Public Health Division

Center for Health Protection, Drinking Water Services



Tina Kotek, Governor

May 2, 2025

Jim Newton, PE, RG, CWRE Principal – Engineer-Geologist Cascade Geoengineering, LLC Via email: newtonjim@hotmail.com

Re: ASR Well #2 (PR#35-2025) City of Prineville (PWS ID#00682) Site Plan Approval

Dear Jim:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new ASR Well #2 for City of Prineville. On April 9, 2025, our office received a narrative of the project, a site plan, land use compatibility statement (LUCS), general specifications, easement information and water right information. A revised well log was submitted on April 11, 2025. A plan review fee of \$3,300 was received on March 5, 2025.

The project includes reconstructing an existing exploratory well (Well log CROO 54907) into the new aquifer storage and recovery ASR #2 well. The water system has an easement that provides the required 100' radius of control. The well will pump directly into the City's nearby 30-inch water main and would be considered to be Source LA on new entry point L.

A regional geologist in our program reviewed the proposed well construction. He noted the following, which should be shared with the well driller:

- The estimated depth to a water-bearing zone is approximately 442 feet below ground surface (bgs) based on well CROO 54907.
- The aquifer nature is estimated to be confined.
- The area around the well is surficially mapped as the Deschutes Formation (Qtb), consisting of tuffaceous sedimentary rocks, interbedded basalt flows and vent rocks, and landslide debris.
- The proposed reconstructed ASR well will be completed to a depth of 560 feet bgs and the cement seal will extend a minimum of 5 feet into the overlying consolidated layers, which start at 90 feet bgs. The proposed seal will extend to a depth of approximately 500 feet bgs.

 The proposed construction appears to meet Oregon Water Resources Department's minimum well construction standards.

The project is granted site plan approval. Once construction of the well is complete, please submit:

- 1. The well driller's report (well log).
- 2. The submitted LUCS was signed with section B completed; a LUCS with section A signed by the planning authority must be submitted.
- 3. Well pumping test information including static water level, pumping rate, drawdown and rate of recovery.
- 4. Pump information.
- 5. Raw (Untreated) Water Quality Data including coliform bacteria, IOCs, VOCs, SOCs and radionuclides. These are to be taken from the new well's raw water sample tap at the wellhead.
- 6. Engineered plans that show the above-well structure detail including the well house, concrete slab, drainage, pump-to-waste piping and plans and specifications for connection of the new well to the water system.

The above items should reference Plan Review #35-2025 and can be emailed to me at Carrie.L.Gentry@oha.oregon.gov.

Note that the review of any above ground details will take place after the new well log is submitted to DWS and reviewed by our geologist. I note that a generator is planned within 100' of the well; note the rules require that equipment must provide secondary containment that will accommodate 110 percent of the fuel tank storage.

If you have any questions, please feel free to call me at (971) 201-9794.

Sincerely,

CA

Carrie Gentry, PE Regional Engineer OHA-Drinking Water Services Carrie.L.Gentry@oha.oregon.gov

cc: Josh Seerup, REHS, OHA/DWS Casey Kaiser, Public Works Director, City of Prineville Tommy Laird, Well Construction Program Coordinator, OWRD