



December 2, 2022

Bruce Brody-Heine, RG, CWRE  
GSI Water Solutions, Inc.  
Via email: [BBheine@gsiws.com](mailto:BBheine@gsiws.com)

Re: **Well #9 (PR#150-2022)**  
**Redmond Water Department (PWS ID#00693)**  
**Site Plan Approval**

Dear Bruce:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for Well #9 for Redmond Water Department. On October 4, 2022, our office received a site plan, proposed well drilling specifications, a land use compatibility statement, well logs for nearby wells and water rights information. A plan review fee of \$3,300 was also received.

The project includes drilling a new well to a depth of approximately 800 feet below ground surface (bgs). The well appears to be on a separate entry point (does not combine with water from other wells prior to entering the distribution system). The water system appears to have a 100' radius of control around the well.

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 284 feet bgs, based on the recently deepened well DESC 62855.
- The aquifer nature may be confined or unconfined. The nature of the aquifer will be determined after final construction of the well. The aquifer material at the proposed location will most likely consist of volcanic rocks from the Deschutes Formation. Well DESC 3879, located to the south of the proposed well location, indicates that the aquifer may be locally confined. The deepening of well DESC 3851/62855, located to the north of the proposed well location, indicates that the aquifer might be unconfined. Generally, wells constructed within the Deschutes Basin are typically considered unconfined by Oregon Water Resources Department.
- If the well is constructed into a confined aquifer, the well would need to be cased and sealed from land surface to a minimum of at least five feet into solid,

uncreviced, consolidated rock overlying the water-bearing zone.

- The estimated depth of the casing seal is 200 to 350 feet.

**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. Well pumping test information including static water level, pumping rate, drawdown and rate of recovery.
3. Pump information.
4. Raw (Untreated) Water Quality Data including coliform bacteria, IOC, SOC, VOC and radionuclides. These are to be taken from the new well's raw water sample tap at the wellhead.
5. 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.
6. Note that since the well appears to be on its own entry point (does not combine with water from any other well prior to entering the distribution system) and the water system practices residual maintenance, the submittal of the engineered plans should contain details on the gas chlorination residual maintenance installation for this well. Additionally, the plan review fee for a combined review (well plus residual maintenance) would be a total of \$4,125 so an additional \$825 would be required.

The above items should reference Plan Review #150-2022 and can be emailed to me at [Carrie.L.Gentry@dhsosha.state.or.us](mailto:Carrie.L.Gentry@dhsosha.state.or.us).

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

Sincerely,



Carrie Gentry, PE  
Regional Engineer  
Drinking Water Services

ec: Michelle Byrd, REHS, OHA/DWS  
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