

September 11, 2018

Fred Bolton, Project Manager 10270 SW Greenleaf Terrace Tigard, OR 97224 800 NE Oregon Street, Suite #640 Portland, OR 97232-2162 (971) 673-0459 (971) 673-0694 – FAX http://healthoregon.org/dwp

Re: Well #7, Plan Review # 110-2018

Western Hills Mobile Home Estates, PWS ID # 4101172

Site Plan Approval

Dear Mr. Bolton:

Thank you for your submittal to the Oregon Health Authority's Drinking Water Services (DWS) of plan review information for the new well, well #7, for the Western Hills Mobile Home Estates. On August 15, 2018, our office received a site plan with the well's proposed location and distances to nearby sanitary hazards, a narrative or the proposed well construction, a Columbia County-approved land use compatibility statement, ownership information around the well, and verification of a water right permit application on file for the well with the Oregon Water Resources Department (OWRD). A plan review fee of \$825 was received on August 29, 2018.

The project includes drilling a 280-foot deep well located approximately 140 feet west of the water system's existing well, well #6. Well #7 will receive the same treatment as well #6, greensand filtration and residual maintenance chlorination for iron and manganese removal, and enter the distribution through a common entry point with well #6.

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

- Based on the well log for well #6, the proposed construction for well #7 appears adequate and the aquifer appears to be confined.
- To meet OWRD standards, the casing seal should extend a minimum of 5 feet into the uncrevised low permeability layer directly above the first targeted water bearing zone.
- If the completed well is determined to meet OWRD construction standards and the aquifer that the well draws from is confined, it is less likely that the source will be determined to be under the influence of surface water and additional monitoring required, given that Beaver Creek is 350 feet away.

The project is granted site plan approval. Once construction of the well is complete, 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 recover. I have attached an article on preparing for your aquifer pump test.
- 3. Pump information.
- 4. Raw (Untreated) Water Quality Data including coliform bacteria, inorganic compounds, including nitrate and arsenic, synthetic organic compounds, volatile organic compounds, and radionuclides (gross alpha, radium 226/228, and uranium). These are to be taken from the new well's raw water sample tap at the wellhead.
- 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.
- 6. A copy of the Water Right Permit from OWRD, if a water right permit is required.

The above items should reference Plan Review #110-2018 and can be emailed to me at james.b.nusrala@state.or.us or mailed to:

Attn: James Nusrala, Regional Engineer OHA-Oregon Drinking Water Program 800 NE Oregon Street, Suite 640 Portland, OR 97232-2162

If you have any questions or concerns, or would like this in an alternate format, please contact me at (971) 673-0459, or <u>james.b.nusrala@state.or.us</u>. Your cooperation is appreciated.

Sincerely,

James Nusrala, P.E., Regional Engineer

Drinking Water Services

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Enclosure: How to prepare for your aquifer test article

cc:

Mark Grenz, P.E., Multi/Tech Engineering Services, 1155 13th Street, Salem, OR 97302 Mike and Denise Werner, 16505 SE 1st Street – Unit #144, Vancouver, WA 98684 Jake Constans, Watermaster, Oregon Water Resources Department, 1400 SW Walnut St, MS-49, Hillsboro, OR 97123

Joel Ferguson, REHS, Columbia County Public Health Foundation