Project: **Aquifer Storage & Recovery** Permit Action: **Draft UIC Temporary Permit**

### A. Description of Injection well

**Location:** One (1) injection well, located in Sw ¼ Sw ¼ Section 7 T.20N., R21E., MDB&M Washoe County, Nevada. The well is named Hawkings Court (HC) Well.

Latitude: 39°36'32"

Longitude: 119°39'42"

#### **Well Construction:**

Well Name/No.	Type of Construct.	Water Level	Total Depth	Screen Interval
Hawkings Court, Production well, Completed 10/05	36" borehole/30" casing to 40'; 28" borehole 40'-604'; 18 5/8" casing steel casing with 0.070 Roscoe Moss Louvered screen to 590'; cement grout seal to 150'; well contains a 3" ASR injection tube outside of 18" casing.	62'	604'	180'-260', 280'-420', 440'-580'
Tucker Well, monitoring well	??" borehole/14" casing to 165', cement seal to 56'. Does not penetrate injection zone in basalt	27'	165'	101'-165'
Tucker well is 30' west of the HC well, Wingfield Springs #2 is 1125' northwest.				

**Injectate Characteristics:** All injectate will be surface water treated through TMWA's drinking water treatment plants and municipal water distribution system, some pumped ground water may be in distribution system during the injection cycle. Proposed rates will be 400 – 800 gpm. The TDS of the injectate ranges from 140 mg/l, chloride = 11 mg/l, sulfate = 23 mg/l, magnesium = 4.9 mg/l, sodium = 20 mg/l; and meets all drinking water standards for the constituents tested.

**Receiving Water Characteristics:** The quality of the receiving ground water aquifer meets all drinking water standards and has a TDS of 180 mg/l and pH of 8.4. Other values include bicarbonate = 92 mg/l, arsenic = 0.003 mg/l, sulfate = 17 mg/l, Chloride = 10 mg/l, fluoride = 0.20 mg/l, sodium = 36 mg/l, iron < 0.05 mg/l, and nitrate as NO3= 7.0 mg/l. The most recent data from HC well is 7/10/08 under Attachment 4.

#### **Wellhead Protection Areas**

Hawkings Court water well is a water supply well, thus this well has its own protection area. The HC well is outside of the 20-year delineation of the Spring Creek #6 well operated by Washoe Co.

\_Y\_ Injection well/Facility within a 2-, 5-, or 10-year ground water protection area

\_Y\_ Injection well/Facility within 7000-foot buffer zone for any public water supply well

### B. Synopsis of Project

The project area is located in the Wingfield Springs area of Spanish Springs (see map). The purpose of TMWA's aquifer storage and recovery (ASR) program is to store water that is extracted from the Truckee River, treated at the drinking water treatment plant, and conveyed via the distribution system. Injection periods will vary depending on system demand and weather, but will usually operate from October through April. Assuming only treated surface water is injected, the closest chlorine treatment point would be at the Chalk Bluff Treatment Facility.

The HC well was drilled in 2005 as a production well with a potential long-term yield of 3,000 gpm. TMWA conducted an extensive testing on the well back in late 2005. The highest production/injection zones are found at 400', 450', and 550'.

The Tucker well is a shallow well 30 feet west of the HC well, and will be used for monitoring. This well hit volcanic rock from 42 feet to 165 feet, similar to the HC well.

A summary of TMWA's artificial recharge program is given below:

Dec 2008	Issue Temp permit UNEV2009202T
Nov 2005	aquifer testing program, spinner flow survey, downhole video
July 2005	drill production well – completed Nov 5, 2005
May 2005	drilling of geologic test borehole

**C. Proposed Effluent Limitations and Special Conditions**

Refer to **Part I.A** of the permit.

**E. Rationale for Permit Requirements**

The permit conditions will help to ensure that the injectate does not adversely affect the existing water quality or hydrologic regime. Verification will be performed to ensure that injected fluid quality remains constant and meets drinking water standards. In particular, NDEP is concerned that recharge projects do not create chlorinated organics in the ground water due to the chlorination treatment of injected water.

**E. Proposed Determination**

The Division has made the tentative determination to issue the permit.

**F. Procedures for Public Comment**

The Notice of the Division's intent to renew the permit authorizing the facility to discharge to the ground water of the State of Nevada subject to the conditions contained within the permit, was sent to the Reno Gazette Journal newspaper for publication no later than December 24, 2008. The notice is being sent 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 written comments received during the comment period will be retained and considered in the final determination. 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. 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 will 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.

Prepared by: Russ Land  
Date: December 12, 2008