

July 2, 2024



800 NE Oregon Street, #640 Portland, OR 97232-2162 Phone: 971-201-9794 Fax: 971-673-0694 www.healthoregon.org/dwp

David May Skylane Farms Via email: dmay@vffi.com

Re: New Well (PR#82-2024) Skylane Farms (PWS ID#94461) Site Plan Approval

Dear David:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new well for Skylane Farms. On June 6, 2024, our office received a site plan and well log. A plan review fee of \$825 was received on June 11, 2024.

The project includes a well (well ID MARI 71030), drilled to a depth of 358.5 feet in September 2023. The water system appears to have the required 100' radius of ownership/control. The well appears to be within 100' of a parking lot/private roadway as well as a railroad track.

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

- The well meets current below-ground construction standards.
- The well is cased to a depth of 271 feet. The casing is sealed to a depth of 37 feet, extending into a 92-feet thick layer of low permeability composed of silt, clay and sandy silt. A secondary 10-inch diameter casing acts as a liner in the 16-inch diameter borehole below a depth of 271 feet.
- This well draws water from a semi-confined aquifer composed of several layers of sand and mixed sand/gravel. These layers represent several water-bearing zones, all of which appear to be part of the same aquifer. The shallow potential water-bearing zone within the aquifer systems occurs at a depth of 92 feet, 55 feet below the casing seal. The final static water level rose less than 1 foot above the top of this water-bearing zone,

suggesting that the water in the aquifer is slightly under pressure. The overlaying silty sand and clay appear to act as a low permeability confining layer.

• Results from a sensitivity analysis indicate that the well construction has a low sensitivity to nearby land use practices and the aquifer is not highly sensitive to nearby land use practices.

The project is granted site plan approval. In order to continue the plan review process, please submit the following:

- 1. Since the well is located within 100' of a private road/parking lot, a waiver from construction standards must be submitted. A link to the form will be provided with the email accompanying this letter.
- 2. Pump information must be submitted (manufacturer, model number, NSF 61 certification).
- 3. Engineered plans that show the above-well structure detail including the following items (note that the water system can request an exemption from having a PE prepare plans):
 - 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.
- 4. Clarification must be provided on whether the well combines with water from the other wells prior to entering the distribution system.
- 5. Raw (Untreated) Water Quality Data including coliform bacteria, IOC, SOC, and VOC. These are to be taken from the new well's raw water sample tap at the wellhead.

The above items should reference Plan Review #82-2024 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,

City

Carrie Gentry, PE Regional Engineer Drinking Water Services

cc: Chantal Wikstrom, REHS, OHA/DWS Sarah Schwab, REHS, Oregon Department of Agriculture Tommy Laird, Well Construction Program Coordinator, OWRD