



June 30, 2022

Kyle Pettibone, PE
RH2 Engineering, Inc.
Via email, kpettibone@rh2.com

Re: **Well #5 (PR#92-2022)**
City of Mosier (PWS ID#00543)
Site Plan Evaluation

Dear Kyle:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new well for the City of Mosier. On May 27, 2022, our office received plans, specifications, and a land use compatibility statement. A plan review fee of \$825 was received on June 7, 2022.

The project includes drilling a new well (Well #5) to a depth of approximately 465 feet. The new well is expected to be source AC on the existing entry point A and combine with water from Well #4 (source AB) prior to the distribution system. The well is expected to be fitted with a pitless adapter and will be provided with residual maintenance chlorination.

The site plan provided indicates that the water system has less than the required 100' radius of control; just a bit more than 50' will be provided. There is also a roadway located less than 100' from the proposed site. The well site is approximately 125' from Mosier Creek.

A regional geologist in our program reviewed the proposed well construction. He noted the following, which should be shared with the well driller:

- The estimated depth to a water-bearing zone is 300 feet below ground surface (bgs).
- The aquifer nature is estimated to be confined.
- The estimated depth of the casing seal is 268 feet bgs. The well casing and seal for the new well will need to extend from land surface to a minimum of five feet into solid uncreviced, consolidated rock formation (Selah Interbed) overlying the water bearing zone (see OAR 690-210-0150 and 690-210-0155). The proposed well construction appears to meet Oregon Water Resources Department (OWRD)

standards, but DWS recommends that the driller consult with OWRD prior to the final seal placement.

As noted above, the well site does not have the required 100' radius of control and there is a roadway within 100' of the well site. A waiver for the radius of control issue cannot be approved prior to drilling a well. If the well is properly drilled into a confined aquifer, then OHA/DWS may be able to waive the requirements for both the radius of control and the well located within 100'. If the well is not drilled into a confining aquifer, then OHA/DWS may not be able to approve the well for use by the water system.

Due to the radius of control issue, **the site plan/location cannot be approved at this time.** If a properly constructed confined aquifer well is drilled, please submit:

1. The well driller's report (well log).
2. Well pumping test information including static water level, pumping rate, drawdown and rate of recovery.
3. Raw (Untreated) Water Quality Data including coliform bacteria, IOC, SOC, VOC and radionuclides. These are to be taken from the new well's raw water sample tap at the wellhead.
4. A request for a construction standard waiver for the radius of control issue. The waiver form is available on our website and will be included in the email along with this letter.

The above items should reference Plan Review #92-2022 and can be emailed to me at Carrie.L.Gentry@dhsosha.state.or.us.

Review of the above ground items and connection to the water system is generally conducted after the well log is available, during the conditional approval phase of DWS' plan review process. I note that the submittals provided with this plan review include these items.

Note that due to the distance of the proposed well location from the nearby surface water source, a review for Ground Water Under the Direct Influence of Surface Water (GWUDI) will be conducted by our regional geologist once the well log is available for review. This review may trigger additional assessment monitoring to determine if the well is a GWUDI source. There would be additional requirements for treatment if the well is determined to be a GWUDI source.

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
Eric Grendel, REHS, North Central Public Health District
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