

September 18, 2023



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Amber Sagnotti **Jachter Family Wines** Via email: asagnotti@jachterwine.com

New System and Well (PR#112-2023) Re: Jachter Family Wines (PWS ID# - not yet assigned) Site Plan/Conditional Approval

#### Dear Amber:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new water system for Jachter Family Wines. On August 18, 2023, our office received a site plan, well log, list of equipment, sampling results, land use decision and a plan review fee of \$825.

The project includes an existing well (well log ID YAMH 58450), drilled to a depth of 294 feet in 2020. The well is located near an unnamed stream. Also included are two 5,000-gallon tanks, a 5-HP booster pump, two 2,500-gallon buried tanks and two pressure tanks (119 and 82 gallons).

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 well log construction details and noted the following:

The casing and casing seal extend to a depth of 138 feet, 122 feet into a low permeability claystone and siltstone bedrock that overlies the aquifer. A narrow diameter liner with screens was placed in the well to help keep the borehole open below the casing. Water can enter the well through the uncased portion of the well between 138 and 294 feet below ground.

- The well draws water from a deep confined sedimentary bedrock aquifer composed of siltstone and sandstone. The water-bearing zone occurs at a depth of 142 feet and is overlain by 126 feet of low permeability siltstone, claystone and shale that act as a confining layer. Water within the aquifer is under pressure, rising 21 feet above the identified water-bearing zone to a final static water-level depth of 121 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
  does not contribute to the overall sensitivity of this water supply to nearby land use
  practices.
- An unnamed stream is within 110 feet of the wellhead. Due to the sensitivity analysis results, at this time the well is not considered susceptible to groundwater under the direct influence of surface water (GWUDI). Should future water quality results indicate the presence of a contaminant in significant concentrations, GWUDI analysis results will be reviewed an updated accordingly. This could lead to additional sampling and treatment requirements in the future.

## The plans are approved with the following conditions:

### Well

- Please submit information that demonstrates the water system has ownership of the 100' radius or has obtained a restrictive easement. Note that if the water system does not have some radius of control, we would be unable to approve this well without a restrictive easement.
- A sample tap at or near the well head must be provided. The sample tap should be prior to any storage.
- 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 casing vent is required. Please provide documentation (or photo) that the pitless adapter cap is vented underneath.

# 5,000-gallon tanks

- More detail on the piping configuration of the 5,000-gallon tanks is required.
  - o Is there a common inlet and outlet pipe, or are there separate pipes for each?
  - O Does the water fill both tanks at the same time or does one tank fill and then the other?
  - o Is there a drain line for each tank?

- Generally, tanks have overflow piping near the top to prevent the water from flowing out the top. No overflow piping was noted. Clarification is required on the plan for water to overflow.
- A silt stop must be provided at the outlet pipe. Generally, this is accomplished by having the outlet pipe slightly higher than the bottom of the tank.

### 2,500-gallon tanks

- Information is required on the material used to construct the tanks.
- More detail on the piping configuration of the 2,500-gallon tanks is required.
  - o Is there a common inlet and outlet pipe, or are there separate pipes for each?
  - O Does the water fill both tanks at the same time or does one tank fill and then the other?
  - o Is there a drain line for each tank?
- Generally, tanks have overflow piping near the top to prevent the water from flowing out the top. No overflow piping was noted. Clarification is required on the plan for water to overflow.
- A silt stop must be provided at the outlet pipe.
- A fence or other vandal deterrence must be provided for the tanks.
- The roof access hatches must have curbing around the openings and lockable watertight covers that overlaps the curbing.
- Screened vents must be provided above the highest water level to permit circulation of air above the water in finished water storage tanks.
- Tanks that are located partially or fully below ground must have footing drains discharging to daylight to carry away ground water which may accumulate around the perimeter of the structure. Were footing drains installed for these buried tanks?

### Pressure tanks

 Bypass piping around the pressure tanks must be provided to permit operation of the system while a tank is being maintained or repaired (schematic or photo showing how this requirement is met would be acceptable).

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 #112-2023 and can be emailed to me at Carrie.L.Gentry@oha.oregon.gov.

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

CAS

cc: Sarah Schwab, REHS, Oregon Department of Agriculture
David Jachter, Jachter Family Wines, <u>djachter@jachterwine.com</u>
Travis Kelly, Well Construction Compliance Coordinator, Oregon Water Resources