

15-0048

January 16, 2015

Pine Resort
Attn: Allen Kiestler
12 N Pine Featherville Road
Pine, Idaho 83647

RE: PWS 4200036 Pine Resort Well #1 Ultraviolet Disinfection system

On November 12, 2014 an on-site sanitary survey was conducted. During that survey we discussed the Ultraviolet (UV) disinfection system on Well #1. According to our records the UV disinfection system has never been through formal review or approval by the Department of Environmental Quality (DEQ) prior to installation and use. According to IDAPA 58.01.08.503 prior to construction of new public water supply systems or modifications of existing public water supply system, plans and specifications must be submitted to DEQ for review and approval.

UV disinfection is an acceptable method for inactivation or destroying pathogenic organisms to prevent the spread of waterborne disease to the downstream users and the environment. In order to ensure the effectiveness of UV disinfection, it must be designed and approved by a licensed Engineer and then approved by DEQ. This is important to ensure the system is not masking harmful issues that need to be addressed such as viruses or E. coli. Because this system was not engineered there is no way of knowing if the UV disinfection system is effective in inactivation viruses or other harmful contaminants.

Central District Health Department (CDHD) met with DEQ shortly after this survey and it was decided by DEQ in lieu of the required engineering, one of the options below will be required to ensure that the water is safe to consume.

The following are the options for resolving this issue:

- 1) Remove the UV disinfection system. If after removal samples test positive for Total Coliform, other options will need to be explored or a properly engineered disinfection system may need to be approved and installed.
- 2) Conduct monthly raw water assessment monitoring on Well #1 for one year with the UV disinfection treatment in place. These sample results will allow CDHD and DEQ to evaluate the quality of the source water to determine if increased or additional treatment is needed. The well will only need to be sampled during months in which it has served water.

Serving Valley, Elmore, Boise, and Ada Counties

Ada / Boise County Office
707 N. Armstrong Pl.
Boise, ID 83704
Enviro. Health: 327-7499
Reproductive Health: 327-7400
Immunizations: 327-7450
WIC: 327-7488
FAX: 327-8500

Elmore County Office
520 E. 8th St. North
Mountain Home, ID 83647
Enviro. Health: 587-9225
Family Health: 587-4407
WIC: 587-4409
FAX: 587-3521

Valley County Office
703 N. 1st St.
McCall, ID 83638
Ph. 634-7194
FAX: 634-2174

Each month a source Total Coliform/E. coli (TC/EC) sample will need to be collected at the well before the UV disinfection system. If that sample comes back positive for Total Coliform a second sample will need to be collected from the distribution system after the UV disinfection system.

- 3) Abandon well #1 per Idaho Department of Water Resources (IDWR) well abandonment requirements and use well #2 as your primary drinking water. Before this is done you will need to ensure that the well can provide adequate water without pressure problems. Well #1 may be used for irrigation, if need be. If Pine Resort decides to abandon the well, please make sure the well is physically disconnected from the system.

Thank you for your time and cooperation. Please respond in writing within 30 days of receipt of this letter on which option Pine Resort will be choosing. If you have any questions, please contact **Brigitta Gruenberg** at Central District Health Department at **208-869-9336**.

Sincerely,



Brigitta Gruenberg, REHS
Senior Environmental Health Specialist
Public Water Systems Coordinator

cc: TRIM