

March 11, 2014

Jamie Porter
P.O. Box 8
Springfield, OR 97477

**RE: GROUNDWATER UNDER THE DIRECT INFLUENCE OF SURFACE WATER
DETERMINATION - RAINBOW WATER DISTRICT - PWS #4100839**

Dear Jamie,

Drinking Water Services has received the results from the first set of Microscopic Particulate Analyses (MPA) collected from Chase Well #2 (NO WELL LOG)/SRC-BB. The purpose of the MPA test was to determine the potential risk of your system's drinking water to being classified as Groundwater Under the Direct Influence (GWUDI) of Surface Water.

The risk score from the MPA, collected during a high water flow event (greater than a gage height of 57 feet or 20,000 cubic feet per second) on February 13, 2014, and based on the relative abundances of surface water indicators, was 24 (see MPA scoring method at OAR 333-061-0032 (8)(h)(Table 11)).

According to Oregon Administrative Rule 333-061-0032 (8)(i)(B)), any risk score greater than 19 results in the water system's source being classified as GWUDI. As a result of the GWUDI classification, Rainbow Water District's drinking water source Chase Well #2 (NO WELL LOG)/SRC-BB is subject to the provisions of the Surface Water Treatment Rule (SWTR). In addition to this determination, your water system is no longer required to collect a second MPA sample at Chase Well #2 (NO WELL LOG)/SRC-BB.

Rainbow Water District will have 18 months from the date of this letter to meet the requirements stated in OAR 333-061-0032(1) to (5). If these requirements are not met after 18 months your water system may be subject to formal enforcement.

In order for Chase Well #2 (NO WELL LOG)/SRC-BB to comply with the SWTR, the following options are available:

1. Provide filtration and disinfection treatment as required by OAR 333-61-0032.
2. Develop a new source outside the distance-hydrogeologic setting criteria, as outlined in OAR 333-61-0032 (8)(a)(A)(i-v). Wells located outside the distance criteria are typically classified as groundwater.

3. Demonstrate that the water produced from Chase Well #2 (NO WELL LOG)/SRC-BB can meet the criteria for exemption from filtration as outlined in OAR 333-61-032 (2) and (3). Meeting the filtration exemption criteria involves continually meeting the source water standards for total and fecal coliform, turbidity, 3-log inactivation of giardia and 4-log inactivation of viruses, 2-log removal of cryptosporidium, and 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)).
4. Suspend the use of Chase Well #2 (NO WELL LOG)/SRC-BB and purchase water from a nearby approved system.

Once Rainbow Water District has selected one of the options listed above in order to achieve compliance, the necessary water system modifications must be operational by **September 11, 2015**. Prior to implementation of one of the options, plans will need to be submitted to the Authority for review (see <http://public.health.oregon.gov/HealthyEnvironments/DrinkingWater/PlanReview/Pages/index.aspx> for plan review information). The plans submitted to DWS must also be prepared by a registered Professional Engineer.

Interim Operation Plan:

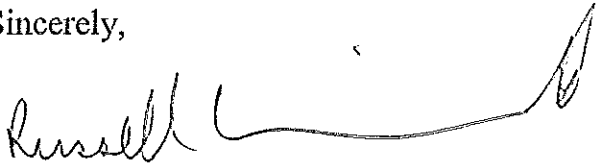
Water system sources that have been determined to be under GWUDI and have 18 months to meet the requirements of the SWTR must also meet the following Interim Standards (see OAR 333-061-0032 (1)(c)):

- 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. Daily disinfection "CT" values must be calculated and recorded daily, including pH and temperature measurements, and disinfection residuals at 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).

Jamie Porter
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If you have any questions regarding the GWUDI determination, please contact me at (541) 726-2587 ext. 26. For questions regarding compliance with the SWTR or compliance with the interim operational measures, please contact Casey Lyon at (541) 726-2587 ext. 31 or Karen Kelley at (541) 726-2587 ext. 22.

Sincerely,

A handwritten signature in black ink, appearing to read "Russ Kazmierczak". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Russ Kazmierczak
Natural Resource Specialist

cc: Casey Lyon, DHS-DWP Springfield
Karen Kelley, DHS-DWP Springfield
Rainbow Water District (PWS ID: #4100839) Master File, DHS-DWP Portland