

Tina Kotek, Governor

December 27, 2024

Corey Benzel  
Rice Hill Owners Association  
5256 Boswell Road  
Yoncalla, OR 97499

*sent by email only*

**Re: Well #5 (PR#152-2024)  
Rice Hill Owners Association (PWS ID#94108)  
Conditional Approval**

Dear Corey Benzel:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the Well #5 for Rice Hill Owner's Association. On November 8<sup>th</sup>, 2024, the DWS received drawings, product information, testing and a plan review fee of \$825.

The project includes review of "Well #5" (L126000), associated water storage, and water distribution. The well and associated water system facilities are owned and operated by the Rice Hill Owners Association, but the water system supplies water to the Rice Hill West Subdivision, public water system number 06041. The public water systems and associated facilities are located in the unincorporated community of Rice Hill, Oregon.

The plans are approved subject to the following conditions:

*Well-*

- The land within a 100 foot radius of "Well #5" does not appear to be owned by the Rice Hill Owner's Association based on submitted GIS coordinates provided for the well. The well's 100-foot radius setback to the west of the well is within the adjacent Goodwich Highway and private property to the west of the highway. With the exception public rights-of-ways, perpetual restrictive easement shall be obtained by the water supplier for all land within 100 feet of the well. The easement shall be recorded with the county in which the well is located and with the recorded deed to the property. A certified true copy shall be filed with the Authority. Please reference

OAR 333-061-0050(2)(a)(B).

- A public road (Goodwich Highway) is within the 100-foot setback of the well. Public or private roadways may be allowed within 100 feet of a confined well, provided the well is protected against contamination from surface runoff or hazardous liquids which may be spilled. The public road has earthen ditches that allow stormwater disposal through soil infiltration. Please reference OAR 333-0061-0050(a)(D) & (E).

*Finished water storage-*

- Submitted plan review information provided very little information on the subsurface concrete water reservoir. Provide information that the concrete storage is rated (NSF certification) for potable water use and engineering approval that the storage tank is being used as designed (as water reservoir). It should be verified the concrete reservoirs is provided with sufficient reinforcing to prevent the formation of cracks, and waterstops and dowels are placed at construction joints, as needed. If tank was poured-in-place wall, any castings should be provided where pipes pass through the concrete. Please reference OAR 333-061-0050(6)(a)(D).
- Submitted plan review information had no information as to whether the subsurface storage tank was installed on an adequate foundation and has adequate subsurface drainage. Please provide engineered review and approval of storage as-built conditions. Where ground-level reservoirs are located partially below ground, the bottom shall be above the ground water table and footing drains discharging to daylight shall be provided to carry away ground water which may accumulate around the perimeter of the structure. Please reference OAR 333-061-0050(6)(a)(G).
- Submitted plan review information had no information as to whether concrete storage tank has a screened vent. Screened vents shall be provided above the highest water level to permit circulation of air above the water in finished water storage facilities. Please reference OAR 333-061-0050(6)(a)(L).
- Provide information demonstrating that the top of the concrete reservoir is watertight. Please reference OAR 333-061-0050(6)(a)(I).
- Provide information demonstrating a silt stop is provided at the reservoir outlet pipe. Please reference OAR 333-061-0050(6)(a)(N).
- Provide information demonstrating bypass piping around the pressure tank is provided to permit operation of the system while the tank is being maintained or repaired. Please reference OAR 333-061-0050(6)(b)(B).
- Provide information demonstrating pressure tank is provided with a drain, a pressure gauge, an air blow-off valve, means for adding air and pressure switches for controlling the operation of the pump(s). Please reference 333-061-0050(6)(b).

*Distribution system-*

- The water distribution system between well source and points of use/premises crosses multiple public and private properties. Provide information that where pipelines pass through properties not owned by the water system, easements have been obtained for pipeline(s) location from those respective property owners and easements have been recorded with the applicable County deeds and records department. Please reference OAR 333-061-0050(8)(a).
- Provide information that installed distribution pipe and fittings are in conformance with the standards of the American Water Works Association, NSF International or other equivalent standards acceptable to the Authority. Please reference OAR 333-061-0050(8)(b).
- Provide information distribution piping is designed and installed so that the pressure measured at the property line in the case of Community water systems, or at the furthest point of water use shall not be reduced below 20 psi. Please reference OAR 333-061-0050(8)(e).
- Provide information that distribution piping is carefully bedded and fully supported in material free from rocks and shall be provided with a cover of at least 30 inches. Select backfill material shall be tamped in layers around and over the pipe to support and protect it. Large rocks or boulders shall not be used as backfill over the pipe. Please reference OAR 333-061-0050(8)(f).
- If applicable, air-relief valves shall be installed at high points where air can accumulate. The breather tube on air-relief valves shall be extended above ground surface and provided with a screened, downward facing elbow. Please reference OAR 333-061-0050(8)(i).
- Provide information that nonconductive water pipe (plastic or other material) that is not encased in conductive pipe or casing has an electrically conductive wire or other approved means for locating the pipe when the pipeline is underground. Please reference OAR 333-061-0050(8)(k).

*Crossings-Sanitary sewers and water lines-*

- Based on the submitted site plan, the distribution pipe appears it likely crosses sewer line(s) between commercial business south of the pipe's displayed location and sewage holding lagoons north of the pipe's location. Please provide information any water-sewer line crossing the applicable portion(s) of subsection (a) through (c) of OAR 333-061-0050(9).
- Based on the submitted site plan, the distribution pipe crosses a drainage ditch on

the east side of the Interstate Five Highway and Yoncalla Creek on the West side of the highway. Provide information a minimum cover of 30 inches is provided over the pipe. Where the watercourse is more than 15 feet wide, demonstrate the pipe is of special construction with flexible watertight joints, valves shall be provided on both sides of the crossing so that the section can be isolated for testing or repair, and test cocks shall be provided at the valves. Please reference OAR 333-061-0050(9)(d).

A DWS Hydrogeologist has reviewed the “Well #5” construction and offered the following comments:

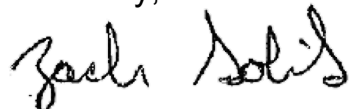
*“The well was drilled to a depth of 225 feet in September 2017. A 6-inch casing was placed to a depth of 18 feet and sealed to that same depth. (8.21 sacks of bentonite calculated, 10.0 sacks utilized). The well construction is considered to meet minimum standards in terms of casing depth, casing seal depth, sealant volume, and annular spacing.”*

*“The well is surficially located in what is mapped as tuff member of the Umpqua Formation. The well appears to produce from what is likely the siltstone member of the Umpqua Formation at a depth of 148 feet. The aquifer is considered confined based on the rise and static water level (91 feet in depth) compared the initial water bearing zone depth of 148 feet. Surface geology as described by Hoover, L. Bulletin 1122-D, 1963.”*

**Until we receive verification that the conditions have been met and final approval has been issued, the water system is not approved for use.** Documentation demonstrating how the above conditions were met should reference Plan Review #152-2024 and can be emailed to me at [zachariah.cunningham-golik@oha.oregon.gov](mailto:zachariah.cunningham-golik@oha.oregon.gov).

If you have any questions, please feel free to call me at 541-231-9077.

Sincerely,



Zach Golik, PE  
Regional Engineer  
Drinking Water Services

CC: Kimberly Tanner, Douglas County Public Health