

STATE OF OREGON

COUNTY OF COLUMBIA

PERMIT FOR AQUIFER STORAGE AND RECOVERY (ASR)

THIS ASR PERMIT IS HEREBY ISSUED TO:

McNulty Water People's Utility District  
c/o Jeff Anderson  
P.O. Box 260  
St. Helens, OR 97051

The specific limits and conditions of the use are listed below.

APPLICATION FILE NUMBER: ASR PERMIT #002

PREVIOUS ASR TESTING AUTHORIZATION: ASR LIMITED LICENSE #015

SOURCE OF WATER: 5 WELLS AUTHORIZED UNDER CERTIFICATES 87258, 58654, 58655, 61176, AND TRANSFER 11498

**POINTS OF DIVERSION:**

STONE ROAD WELL 2 - (COLU 821): SE ¼ NW ¼, SECTION 13, T4N, R2W, W.M.; 359 FEET NORTH & 751 FEET WEST FROM CENTER 1/4 CORNER, SECTION 13

STONE ROAD WELL 1 - SHALLOW (COLU 3486/COLU 811): SE ¼ NW ¼, SECTION 13, T4N, R2W, W.M.; 2277 FEET SOUTH & 1881 FEET EAST FROM NW CORNER, SECTION 13

MILLARD WELL (COLU 3274): SW ¼ SW ¼, SECTION 7, T4N, R1W, W.M.; 1255 FEET NORTH & 1210 FEET EAST FROM SW CORNER, SECTION 7

BLAHA WELL 1- (COLU 3480): SW ¼ SE ¼, SECTION 12, T4N, R2W, W.M.; N 79 DEGREES WEST 2610 FEET FROM SE CORNER, SECTION 12

BLAHA WELL 2 - (COLU 53430): SW ¼ SE ¼, SECTION 12, T4N, R2W, W.M.; 616 FEET NORTH & 159 FEET EAST FROM THE S ¼ CORNER OF SECTION 12

**ASR WELL LOCATION:**

ROBINETTE (ASR) WELL (COLU 51275): SE ¼ SE ¼, SECTION 25, T5N, R2W, W.M.; 523 FEET NORTH & 54 FEET WEST FROM SE CORNER SECTION 25

MAXIMUM DIVERSION RATE: 0.89 CUBIC FEET PER SECOND (400 GPM)

MAXIMUM INJECTION RATE: 0.89 CUBIC FEET PER SECOND (400 GPM) AT THE ROBINETTE (ASR) WELL

MAXIMUM VOLUME OF STORAGE: 8 MILLION GALLONS

MAXIMUM WITHDRAWAL RATE: 0.89 CUBIC FEET PER SECOND (400 GPM) OF STORED WATER THROUGH THE ROBINETTE (ASR) WELL

MAXIMUM STORAGE DURATION: ONGOING

**This ASR permit is issued with the following conditions:**

1) **Record of Use.** The permittee shall maintain a record of injection and recovery, including the total number of hours of injection and recovery and the total metered quantity injected and recovered. The record of use may be reviewed by Department staff upon request.

2) **Modification/Revocation.** The Department shall notify the permittee in writing and allow the permittee to respond when considering the following actions:

(A) The Department may modify the ASR permit for any of the following reasons:

(i) to reflect changes in Oregon Health Authority (OHA, formerly DHS) and Oregon Department of Environmental Quality (DEQ) water quality or treatment standards;

(ii) to address needed technological changes as requested by OHA or DEQ to minimize constituents regulated under OAR 333-061-0030 (ORS 448.131 and 448.273) or OAR 340-40 (ORS 468B.165);

(iii) upon written request from the permittee for minor adjustments to the authorization in the permit.

(iv) upon written request from the permittee for changes to the limits for the recovery of stored water. Any person operating an ASR project under a permit, upon approval by the Director, may recover up to 100 percent of the water stored in the aquifer storage facility if valid scientific data gathered during operations under the limited license or permit demonstrate that the injected source water is not lost through migration or other means and that ground water otherwise present in the aquifer has not been lost irretrievably as a result of aquifer storage or recovery.

(B) The Director may revoke or modify the ASR permit for any of the following reasons:

(i) to prevent or mitigate substantial interference with other water rights, minimum perennial streamflows established prior to the granting of the ASR permit, or aquifer water quality; or

(ii) to address any other unintended, injurious effects of the ASR activity.

(C) The Department shall offer an additional public comment opportunity consistent with the notice and comment provisions of OAR 690-350-020 prior to modifying the permit.

3) **Compliance with Other Laws.** The injection of acceptable water into the aquifer, as well as its storage and recovery under this permit, shall comply with all applicable local, state or federal laws. This shall include but not be limited to compliance with the DEQ Underground Injection Control registration

program as authorized under the Safe Drinking Water Act (40 CFR 144.26). Also, discharges to waterways must be in compliance with all DEQ requirements.

#### **4) Water Quality Conditions and Limits:**

(A) The permittee shall minimize, to the extent technically feasible, practical and cost-effective, the concentration of constituents in the injection source water that are not naturally present in the aquifer;

(B) Except as otherwise provided in (C) of this condition, if the injection source water contains constituents regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) that are detected at greater than 50 percent of the established levels (MCLs or MMLs in the cited rules), the permittee shall employ technically feasible, practical and cost-effective methods to minimize concentrations of such constituents in the injection source water;

(C) Constituents that have a secondary contaminant level or constituents that are associated with disinfection of the injection source water may be injected into the aquifer up to the standards established under OAR 333-061-030 (ORS 448.131 and .273);

(D) The Department may, based upon valid scientific data, further limit certain constituents in the injection source water if the Department finds that those constituents will interfere with or pose a threat to the maintenance of the water resources of the state for present or future beneficial uses;

(E) The permittee shall be in compliance with treatment requirements and performance standards for source water that fall in categories identified in OAR 333-061-0032;

(F) If during the course of ASR operations, a constituent which is regulated under OAR 333-61-030 (ORS 448.131 and .273) or OAR 340-40 (ORS 468B.165) is detected above the 50 percent level prescribed in condition (4)(B) or the 100 percent level prescribed in condition (4)(C), the permittee shall immediately stop injection activities upon receipt of lab data and notify the Department within five days.

#### **5) Water Quality Sampling.**

(A) Injection Water. The permittee shall sample and analyze injection source water for the constituents and frequency required by Oregon Health Authority Drinking Water Program (OHA) for community drinking water systems. The permittee shall follow the source water quality testing plan, and sample and analyze for landfill-related constituents as described in the Quality Assurance & Quality Control Plan of the ASR permit application (dated March 30, 2015). Modifications to this plan may be proposed to the Department in writing for review, approval or denial.

(B) Withdrawal of Stored Water. The permittee shall sample and analyze water withdrawn from storage for the constituents and frequency required by OHA for community drinking water systems.

**6) Water Level Monitoring.**

(A) The licensee shall monitor water levels in wells in the manner described in the approved ASR water level monitoring plan.

(B) Transducer and airline data shall be verified and corrected with quarterly manual measurements if an e-tape can be lowered past obstructions to the water level. In the event a pump is pulled, wells shall be equipped with an unobstructed, dedicated measuring tube pursuant to figure 200-5 in OAR 690-200.

**7) Recovery.** The availability of stored water for recovery is based on the following factors:

(A) Available stored water is determined on a well-by-well basis in a storage account. The permittee may recover up to 95 percent of the quantity injected under this permit during the water year that the water was injected. After that water year, the availability of stored water shall be further diminished each water year such that the permittee may only recover up to 95 percent of any water year-to-water year storage carryover. (For example, water year 2015 lasts from October 1, 2014 through September 30, 2015.)

(B) Any water withdrawn from the ASR well identified in this permit shall be debited against the quantity available in the aquifer by virtue of ASR storage or considered a draft on natural groundwater under existing groundwater rights. Simultaneous withdrawals of natural groundwater and stored water may occur, but at no time shall the total withdrawal rate exceed that which is authorized in this limited license. The licensee shall report monthly amounts debited against the ASR storage account and the amount of natural groundwater withdrawn. This limited license does not authorize withdrawal of more water than was available from injection. In the event that static water levels at project wells drop below pre-ASR groundwater elevations or other unforeseen issues occur, the Department may review, modify or revoke this condition and re-evaluate the storage account balance.

(C) The availability of stored water is a running account that is subject to determination at any time.

**8) Annual Reporting.**

(A) Except as otherwise noted, the permittee shall provide the Department a written report of the results of ASR operations for each water year by February 15th of the following water year. The first report shall be due in 2016 and include results from water year 2015. The report shall detail the several kinds of data collected during the water year (including water quality results), account for the injection of stored water, withdrawals of stored and natural water, and the new-year carryover storage at each well. The first report shall include any partial-year results under ASR Limited License #015 and the testing and monitoring described in the ASR permit application. In addition to any graphical or tabular reporting, the City shall report past and future water level data digitally in a format specified by the Department. Annual reports shall include water quality data analysis and interpretation that shall be sealed and signed by a professional(s) registered or allowed, under Oregon law, to practice geology.

(B) As pertinent, annual reporting shall include the formatting and additional information cited in Condition 9 below.

9) **Special Reporting Condition.** The licensee shall provide the following information to the Department:

A) Submission of any and all hydrogeologic data collected and reports developed for the project, including but not limited to cuttings analysis, video logs, geophysical logs, aquifer tests and step tests.

(B) Submission of digital water level data for all ASR wells and any other wells measured in conjunction with the project (in a Department specified format), including annual report data.

(C) Submission of annual reports with locations and elevations for all project wells and locations and elevations for all non-project wells that have been used for collecting water levels or other data pertinent to the project (in a Department specified format).

(D) Notification in the annual report of any changes in well construction to the ASR permit file.

(E) Associating all project well data with the Department Well Identification Number (Well ID Number), the Department Well Log ID, if available, and the project Well Name.

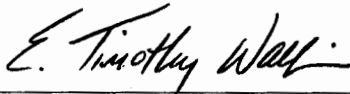
10) **Protection for Existing Water Users.** In the event of conflicts with existing appropriators, the licensee shall conduct all testing so as to mitigate the injurious effects. In addition, the licensee shall cooperate with the efforts of the Department to protect existing water rights and the water quality of existing users that rely upon the receiving aquifer and the injection source water.

11) **Use of Recovered Water.** The licensee shall use any recovered water for the purposes described in the base water rights that authorize diversion.

12) **Additional Conditions on an Informal Basis.** The Department may suggest additional conditions to the permittee. Provided that those conditions are agreed to and undertaken by the permittee, the Department may forego formal changes to this permit. This informal process does not extend to obligation reductions.

13) **Other Measures.** The permittee shall take any additional measures appropriate to address ASR-related issues of landslide activation, seepage, streamflow increases, aquifer boundary determination, aquifer storage efficiency, and water quality protection.

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Issued October 14, 2015



for Thomas M. Byler, Director  
Water Resources Department