



PUBLIC HEALTH DIVISION
Center for Health Protection, Drinking Water Services

Tina Kotek, Governor

Oregon
Health
Authority

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March 13, 2024

William Smith
Fern Acres
84299 Wright Road
Florence, OR 97439

**Re: Surface water treatment & distribution (PR#161-2023)
Fern Acres (PWS ID#01563)
Conditional Approval**

Dear William Smith:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the surface water treatment and distribution system at Fern Acres. DWS has received drawings, product data and a plan review fee of \$825.

This is a review of the Fern Acres public water system located in Dunes City, Oregon. The review includes the surface water treatment system and distribution system supplying the associated the residential subdivision.

The project shall adhere to all applicable DWS Oregon Administrative Rules (OAR). The submitted plan review material has been reviewed and the following items were noted as specific conditions of final approval:

General-

- Per OAR 333-061-0036, the Fern Acres public water system shall immediately begin monitoring and submitting surface water monitoring requirements as Community public water system. Please coordinate with your direct State regulator for these requirements.
- Per OAR 333-061-0050(1), only materials designed for potable water service and meeting NSF Standard 61: Drinking Water System Components - Health Effects or equivalent shall be used in those elements of the water system which are in contact with potable water.

Surface water and groundwater under direct surface water influence source facilities-

- Per OAR 333-061-0050(3), the surface water intake from Woahink Lake shall be constructed in accordance with the applicable portions of subsection (a) through (d) of this rule. Provide as-built documents (i.e., drawings, photos, product information, etc.) demonstrating compliance with these rules.

Water treatment facilities (other than disinfection)-

- Per OAR 333-061-0050(4), the Rosedale cartridge filtration system shall demonstrate compliance with the applicable portions of subsection (a) through (d) of this rule. No pre-installation filtration pilot study data has been provided with the plan review showing the selected filtration can successfully treat all seasonal variability of the raw surface water quality. The water system shall demonstrate with a live pilot study that the selected filtration system can produce compliant finished water under all seasonal variation (at least one year) from the date of receipt of this conditional approval letter prior to final approval of the surface water treatment being given by the DWS. The Rosedale PS 740 PPP 356 main filter used in conjunction with the 18435-2F-1-150- SB700 is qualified for a log removal credit of 2.0 log for crypto and 2.0 log for Giardia per the DWS challenge study criteria. Provide as-built documents (i.e., drawings, photos, product data) showing installation of necessary sampling port (i.e., combined filter effluent sample tape) and measuring devices (i.e., pre and post pressure gauges).
- The Woahink Lake water source, at the new surface water intake location, will be required to perform Long Term 2 Enhanced Surface Water Treatment Rule (LT2) monitoring per OAR 333-061-0036. This monitoring should be started as soon as possible and coordinated with the water system's direct regulator.
- The Fern Acres public water system will need to monitor post filtration turbidity on a daily basis and submit a monthly operating report to the DWS per OAR 333-061-0036.

Facilities for disinfection and disinfectant residual maintenance-

- Per OAR 333-061-0050(5), disinfection of the potable water shall be done per the applicable portions of subsection (a) through (l) of this rule. Provide as-built information (i.e., drawings, photos, product data, etc.) demonstrating how these rules are met.
- Provide a disinfection contact time tracer study per the *US EPA Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems Using Surface Water Sources*. Based on the submitted plan review information, it appears necessary that at least one of the two 5,000-gallon storage tanks will need to function as disinfection contact chambers (clear well).
- The Fern Acres public water system will need to monitor its disinfection contact time and CT per the results of its tracer study on a daily basis and submit a

monthly operating report to the DWS per OAR 333-061-0036.

Finished water storage-

- Per OAR 333-061-0050(6), the finished water storage shall meet the applicable portions of this rule. Provide as-built information (i.e., drawings, photos, product data, etc.) demonstrating the applicable rules being met.

Distribution systems-

- Per OAR 333-061-0050(7), the water distribution system shall meet the applicable portions of subsection (a) through (l) of this rule. Provide as-built information (i.e., drawings, photos, product data, etc.) demonstrating these rules being met.

Capacity Requirements for Public Water Systems-

- Per OAR 333-061-0061, the Fern Acres public water system shall demonstrate it has the technical, managerial, and financial capability to plan for, achieve, and maintain compliance with applicable drinking water standards. Coordinate with your water system's direct State regulator for compliance with this rule.

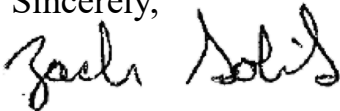
Cross Connection Control Requirements-

- Per OAR 333-061-0070, water suppliers must undertake cross connection control programs to protect the public water systems from pollution and contamination per the applicable portions of subsection (1) through (18) of this rule. Provide as-built information (i.e., drawing, photos, product data, etc.) demonstrating compliance with this rule.

Until we receive verification that the conditions have been met and final approval has been issued, the surface water treatment and distribution is not approved for use. For waterline projects, note that engineers must inspect/be prepared to sign off before burying lines. 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 #161-2023 and can be emailed to me at zachariah.cunningham-golik@oha.oregon.gov.

If you have any questions, please feel free to email me at call me at 541-231-9077.

Sincerely,

A handwritten signature in black ink that reads "Zach Golik". The signature is written in a cursive, slightly slanted style.

Zach Golik, PE
Regional Engineer
Drinking Water Services

CC: Julie Wray, DWS Portland
Amy Bleekman, DWS Springfield