

November 15, 2024

Dawn McElreath
Rising Sun Farms Inc.
5126 S. Pacific Hwy
Phoenix, OR 97535

sent by email only

**Re: New Well (PR#2024-147)
Rising Sun Farms Inc. (PWS ID#95067)
Conditional Approval**

Dear Dawn McElreath:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new well for Rising Sun Farms. On October 16, 2024, our office received a well log, lab results, site plan and a plan review fee of \$825.

The project includes the new well identified as L140797 (JACK 65208) located at 5126 South Pacific Hwy in Phoenix, Oregon. This well will be an additional source in addition to the existing well for the water system (L104439).

The plans are approved subject to the following conditions:

1. The area within 100 feet of the well shall be owned by the water supplier, or a perpetual restrictive easement shall be obtained by the water supplier for all land within 100 feet (except public rights-of-way) (OAR 333-061-0050(2)(a)(B)). It was not clear on the documents submitted if the area around the well is owned by the water system. If not, and an easement is not possible to obtain, a waiver can be applied for.
2. Wells shall not be located at sites which are prone to flooding. In cases where the site is subject to flooding, the area around the well shall be mounded, and the top of the well casing shall be extended at least two feet above the anticipated 100-year (1 percent) flood level (OAR 333-061-0050(2)(a)(F)). Since the well is near a pond, flooding could occur so grading should be done around the well to prevent the well from being flooded.
3. Before a well is placed into operation as the source of supply at a public water

system, laboratory reports as required by OAR 333-061-0036 shall be submitted by the water supplier (OAR 333-061-0050(2)(a)(I)). The only remaining testing that needs to be submitted is the IOCs. We have the coliform, lead & copper, VOCs, SOC, and arsenic have been received.

4. Where turbine pumps are installed, the top of the casing shall be sealed into the pump motor. Where submersible pumps are installed, the top of the casing shall be provided with a watertight sanitary seal (OAR 333-061-0050(2)(K)(ii)). Please confirm the top of the well is sealed tight.
5. A casing vent shall be provided and shall be fitted with a screened return bend (OAR 333-061-0050(2)(K)(iii)). Please confirm the vent at the wellhead has a screen. This will not apply if the well is equipped with a pitless adaptor.
6. A sampling tap shall be provided on the pump discharge line (OAR 333-061-0050(2)(K)(v)). Please confirm there is a sample tap near the well.
7. Piping arrangements shall include provisions for pumping the total flow from the well to waste (OAR 333-061-0050(2)(K)(vi)). Please confirm the well can be pumped to waste prior to entering the water system.
8. A method of determining the total output of each well shall be provided (OAR 333-061-0050(2)(K)(vii)). Please confirm if there is a flow meter.
9. A reinforced concrete slab shall be poured around the well casing at ground surface. The slab shall be sloped to drain away from the casing (OAR 333-061-0050(2)(K)(viii)). Please confirm there is a concrete slab around the wellhead. This will not apply if the well is equipped with a pitless adaptor.
10. The top of the well casing shall extend at least 12 inches above the concrete slab (OAR 333-061-0050(2)(K)(x)). Please confirm the well at least 12" above the concrete slab around the wellhead.
11. Provisions shall be made for protecting pump controls and other above-ground appurtenances at the well head (OAR 333-061-0050(2)(K)(xi)). Please confirm what was used to protect the wellhead and pump controls.

Until we receive verification that the conditions have been met and final approval has been issued, the new well is not approved for use. Upon completion of the project, the engineer must verify in writing that construction was completed according to the submitted plans. If substantial changes are made, a set of as-built drawings must be submitted. Documentation demonstrating how the above conditions were met should reference Plan Review #2024-147 and can be emailed to me at rebecca.a.templin@oha.oregon.gov.

The hydrogeologist also has the following comments about the well and aquifer:

"The well was drilled to a depth of 300 feet in 2021. A 10-inch borehole extends to a depth of 41 feet, from 41-300 feet in depth the borehole is 6 inches in diameter. A

*6-inch casing extends to a depth of 39 feet. Bentonite chips were erroneously reported as placed to a depth of 41 feet (26 sacks), 18.7 sacks calculated for a depth of 41 feet. A 4-inch liner was placed from 0-300 feet in depth and was slotted (240-300 feet in depth). The well is considered to act as an open hole below the casing (*39 feet in depth). The well construction meets minimum standards in terms of casing depth, casing seal depth, sealant volume, and annular spacing.*

The well is located approximately 20 feet from man-made pond which should be considered a sanitary hazard (fecal source). A waiver from construction standards should be required due to a source of pathogenic organisms within the sanitary setback. Triggered monitoring shall apply.

The well is surficially located in what is field mapped as modern fill and construction material (Af). The well appears to produce from what are likely fractures within marine sedimentary bedrock of the Hornbrook Formation (reported as claystone blue). The aquifer is considered confined and appears to display pressure based on the rise static water level (20 feet in depth) compared to the initial water bearing zone of (140 feet in depth)."

If you have any questions, please feel free to email me or call me at 541-650-4868.

Sincerely,



Rebecca Templin, PE
Regional Engineer
Drinking Water Services

CC: Tony George, Jackson County Environmental Health
Tommy Laird, Oregon Water Resources Dept.
Shayon Hayes, Oregon Water Resources Dept.