



May 31, 2024

Alfredo Apolloni
Apolloni Vineyards, LLC
Via email: alfredo@apolloni.com

**Re: New System and Well (PR#69-2024)
Apolloni Vineyards, LLC (PWS ID#95717)
Site Plan Approval**

Dear Alfredo:

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 Apolloni Vineyards. On May 3, 2024, our office received a plan review fee of \$825. A site plan was provided on May 9, 2024. Additional information for the system was provided by Oregon Department of Agriculture. Sample results for coliform, arsenic and nitrate have also been received.

The project includes a well (Well ID WASH66837), drilled to a depth of 455 feet in May 2008. The 100' radius around the well includes a vineyard, which represents a potential sanitary hazard (more details in #2 below). The water system appears to have a storage tank and UV unit installed.

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 in our program reviewed the well log construction details. He noted the following:

- The well was cased to a depth of 385 feet and sealed to a depth of 384 feet. The casing seal is completed 84 feet into siltstone and sandstone of low permeability. Water can enter the well through the uncased portion of the borehole below a depth of 385 feet.
- The well draws water from a deep confined sedimentary bedrock aquifer. The water-

bearing zone is reported to occur at 420 feet below ground surface and is directly overlain by 120 feet of low permeability siltstone and sandstone that acts as a confining layer. Water in the aquifer is under pressure, rising 255 feet above the reported water-bearing zone to a depth of 165 feet below ground level.

- Results from a sensitivity analysis indicate that the well construction has a low sensitivity to local land use practices and the aquifer has a low sensitivity to nearby land use practices.

The project is granted site plan approval. In order to move the plan review process along, the following items are needed:

1. Above ground well head details must be provided (pictures may be the best way of showing these items), specifically:
 - Unless a pitless adapter was installed, a concrete slab must be provided around the well.
 - The casing height must be 12” above the slab (or 12” above grade, if a pitless adapter was installed.)
 - A watertight sanitary seal must be provided.
 - A sample tap at the well head must be provided.
 - Piping arrangements must include provisions for pumping the total flow of the well to waste. Pump-to-waste piping is typically installed for this, however, some systems plan to pump the flow to waste through the sample tap.
 - A method of determining the total output of the well must be provided (typically a flowmeter is installed for this purpose).
 - Unless a pitless adapter is installed, a well house must be provided. If the well house is not a small dog-house style, then it must be provided with light and heat. In all cases it must be lockable.
 - A casing vent with a screened return bend must be provided. If a pitless adapter was installed, the caps are typically vented.
2. Because the well is located within a vineyard, chemical use is presumed. If no chemicals are used, then please provide a statement to that effect. If chemicals are used within 100’ of the well, then a waiver from construction standards must be submitted. The link to the waiver form will be in the email that accompanies this letter. Note that three items on the waiver form must be addressed and one of those requires you to state the proposed alternate measure. In this case, the alternate measure is that you have a properly constructed well in a confined aquifer.
3. Manufacturer’s information (make and model, volume) of the storage tank must be provided.

4. Manufacturer's information (make and model) of the UV unit must be provided.

The above items should reference Plan Review #69-2024 and can be emailed to me at Carrie.L.Gentry@oha.oregon.gov.

In addition to the above items, note that 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: Tommy Laird, Well Construction Program Coordinator, OWRD
Nicole Alfafara, REHS, OHA/DWS
Steve Wong, REHS, Oregon Department of Agriculture
Sarah Schwab, REHS, Oregon Department of Agriculture