



# JACKSON COUNTY

*Health & Human Services*

## Environmental Public Health

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September 26, 2019

Mark Elias  
2675 David Lane  
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Re: Fern Valley Estates Improvement District, PWS #00514  
Confirmation of E.coli in source water at Wells (SRC-AC & SRC-AD) on 4/2/2010

Well #4 and #5 source samples from 9 years ago confirmed the presence of E.coli, an indicator of fecal contamination. Fecal contamination includes harmful bacteria viruses that have the potential to cause serious gastrointestinal illness. Water containing E.coli is considered unsafe to drink.

### **Well Construction Review:**

A review by our hydrogeologist found Well #4-Jack 33100 (SRC-AC) and Well #5-Jack 30448 (SRC-AD) to be inadequately constructed (see below for construction comments).

Well #4-Jack 33100 (SRC-AC): "The well was originally drilled to a depth of 125 feet in June of 1972; the casing extends to a depth of 23 feet and the casing seal terminates at 22 feet in depth. Two sacks of bentonite were used in conjunction with 1 sack of cement. The well was deepened In March of 1994 to a depth of 406 feet. The casing seal was not disturbed. The well construction does not meet standards in terms of casing sealant volume.

E. coli contamination in the well was confirmed on April 2, 2010. Therefore, the well shall be reconstructed. The well casing shall be sealed 5 feet into a competent layer directly overlying the water bearing zone."

Well #5-Jack 30448 (SRC-AD): "The well was originally drilled to a depth of 245 feet in July of 1972; the casing extends to a depth of 34 feet and the casing seal terminates at 33 feet in depth. Three sacks of cement were used in the casing seal. The well was deepened In October of 1990 to a depth of 364 feet. The casing and seal was not disturbed. The well construction does not meet standards in terms of casing sealant volume.

E. coli contamination in the well was confirmed on April 2, 2010. Therefore, the well shall be reconstructed. The well casing shall be sealed 5 feet into a competent layer directly overlying the water bearing zone.

**Groundwater Classification:**

Due to concerns with the well construction and proximity of the well to a nearby irrigation ditch and creek, an evaluation was needed to determine if the well was under the direct influence of surface water. Fern Valley Estates Improvement District (FVEID) completed the requirement to collect Microscopic Particulate Analysis tests and the two wells were classified as groundwater in the letter regarding Microscopic Particulate Analysis Sampling Requirement Public Water System #4100514 – Fern Valley Estates Improvement District, dated September 11, 2019.

**Next Steps toward Compliance:**

Now that the well is classified as groundwater, FVEID will need to correct the source contaminate issue and ensure the drinking water is safe by selecting one of the following options for corrective action, upon approval from Jackson County Environmental Public Health Department (see Oregon Administrative Rule 333-061-0032(6)):

1. Reconstruct Well #4 - JACK33100 (SRC-AC) and Well #5 - JACK30448 (SRC-AD) to meet all current construction standards according to OAR 333-061-0050 and in accordance with OAR 690-210-0150 Sealing of Water Supply Wells in Consolidated Formation or;
2. Disconnect and appropriately abandon Well #4 - JACK33100 (SRC-AC) and Well #5 - JACK30448 (SRC-AD) or;
3. Provide an approved alternative water source.

To know how the water system plans to proceed, you must send me information describing how and when the source contaminant issue will be corrected by **October 30, 2019**.

Plan review is required prior to any well reconstruction or new well construction. Should any of the reconstructed or newly constructed groundwater sources continue to be confirmed for E.coli, additional corrective actions will be necessary.

I appreciate your immediate attention to this matter. If you have any questions or would like to discuss this matter in more detail, please contact me at (541) 774-7843.

Respectfully,



Susan Baker, REHS  
Drinking Water Program Coordinator

Copy to: Russ Kazmierczak, OHA-DWS Springfield  
Data Management, Compliance and Enforcement (DMCE), OHA-DWS Portland

Enclosed: Plan Review Requirements for New Wells at Existing Public Water Systems