



PUBLIC HEALTH DIVISION
Drinking Water Services

Tina Kotek, Governor

Oregon
Health
Authority

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April 8, 2024

Meara McNally Butler
General Manager
Fairsing Vineyard
Via email: meara@fairsingvineyard.com

**Re: New System and Well (PR#151-2023)
Fairsing Vineyard (PWS ID#95721)
Conditional Approval**

Dear Meara:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new system and well for Fairsing Vineyard. On November 20, 2023, our office received a well log and a plan review fee of \$825. Additional site plan details were provided on March 28, 2024.

The project includes an existing well (well ID YAMH 54506), drilled to a depth of 301 feet in 2006. The well is located in a gravel area that serves as a road and parking lot. Vineyards are located within the 100' radius of the well. The system also has a 2,000-gallon storage tank.

Under OAR 333-061-0060(1)(b), submittals must be prepared by a Professional Engineer registered in Oregon, unless exempted by DWS. An exemption was approved for this submittal. Note that by utilizing this exemption, the water system takes full responsibility for the design of the project.

A regional geologist reviewed the below-ground well log construction details and noted the following:

- The casing and casing seal extend to a depth of 154 feet, 13 feet into low permeability sandstone that overlies the aquifer. A narrow diameter perforated liner, placed in the well, helps keep the borehole open below the casing. Water can enter the well through the uncased portion of the well between 154 and 301 feet below ground.

- The well is designed to draw water from a deep confined fractured sedimentary bedrock aquifer. The first water-bearing zone is reported to occur at a depth of 190 feet and is overlain by 49 feet of low permeability sandstone that acts as a confining layer. Water within the aquifer is under pressure, rising 104 feet above the identified water-bearing zone to a final static water level of 86 feet below ground.
- Results from a sensitivity analysis indicate that the well construction does not contribute to the overall sensitivity of this water source to local land use practices and the aquifer is not highly sensitive to nearby land use practices.

The plans are approved with the following conditions:

- As noted, there is a vineyard within the 100' sanitary setback of the well. If chemicals are utilized on the vines, then those could represent a sanitary hazard under our rules. A request for a waiver from construction standards may be possible; the link to the form will be provided in the email. The waiver request form must be submitted.
- Since the well is drilled in a confined aquifer and located near a road, OAR 333-061-0050(2)(a)(D) applies. This rule allows DWS to waive the setback requirement for a road that is located within 100' of a well. In order to approve this setback issue, information must be submitted that demonstrates how the well is "...protected against contamination from surface runoff or hazardous liquids which may be spilled on the roadway and is protected from unauthorized access". Note that because of the surrounding slopes, it may be necessary to provide pavement/curbing near/around the well head to protect the well head from any runoff etc.
- A raw water sample tap is required close to the well head, prior to any storage or treatment.
- Piping arrangements must include provisions for pumping the total flow from the well to waste.
- The pitless well cap must be vented. Generally if you look underneath the cap, there will be a screen if the cap is vented.
- A coliform bacteria sample result must be submitted. This sample must be obtained from the well head raw water sample tap.

Until we receive verification that the conditions have been met and final approval has been issued, the facility is not approved for use. Documentation demonstrating how the above conditions were met should reference Plan Review #151-2023 and can be emailed to me at Carrie.L.Gentry@oha.oregon.gov.

In addition to the above conditions, I have the following comment:

- Water rights may be required for your water system, depending on how much water is utilized out of each well per day. Oregon's Water Resources Department regulates water rights and can be contacted at (503) 986-0900. Copies of water right permits or exemptions should be provided to DWS.

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

Sincerely,



Carrie Gentry, PE
Regional Engineer
Drinking Water Services

cc: Nicole Alfafara, REHS, OHA/DWS
Brian Hawkins, REHS, Oregon Department of Agriculture
Sarah Schwab, REHS, Oregon Department of Agriculture