



P.O. Box 226 • Seneca, KS 66538 • 785/336-3760  
FAX 785/336-2751 • <http://www.krwa.net>

June 24, 2010

Joe Schwinn  
Leavenworth RWD 2  
17492 Santa Fe Trail  
Leavenworth, Kansas 66048

Dear Joe,

I appreciate the opportunity to meet with you on June 2 to discuss operation of the district's public water supply. We also discussed the State requirement of having a certified operator. As I mentioned, the district needs to decide if they plan to proceed with either retaining a certified contract operator or having you become certified. Either option is acceptable. I only bring up the contract operator option as the district presently has city of Leavenworth staff collecting your twice-monthly bacteriological water samples. The purpose of this letter is to summarize issues discussed during our visit.

The three most basic requirements that KDHE has of all water supply systems is that they:

- **Monitor chlorine residuals daily in the distribution system and record those readings in a permanent log.** Daily monitoring is required by State regulation. This requirement is made to ensure that water delivered to district customers meets the State required minimum residual of 1.0 mg/L combined chlorine. I suggest checking with other board members and city of Leavenworth staff to determine if monitoring is already begin done. If not, the district needs to purchase a test kit and begin daily monitoring. Residuals should be monitored at different locations daily and can be checked at either indoor or outdoor taps. Daily residual logs should be retained so they are available for review by KDHE staff during future inspections. Residual logs should include the residual measured along with the date, time and location.
- **Collect all bacteriological water samples each month.** Most months, the district only has two samples to collect. However should you have a sample test positive for coliform bacteria, you will receive three repeat (check) samples. Samples can only be collected on Monday, Tuesday or Wednesday each week. Samples should be collected indoors only from customers that use a normal amount of water. You must avoid collecting samples at locations that have water softeners, filters or other point-of-use treatment devices. Samples must reach the KDHE lab within 30 hours. The sample submission card enclosed with the bottle should be completed making sure to include the time and date of collection. Otherwise, the sample will be not be analyzed.

- **Develop and use a bacteriological sampling plan.** The reason for a sampling plan is to ensure that all parts of the distribution system are sampled. Again, I suggest you contact the city of Leavenworth to determine if they have a sampling plan for your system that they use when selecting sample locations. If not, one must be developed. Your sampling plan should include a map of the distribution system divided roughly in half so you have two zones (Zone 1 and Zone 2). You then need to find a minimum five (5) sampling locations within each zone. The address of each sampling location should be listed with the map. Once the sampling plan is finished, it should be used each time a water sample is collected. KDHE suggests that you alternate between zones each time you collect a sample, rotating through the five sampling locations within each zone. A new sampling plan should be developed every January.

Please feel free to call or email if you have any questions. I will be contacting you again in July to see where the district stands with regard to the aforementioned requirements. I can be reached by phone at 913-850-8822 or by email at [jeff@krwa.net](mailto:jeff@krwa.net). Funding for the above assistance was provided through a contractual arrangement between the Kansas Department of Health and Environment (State Revolving Loan Program set-aside) and the Kansas Rural Water Association (KRWA).

Sincerely,

Jeff Lamfers  
Consultant

c: Jack Hund, Chairman  
Walter Sharp, Manager  
Helen Holm, KDHE, Lawrence  
Teresa Schuyler, KDHE, Topeka