

Regulatory Reforms Being Requested by Rural Water



The National Rural Water Association is developing a listing of suggestions for regulatory reform. Staff from the Kansas Rural Water Association have commented on the following suggestions for such revision.

Safe Drinking Water Act Regulations

Public Notices – While the public should be notified of health effects of drinking water, the public notification for monitoring and reporting violations, for the most part, are not for health-based issues. They are instead for clerical errors, such as incorrect dates, inaccurate method codes, etc. Such violations should be considered correctable and not require a mass distribution to the entire customer base.

Consumer Confidence Reports (CCRs) – The requirement for utilities to develop a Consumer Confidence Report has had some very beneficial impacts on water utilities. (See page 6 of this issue of The Kansas Lifeline for a more complete discussion). The record keeping and operation efficiencies have improved greatly as a result. However, the requirement to mass distribute the report to all customers is very costly and ineffective. Most customers do not understand or even bother to read the reports. The requirement to provide a copy of the report via the postal service is outdated. The reports could be posted online or provided by email and hard copies made available to anyone making such a request.

Disinfection Byproducts (DBPs) – The addition of chlorine has been used

for decades to make water safe to consume. The risks associated with disinfection by-products are considered by some to be either very minimal or non-existent, especially at the MCL levels. Water utilities are often required to spend huge sums of money to modify treatment methods and distribution system operations in an attempt to reduce a risk that is already considered minor. Kansas surface water suppliers changed from free chlorine to combined chlorine to meet the MCL. Prior to these changes, TTHM levels of 150 and 300 ppb were found when free chlorine was being used. Kansas water supplies have an excellent compliance record with the THM requirement.

Total Organic Carbon (TOC) – This precursor to disinfection by-products has no health effects but causes a lot of concern with utility customers. **This requirement also causes much confusion when the percent removal of TOC is not sufficient, but the utility is meeting the MCLs for both TTHM and HAA5.** The "health effects" language, required to be included in the Public Notice for failing to meet TOC removal requirements, mentions the potential of cancer caused by the disinfection byproducts. The TOC monitoring requirement should be completely eliminated or modified to prevent needless public notification about a

supposed contaminant that has no adverse health effects. The TOC reduction requirement was to provide an incentive to comply with the DBPs MCL. Unfortunately, the relationship between TOC removal and compliance with TTHM and HAA5 MCLs is not always consistent between water systems. This TOC requirement should be eliminated especially for those systems that are consistently in compliance with the TTHM and HAA5 requirements. Some consideration should also be given in those cases where the raw water TOC levels are very low and demonstrating sufficient removal is very difficult due to the low raw water TOC levels.

Lead & Copper Rule – The rule ends up basically being a test of the amounts of lead and copper present in household plumbing; the public water system has no control over those materials. The only exception is for our nation's oldest distribution systems that may still have lead solder service lines. The most objectionable part of the rule is the public notification/education requirements when the action level is exceeded. Instead of dealing with an individual homeowner to resolve their problem the utility has to notify everyone using EPA's mandatory language which reads as if the entire system were contaminated with lead and copper.

Ground Water Rule – The Ground Water Rule was directed at states that do not require disinfection of ground water sources.

Wastewater Regs

Combined Sewer Overflows (CSO) – CSOs are becoming more common in permit renewals, requiring the permit holder to develop and conduct a Capacity, Management, Operation and Maintenance (CMOM) program. The CMOM program consists of evaluation of the wastewater collection system, then after evaluation and inspection, a commencement of activities that will correct the deficiencies that were identified in a short timeframe.

Sanitary Sewer Overflows (SSO) – SSOs of untreated wastewater can cause water quality degradation. Some SSOs occur because leaky sewers allow the infiltration and inflow of precipitation and ground water. Sewers deteriorate over time and develop cracks, breaks, and blockages if not properly maintained. In response to the concern about sanitary sewer overflows, U.S. EPA has introduced the concept of a comprehensive Capacity, Management, Operation, and Maintenance (CMOM) Program to reduce and prevent these types of discharges.

Loans and grants were readily available in the 1970's and 1980's to construct plants and collection systems under the Clean Water Act. As time passed, money has become more scarce, however, regulations have become stricter.

Nutrient Removal – Most plants do not have the capacity to achieve either biological or chemical nutrient removal and will need to provide more capacity. This will add a great deal of cost for the utility. The requirements for nutrient removal should be based on sound scientific information and shared more equally between point and non-point sources. Non-point sources, such as agricultural and urban storm water runoff, are major contributors of phosphorous in streams and lakes.

There are two methods of treatment for phosphorous removal, both of which are very expensive:

1. Biological treatment requires major capital investment for anaerobic and anoxic basins and may still require chemical addition for meeting the phosphorous limit.
2. Chemical treatment requires constant chemical feed, increases sludge production by 25 percent, reduces alkalinity (may require pH adjustment), and reduces treatment plant capacity.

A recent report by Kentucky Rural Water Association demonstrated that at a municipal plant in Kentucky with an average flow of 2.2 MGD, chemical precipitation for phosphorous removal would cost between \$80,000 and \$100,000 per year just in chemical costs. That does not

include the cost of removing the 25 percent increase in sludge production

Chemical addition also has the potential to negatively impact the biological processes necessary for conventional wastewater treatment. There are also concerns with the potential for toxicity with the addition of metals and polymers that are required for precipitation.



KRWA welcomes the following new members, as of October 1, 2011

MUNICIPALITIES

City of Augusta
City of Bluff City
City of Burr Oak
City of Dodge City
City of Ellsworth
City of Haven
City of Havensville
City of Junction City
City of Kirwin
City of La Harpe
City of McCracken
City of Oketo
City of Potwin
City of Roseland
City of St. John

RURAL WATER SYSTEMS

Crawford RWD 1
Montgomery Cons. RWD 2
Morning Star Ranch
Wilson RWD 3

ASSOCIATE MEMBERS

Inland Potable Services
King and Associates

SUPPORT ASSOCIATE MEMBERS

When a city or rural water district needs products or services,

SHOP ASSOCIATES FIRST
Associate Members support KRWA.

For a current directory, with contact, e-mail addresses and Web site information for Associate Members, check out

www.krwa.net

(under membership)