

December 9, 2025

John Woody
Diamond Lake Gas Station
3641 Glenbrock Loop Road
Riddle, OR 97469

sent by email only

**Re: Surface Water Treatment (PR#108-2025)
Diamond Lake Gas Station (PWS ID#95243)
Conditional Approval**

Dear John Woody:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the surface water filtration and disinfection for the Diamond Lake Gas Station. On October 30th, 2025, DWS received updated drawings, specifications, product data and recycled a plan review fee of \$825.

The project includes the design and construction of new surface water treatment for the Diamond Lake Gas Station near Diamond Lake, Oregon. The surface water treatment consists of a Harmsco HC/90-LT2 cartridge filtration with MUNI-1-2FL-304 housing, Viqua Pro24-186 ultraviolet 4-log disinfection and chlorine disinfection residual maintenance. The surface water treatment installation work will take place inside the gas station building.

The plans are approved subject to the following conditions:

Water Treatment Facilities (other than disinfection)-

- Laboratory equipment shall be provided so that the water supplier can perform analyses necessary to monitor and control the treatment processes. Reference OAR 333-061-0050(4)(a)(D).
- Sampling taps shall be provided before and following the treatment process and before the first user when any form of water treatment is used at a public water system. Demonstrate this construction standard has been met once work is completed. Reference OAR 333-061-0050(4)(a)(E)
- Pilot studies shall be conducted by the water supplier to demonstrate the

effectiveness of any filtration method other than conventional filtration. Pilot study protocol shall be approved in advance by the Authority. Results of the pilot study shall be submitted to the Authority for review and approval. Reference OAR 333-061-0050(4)(c)(C).

- All filtration systems shall be designed and operated so as to meet the requirements prescribed in OAR 333-061-0032(4) and (5). Design of the filtration system must be in keeping with accepted standard engineering references acknowledged by the Authority such as the Great Lakes Upper Mississippi River "Recommended Standards for Water Works" technical reports by the International Reference Center for Community Water Supply and Sanitation, or publications from the World Health Organization. A list of additional references is available from the Authority upon request. Reference OAR 333-061-0050(4)(c)(E).
- Water systems using cartridge filtration must have pressure gauges installed before and after each cartridge filter. Demonstrate this construction standard has been met once work is completed. Reference OAR 333-061-0050(4)(c)(K).

Facilities for disinfection and disinfectant residual maintenance-

- Sample taps shall be provided before and after chlorine application(s). Demonstrate this construction standard has been met once work is complete. Reference OAR 333-061-0050(5)(f).
- Testing equipment shall be provided to determine the chlorine residual. Demonstrate this construction standard has been met once the work has been completed. Reference OAR 333-061-0050(5)(g).
- The chlorination must be applied in proportion to water flow. Demonstrate this construction standard has been met with the completion of the work. Reference OAR 333-061-0050(5)(i).
- The UV unit must achieve the dosage indicated in OAR 333-061-0036(5)(c)(D)(i), Table 32 for the required pathogen inactivation. Demonstrate this has been met with as-built information. Demonstrate this construction standard has been met once the work is completed. Reference OAR 333-061-0050(5)(k)(A).
- The treatment unit must have an upstream valve or device that prevent flows from exceeding the manufacturer's maximum rated flow rate, a UV sensor that monitors light intensity through the water during operation, and a visual and audible alarm. Demonstrate this construction standard has been met with the completed work. Reference OAR 333-061-0050(5)(k)(C).
- There must be a visual means to verify operation of all ultraviolet lamps. Demonstrate this construction standard has been met with completed work. Reference OAR 333-061-0050(5)(k)(D).

- The lamps, lamp sleeves, housings and other equipment must be able to withstand the working pressures applied through the unit. Demonstrate this construction standard has been met once work is complete. Reference OAR 333-061-0050(5)(k)(E).
- The UV treatment unit must have shut-off valves at both the inlet side and the outlet side of the treatment unit. There shall be no bypass piping around the treatment unit. Demonstrate this construction standard is met with completion of work. OAR 333-061-0050(5)(k)(H).

Disinfection of facilities-

- Following construction or installation of new facilities and repairs to existing facilities, those portions of the facilities which will be in contact with water delivered to users must be cleaned and flushed with potable water and disinfected according to AWWA Standards C651 through C654 before they are placed into service. Demonstrate this construction standard has been met with completion of the work. Reference OAR 333-061-0050(10).

Product Acceptability Criteria-

- Demonstrate all as-built materials and chemicals conform with the requirements of OAR 333-061-0087 upon completion of the work.

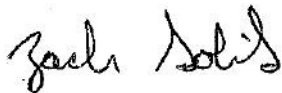
In addition to these conditions, I have the following comment:

All new or modified water conveyance pipes associated with the new surface water treatment installation are subject to the State Plumbing Code. Coordinate with the water system's local permit jurisdiction for review and approval per State Plumbing Code.

Until we receive verification that the conditions have been met and final approval has been issued, the surface water treatment 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 #108-2025 and can be emailed to me at zachariah.cunningham-golik@oha.oregon.gov.

If you have any questions, please feel free to 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