

May 5, 2016

Randy Parrott Bridge Water District P.O. Box 84 Myrtle Point, OR 97458 444 A Street Springfield, OR 97477 (541) 726-2587 (541) 726-2596 www.healthoregon.org/DWP

RE: GROUNDWATER UNDER THE DIRECT INFLUENCE OF SURFACE WATER – BRIDGE WATER DISTRICT – PWS #41-00552

Dear Mr. Parrott,

The fecal microbial contaminant *E. coli* has been confirmed in several of Bridge Water District's spring sources of drinking water. Your system's regulator, Rick Hallmark with Coos Health & Wellness, presented several options to achieve compliance with public drinking water rules in his letter of November 23, 2015. Your response letter dated April 5, 2016, stated that Bridge Water District has chosen to install surface water treatment and continue using the existing spring sources. The EPA and Oregon Health Authority (OHA) classifies such sources as Groundwater Under the Direct Influence of surface water (GWUDI).

Even though Bridge Water District has elected to declare its sources as GWUDI and provide surface water treatment, its alternatives are reiterated here:

- 1. Provide surface water filtration and disinfection treatment as required by OAR 333-61-0032.
- 2. Provide surface water disinfection treatment, but demonstrate that the water produced from your source springs can meet the criteria for exemption from filtration as outlined in OAR 333-61-032 (2) and (3). To meet this exemption, Bridge Water District would need to establish a watershed control program or a certified drinking water protection plan (see OAR 340-040-0160 to 340-040-00180) that addresses both the groundwater and surface water (see OAR 333-61-032 (2)(c)(B)). The disinfection treatment would need to meet surface water standards for total and fecal coliform, turbidity, 3-log inactivation of *Giardia* and 4-log inactivation of viruses, and 2-log removal of *Cryptosporidium*.

- 3. Develop a new source (well or spring) outside the distance-hydrogeologic setting criteria from any surface water, as outlined in OAR 333-61-0032 (8)(a)(A)(i-v). Sources located outside the distance criteria are typically classified as groundwater. New sources would need to meet the current construction standards for public drinking water.
- 4. Suspend the use of the current spring sources and connect to or purchase water from a nearby approved system.

Bridge Water District has chosen to self-declare the spring sources (Springs 1-6, or SRC-AA through SRC-AF) as GWUDI, forgoing spring reconstruction and MPA testing. The water district has 18 months from the date of this letter to provide filtration and disinfection treatment as required in OAR 333-061-0032(1) to (5), option 1 above. The necessary system modifications must be operational by **October 5, 2017.** If these requirements are not met after 18 months, Bridge Water District system may be subject to formal enforcement.

Prior to implementation, plans must be submitted to the Authority for review. See plan review information at

http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/PlanReview/Pages/index.aspx (the general email address is dws.planreview@state.or.us).
These plans must also be prepared by a registered Professional Engineer.

Interim Operation Plan:

Water systems using GWUDI sources and with 18 months to meet SWTR requirements must also comply with the following Interim Standards (see OAR 333-061-0032 (1)(c)):

- The turbidity of water entering the distribution system must never exceed 5 NTU. Turbidity measurements must be taken a minimum of once per day. If continuous turbidimeters are in place, measurements should be recorded every four hours.
- Disinfection must be sufficient to reliably achieve at least 1.0 log inactivation of *Giardia lamblia* cysts prior to the first user. Disinfection "CT" values must be calculated and recorded daily, based on daily pH and temperature measurements, and disinfection residuals at or before the first customer.
- Reports must be submitted to the Department monthly as prescribed in OAR 333-061-0040.

• If these interim standards are not met, the owner or operator of the water system must notify customers of the failure as required in OAR 333-061-0042(2)(b)(A) and (3)(b).

See the information above for engineering plan review questions and submittal. For basic questions regarding surface water treatment or the interim operational measures, please contact me at (541) 726-2587 ext. 30. Rick Hallmark at Coos Health & Wellness ((541) 541-751-2403) continues to be your regulatory contact for routine matters until the water system has attained surface water treatment.

Sincerely,

Betsy Parry, R.E.H.S. Drinking Water Services

cc: Brad Daniels, DWS Portland Shawn Stevenson, DWS Springfield Rick Hallmark, Coos Health & Wellness