



February 10, 2022

Ed Butts, PE
4B Engineering & Consulting, LLC
Via email

Re: **Wells 1A and 1B (PR#76-2021)**
City of Monmouth (PWS ID#00537)
Site Plan Approval

Dear Mr. Butts:

Thank you for your submittal on January 12, 2022 of additional information to the Oregon Health Authority's Drinking Water Services (DWS) for the Wells 1A and 1B project. As noted in our July 6, 2021 letter, our office received a submittal on May 10, 2021 containing a site plan, land use compatibility statement, proposed drilling specifications, and well logs for nearby wells. A plan review fee of \$3,300 was received on May 19, 2021. The project includes drilling two wells to a depth of approximately 48' deep near the City's existing Well #1.

The wells are proposed to be located within 100 feet of public roadways, which current construction standards only allow for wells drilled into confined aquifers - see OAR 333-061-0050(2)(a)(D). The estimated aquifer nature for these wells is unconfined. The most recent submittal included an agreement to put the water from these wells through the existing cartridge filtration and disinfection treatment. DWS will require permanent filtration in lieu of providing appropriate setbacks and will classify Wells #1A and #1B as self-declared groundwater under the direct influence of surface water.

A regional geologist reviewed the proposed well construction specifications and noted that the following, which should be shared with the well driller:

- The estimated depth to a water-bearing zone for each well is 20 to 25 feet.
- The estimated depth of the casing seal for each well is a minimum of 18 feet. The proposed construction of the casing and casing seal appear to be appropriate given the materials encountered in nearby Well #1 (MARI 13286).

The project is granted site plan approval. Once construction of the well is complete, please submit:

1. The well driller's reports (well logs).
2. Well pumping test information including static water level, pumping rate, drawdown and rate of recovery.
3. Pump information.
4. Raw (Untreated) Water Quality Data including coliform bacteria, IOC, SOC, VOC and radionuclides. These are to be taken from the raw water sample tap at the each of the wellheads.
5. Engineered plans that show the above-well structure detail including the well house, concrete slab, drainage, pump-to-waste piping and plans and specifications for connection of the new well to the water system.

The above items should reference Plan Review #76-2021 and can be emailed to me at Carrie.L.Gentry@dhsosha.state.or.us

In addition to the above requirements, I have the following comment:

- Note that increased lead and copper sampling will be required once final approval is issued. The water system will be required to conduct two 6-month rounds at the original number of sample sites (40), with the new wells in use.

If you have any questions, please feel free to call me at (971) 201-9794.

Sincerely,



Carrie Gentry, PE
Regional Engineer
Drinking Water Services

ec: Michelle Byrd, REHS, OHA/DWS
Tom Pattee, RG, OHA/DWS
Russ Cooper, Public Works Director, City of Monmouth