

Health and Human Services
Environmental Public Health

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Joanna Davis Applegate River Lodge, PWS #4191557 15100 Hwy 238 Applegate, OR 97530

Dear Ms. Davis,

Thank you for your assistance with the Level 2 Investigation that I conducted at the Applegate River Lodge as a result of the E.coli positive source sample collected on February 28, 2019. The mission of this investigation was to find any sanitary defects that could explain the bacterial contamination in your well.

I was able to identify a possible pathway of contamination at the wellhead. These findings included soil mounded around the well head. The well house was open to weather, animals and birds which could allow contamination to enter the well through the upturned screened vent (see photos below).

In addition to the sanitary defects, the well head is missing a raw water sample tap. Currently, raw water sample collection is located in the pumphouse approximately 20 ft. away from the well. Installation of a raw sample tap at the pump house would reduce the risk of contamination from the distribution line leading from the wellhead.

Oregon Health Authority (OHA) – Drinking Water Services (<u>DWS</u>) rules and procedures indicate that if all sanitary defects and significant deficiencies are corrected and additional E.coli testing indicate that the well is clear of contamination, then the Boil Water Notification can be removed without additional disinfection requirements.

The corrective actions and follow up procedures.

• The casing vent shall be fitted with a screened return bend (see OAR 333-061-0050 (2)(a)(K)(iii)).

- The mounded soil around the wellhead should be removed and the ground surface shall be graded so that drainage is away from the well. (see OAR 333-061-0050 (2)(a)(K)(ix)).
- The water system should retrofit the wellhead with a pitless adapter or a reinforced concrete slab shall be poured around the well casing so that drainage is away from the well (see OAR 333-061-0050 (2)(a)(K)(viii & xiii)).

The top of the well casing shall extend 12 inches above the concrete slab see OAR 333-061-0050 (2)(a)(K)(x)).

- Operator shall install a protective and secured building around the wellhead.
- Provisions shall be made for protecting pump controls and other above-ground appurtenances at the well head.

Where a wellhouse is installed for this purpose, it shall meet applicable building codes and shall be insulated, heated and provided with lights, except that where the wellhouse consists of a small removable box-like structure the requirement for lights may be waived by the Authority; (see OAR 333-061-0050 (2)(a)(K) (xi)

The wellhouse shall be constructed so that the well pump can be removed. (see OAR 333-061-0050 (2)(a)(K)(xii))

Wells equipped with pitless adaptors or units are not required to meet the requirements of subparagraphs (2)(a)(L)(iii) and (viii) of this rule. (see OAR 333-061-0050 (2)(a)(K)(xiii))

• A monthly source assessment sample will be required for coliform/E.coli for one year. If one of these samples test positive for E.coli then your water system will be required to collect five additional source confirmation samples. If a source confirmation sample tests positive for E. coli, then a source evaluation (does the well meet construction standards) will be required under the Groundwater Rule.

Please contact me for any questions or concerns about this process.

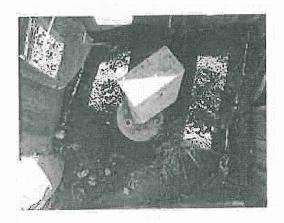
Respectfully,

Susan Baker

Environmental Health Specialist

cc: OHA-DWS/Portland





Wellhead View #1

Wellhead View #2



Well House Condition