

September 16, 2024

Matthew Bonds
Attorney
Gottlieb Law
Via email: mbonds@gottlieb.law

**Re: New System and Well (PR#110-2024)
Silverback Estate Winery (PWS ID#95744)
Conditional Approval**

Dear Matthew:

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 Silverback Estate Winery. On August 21, 2024, our office received a site plan, well log and a plan review fee of \$825. Sample results were provided by Oregon Department of Agriculture.

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.

The project includes a well (Well ID MARI 70200), completed in 2022 and is intended to serve a tasting room. The water system appears to have a 100' radius of control around the well. Based on the site map, it appears that the well is located within a vineyard.

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

- The well meets current below-ground construction standards.
- The well was drilled to a depth of 120 feet and is cased to the bottom of the hole. The casing is sealed to a depth of 50 feet, extending 5 feet into a 20-foot-thick layer of low permeability weathered basalt. The casing is perforated from 65 to 105 feet below ground level. However, the outside of the casing has a pea gravel filter pack that extends from 55 to 105 feet below ground level. Therefore, it is assumed that the well functions as an open hole, allowing water to enter the well along the entire length of the gravel filter pack.

- The well draws water from a confined layered basalt aquifer. The first water-bearing zone below the casing seal is reported to occur 65 feet below ground level and is directly overlain by 20 feet of weathered basalt of low permeability that acts as a confining layer. Water in the aquifer is under pressure, rising 47 feet above the water-bearing zone to a depth of 18 feet below ground level.
- Results from a sensitivity analysis indicate that the well and the aquifer characteristics are not highly sensitive to local land use practices that occur within the sanitary setback.

The plans are approved with the following condition:

- Since the site plan shows the well within a vineyard, a waiver from construction standards for any chemical use within the 100' radius of control around the well is required. If no chemicals are used within the 100' radius of control around the well, then a statement can be submitted instead of the waiver. The waiver form will be linked in the email that accompanies this letter.

Until we receive verification that the condition has been met and final approval has been issued, the facility is not approved for use. Documentation demonstrating how the above condition was met should reference Plan Review #110-2024 and can be emailed to me at Carrie.L.Gentry@oha.oregon.gov.

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

Sincerely,



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

cc: Sarah Schwab, REHS, Oregon Department of Agriculture
Joshua Teamus, REHS, Oregon Department of Agriculture
Chantal Wikstrom, REHS, OHA/DWS
Jennifer Aronson, Silverback Estate Winery, jen@silverbackwine.com
Tommy Laird, Well Construction Program Coordinator, OWRD