

Changes in operations, finances require system assessments

There's an old adage, "Things just aren't like they used to be." Redundant as that may seem, the comment certainly applies to water systems. Changes in regulations and changes in system operations require adjustments. But before launching off on an idea, it's best to first begin with an assessment. An assessment of small water systems is something that KRWA can help you conduct.

First, it is important for small water systems to operate like businesses. Providing quality water, maintaining compliance with all the regulations and planning for the future requires board and council members, operators and managers to be aware of changes taking place in the environment in which the water systems have to operate. It is necessary to continually look into the future.

Good maintenance practices in this north-central Kansas rural water district has the operators changing out all the rusting bolts on piping systems in well houses and booster stations with good grade, stainless bolts. Replacing deteriorating bolts is just one example of minor repairs that good operators and responsible board/council members will see to being completed.



Board and council members and operators and managers of municipal and rural water systems must consider the possible need for financing improvements. This could be due to the impact of new regulations or the possible loss of key customers. There are demands that can only be met through good operations and a good business plan.

Many water systems in Kansas were started at times when the cost of providing water was low and there were very few regulations. Today the cost of complying with many regulations is quite high and going higher, especially for small systems that serve less than 2,000 people. These regulations can require capital improvements, additional monitoring and increases in reporting and record keeping.

The Disinfection and Disinfectants Byproduct Rule (DDBP) has required many surface water supply systems to

upgrade their water treatment plant or purchase water from another system. As a result some water systems are facing increased rates to customers in the range of \$10 and more per 1,000 gallons. The additional monitoring and changes in monitoring under the Stage 2 DDBP rule may require additional upgrades.

Now the results of required, one-year monitoring for cryptosporidium for some systems under the Long Term 2 Enhanced

Surface Water Treatment Rule will cost \$10,000 to \$15,000. If the monitoring results are above certain levels, then additional capital improvements at the water treatment plant might be required.

Under the Ground Water Rule, additional E. coli monitoring for wells and record keeping will be required in some systems beginning next year if coliform bacteria are detected in presently required distribution system monitoring. Also, some systems will choose to make capital improvements in order to avoid the possible E. coli monitoring.

Regardless of whether the water system (city or RWD) operates a surface water treatment plant, operates wells or purchases water, each water system should assess the impact of present and upcoming regulations on costs and operations. There will also be those who will advocate remedies that may sometimes not be the most cost effective. My advice is to be informed as to what is really required for your system and what are the different alternatives.

Sometimes the alternatives are many and diverse. For example, complying with disinfection byproducts maximum contaminant levels could be as simple as changing operations, making capital improvements to a water treatment plant, or purchasing water from another water supply.

A water system should receive a sufficient income from water sales to pay operational costs, debt payments, and have some “profit” so as to save money for future needs. Board and council members should always be looking to the future to make sure rates are adequate to cover these costs and to cover: a) possible, unexpected breakdown; or, b) emergencies in the system.

It is important for operators, managers, council members and board members to play a role in their water system. I suggest that at the next board or council meeting, the idea of taking a tour of the system to see the condition of the equipment should be discussed. During and after the tour any possible system needs should be evaluated.

In some systems, board/council members need to gain additional awareness of the water system needs. When was the last time, if ever, that the city council or board members toured the water treatment plant, wells or chlorination sites? Can they appreciate that good grade stainless steel bolts cost \$5 each that replaced those rusted steel bolts? Replacing deteriorating bolts are just one example of minor repairs that need to be completed in many systems. But, particularly in smaller systems, council and board members need to see changes that need to be made to better appreciate the investment in making those upgrades.

I've been working with a consecutive water system that purchases water from a larger system. For many years the system ran fine. The larger system (for some reason) decided to lower the chlorine residual in its system and also not conduct an annual “free chlorine “burnout”. This has caused the purchasing system to rechlorinate and add ammonia to its water due to the chlorine residual

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loss in its system. Fortunately the consecutive system has enough money to cover the approximate \$20,000 needed to purchase the equipment to rechlorinate at two different locations.

The Kansas Rural Water Association has staff who will assist any water system conduct a self-assessment of its needs – anything from chlorine residual to water rates. Many systems are not sure of what they need or the scope of a project to address that need; and the

self-assessment is the first step. It doesn't cost anything to have informed discussions about system needs. I encourage you to call KRWA at 785-336-3760 if your system is interested in having a staff member attend a board or council meeting, or a special work session.

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