



April 24, 2024

Paul Scherbak
Director – EH&S Center of Excellence/Wine and Spirits
Via email: Paul.Scherbak@cbrands.com

Re: New Well #2 (PR #61-2024)
Lingua Franca Winery (PWS ID #95732)
Site Plan Evaluation

Dear Paul:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new well for Lingua Franca Winery. On April 15, 2024, our office received a site plan, land use compatibility statement, and a plan review fee of \$825.

The project includes drilling a new well (Well #2) to an approximate depth of 140 feet. The water system appears to have the required 100 foot radius of control around the proposed Well #2 location. The submitted site plan shows a private road, and parking area within a 100 foot radius of the new well. A wetland area is also identified on the site plan, which suggests the presence of surface water within 500 feet of the well.

A regional geologist in our program reviewed the proposed well construction and existing nearby well logs. He noted the following, which should be shared with the well driller:

- The depth to the first water-bearing zone in the underlying basalts may vary between 120 to 220 feet.
- The casing seal must be placed at least 5 feet into solid, unfractured, consolidated rock overlying the water-bearing rock formation.
- Based on what is currently known about the site, the aquifer is likely to be a confined layered basalt aquifer. The surface water setback for layered basalt aquifers is 500 feet. To minimize the potential for a groundwater under the direct influence of surface water (GWUDI) determination, the overlying bedrock confining layer that the casing seal is completed in should be a minimum of 15 feet thick.

The private roadway located within 100 feet of the proposed Well #2 is a violation of the setback construction standard for groundwater wells. A waiver for the setback standard cannot be approved prior to drilling a well. If the well is properly drilled into a confined aquifer, then OHA/DWS may be able to waive the requirement. If the well is not drilled into a confined aquifer, then OHA/DWS may not be able to approve the well for use by the water system.

Due to the setback issue, **the site plan cannot be approved at this time.** If a properly constructed confined aquifer well is drilled, 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, nitrate and arsenic. 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. Specifically,
 - Unless a pitless adapter is installed, a concrete slab must be provided around the well.
 - The casing height must be 12 inches above the slab (or 12 inches above grade, if a pitless adapter was installed.)
 - A watertight sanitary seal must be provided.
 - A sample tap 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.
 - 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 is installed, the caps are typically vented.
6. If there are treatment systems or storage tanks planned to be installed, then additional details must be submitted. Please include information on any of these items, including type, capacity, volume and material, as applicable.
7. Since the well is expected to be drilled into 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 feet 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.

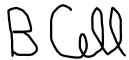
Water rights may be required for your water system, depending on how much water is utilized out of each well per day. Oregon Water Resources Department regulates water rights and can be contacted at (503) 986-0900. Copies of water rights permits or exemptions should be provided to DWS.

Due to the surface water within the Well #2 setback a OHA/DWS geologist would conduct a GWUDI evaluation upon well completion. If the well is eventually determined to be GWUDI and not groundwater, then there would be a requirement to install surface water treatment.

The above items should reference Plan Review #61-2024 and can be emailed to me at baxter.call@oha.oregon.gov.

If you have any questions, please feel free to call me at (541) 393-4374.

Sincerely,



Baxter Call, PE
Regional Engineer
Drinking Water Services

cc:

- File, DWS Portland
- Amy Bleekman, REHS, OHA-DWS
- Jeff Green, REHS, Oregon Department of Agriculture
- Sarah Schwab, REHS, Oregon Department of Agriculture
- Tommy Laird, Well Construction Program Coordinator, Oregon Water Resources Department