

The Kansas Rural Water Association Takes Exception to “Contaminated” Tap Water Article



The Kansas Rural Water Association, a non-profit organization that was incorporated in 1966 and is dedicated to providing the education, technical assistance and leadership necessary to enhance the effectiveness of Kansas' water and wastewater utilities, takes exception to an article concerning water quality published by the Kansas News Service in early November 2019. The article, titled “Environmental Group Says Almost All Kansas Tap Water Is Too Contaminated” and posted on kmuw.org (www.kmuw.org/post/environmental-group-says-almost-all-kansas-tap-water-too-contaminated), opens with this statement: “The water coming out of your tap might meet legal standards, but that doesn't mean that it's safe to drink”! The reporter alleges that Kansas' tap water is unsafe to drink based on research (<https://www.ewg.org/tapwater/state.php?stab=KS>) performed by the Environmental Working Group (EWG), an environmental advocacy group that, according to its latest annual report¹, operates with an annual budget exceeding \$11 million and is widely known for its environmental activism.

On the EWG website there are 92 tap water contaminate EWG “Standards”. These “Standards” are much, MUCH lower than the maximum contaminate levels (MCLs)

The bottom line is almost every one of the nearly 1,000 active public water supply systems in Kansas meets or exceeds all federally imposed Safe Drinking Water Act (SDWA) standards.

allowed by the Environmental Protection Agency (EPA) for the same contaminates. Most of the “Standards” come from State of California recommendations, not the EPA. Yep, that is the same California that passed the controversial Proposition 65 list and posts a cancer warning label on everything from coffee cups to seaweed to wood shavings. I looked up my drinking water supplier, Butler County RWD 7, and found that my tap water exceeds eight EWG Health Guidelines, but both RWD 7 and the city of El Dorado, which wholesales treated water to RWD 7, have zero MCL violations during the same time period. If a reader is so inclined, I invite you to peruse the contaminate reviews at www.ewg.org/tapwater/ewg-reviewed-contaminants.php. There you will find some interesting claims about the reviewed contaminate and ways to remove it, mainly through expensive Point-of-Use (POU) filters.

A 2009 survey administered by researchers at George Mason University² polled 937 members of the Society of Toxicology on their views on risks of various chemicals and how those risks are reported. These scientists specialize in detecting poisons and researching their effects. When asked for their opinions on various organizations, 79 percent of respondents said the Environmental Working Group overstates the risks. The respondents also report that the media does a “poor job” covering basic scientific concepts and explaining risk, including 68 percent who believe the news media pays too much attention to studies put out by environmental groups.

¹ Ewg. “EWG 2017 Annual Report.” EWG, www.ewg.org/2017annualreport/index.php. EWG Tap Water Database

² “Are Chemicals Killing Us? Toxicologists Say Media Overstate Risks.” www.businesswire.com/news/home/20090521006172/en/Chemicals-Killing-Toxicologists-Media-Overstate-Risks.

The bottom line is almost every one of the nearly 1,000 active public water supply systems in Kansas meets or exceeds all federally imposed Safe Drinking Water Act (SDWA) standards.

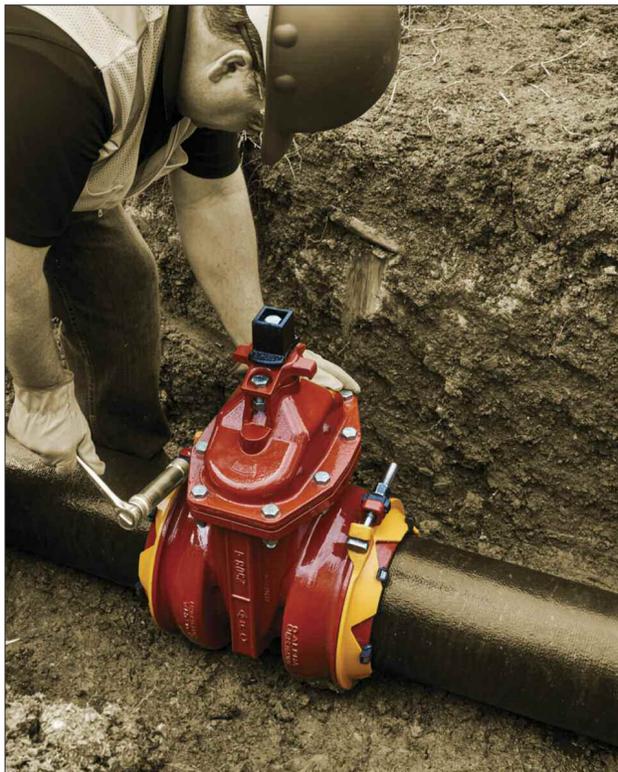
In the Kansas News Service article, the author quotes an EWG senior scientist who claims that the EPA has not updated its list of potential contaminants in 20 years, implying that EPA is not concerned about emerging contaminants. However, on December 20, 2019, the EPA released its PFAS Groundwater Guidance for Federal Cleanup Programs in response to its PFAS Action Plan, released in February of 2019. This is an extremely ambitious plan to clean up the “so-called forever chemical”. Public water supply systems that serve more than 10,000 customers, and a select few that serve fewer than 10,000, are already familiar with the Unregulated Contaminant Monitoring Rule (UCMR). The UCMR, in its fourth version, is used by EPA to collect data for contaminants that are suspected to be present in drinking water but do not have health-based standards set under the SDWA. The SDWA also contains

amendments that require the EPA to consider a detailed risk and cost assessment, and best available peer-reviewed science when developing new standards. Which, in layman’s terms, means that the method used considers the cost to treat the contaminate versus the risk to the customer. It also helps to prevent radical activist groups from creating a panic based on questionable research and influencing elected officials to haphazardly create undue burdens on water utilities. The EPA instead must rely on studies that are reviewed by multiple high-level researchers and still stand up to the scrutiny.

Not that the EPA science always meets the well-known and highly regarded Kansas Common-Sense Standard. Take for example the highly touted “major issue” of nitrates in drinking water. The SDWA standard for nitrate is 10 mg/L or milligrams per liter. That means that for every liter of water a normal adult person drinks, he or she can “safely” imbibe no more than 10 mg of nitrates. The EPA’s

The SDWA also contains amendments that require the EPA to consider a detailed risk and cost assessment, and best available peer-reviewed science when developing new standards.

standard language mentions infant methemoglobinemia, or blue-baby syndrome, a condition where a decreased amount of hemoglobin in the infant’s blood stream affects the transfer of oxygen to the child’s organs. Yes, that sounds scary. According to the article’s author, Pretty Prairie, Kansas had “one of the highest average concentration of nitrates in the US at 21.1 (mg/L)”. Quick internet research turns up exactly zero cases of blue-baby syndrome in Reno County,



IN 1929, AMERICAN INVENTED THE MECHANICAL JOINT. TODAY WE BRING YOU ALPHA™.

Few things in the waterworks industry have been as innovative as the Mechanical Joint. Times have changed. And so has AMERICAN. Introducing the AMERICAN Flow Control Series 2500 with ALPHA™ ends. Now, you can use the same valve for ductile iron, HDPE, PVC, and even cast iron pipe. Unlike MJ, the restraint accessories come attached, leaving only one bolt on each end to tighten. That saves you time and money.

The AMERICAN Series 2500 with ALPHA™ ends – it’s the only gate valve you’ll ever need.

ALMOST ANY MATERIAL. NO TIME AT ALL.



AMERICAN
FLOW CONTROL
THE RIGHT WAY

www.american-usa.com
PO Box 2727, Birmingham, AL 35207 • Ph: 1-800-326-8051 • Fx: 1-800-610-3569
EOE/Vets/Disabilities
ALPHA™ is a trademark of Romac Industries Inc. (U.S. Patent 8,894,100)

DUCTILE IRON PIPE FLOW CONTROL INTERNATIONAL SPIRALWELD PIPE STEEL PIPE



**Delivering
Rural Water
& Municipal
Solutions
Since 1882**

WELL SERVICES

- Water Supply Systems
- Hydrogeological Services
- Well Drilling & Rehabilitation
- Pump Well Maintenance
- Water Treatment Solutions

316.264.5365

Wichita, KS

Kansas City, KS

www.LAYNE.com



NITRATE CONTENT OF VEGETABLES	
Vegetable (100 grams)	Nitrate (mg)
Spinach	741
Mustard Greens	116
Salad Mix	82
Cole Slaw	56
Broccoli	40
Tomato	39
Vegetable Soup	21
Sources: American Journal of Clinical Nutrition	

Kansas. When compared to the 741 mg of nitrate in 100 grams of spinach leaves or the 39 mg in 100 grams of tomato, one must wonder if the urgency in the article is warranted³. And the article failed to mention that Pretty Prairie and Norwich, Kansas, which was also named as exceeding the federal nitrate limits, both built and are currently operating new water treatment plants to remove nitrate. Presently, both cities provide water with nitrate levels below the MCL. The treatment plant at Pretty Prairie cost its

654 citizens \$1.4 million. Fortunately for them, the Kansas Department of Health and Environment and the Department of Commerce provided some forgiveness to reduce the loan amount.

The article research appears to be questionable at best. The small city of Elmdale, Kansas was mentioned twice in the article, the first time claiming the total trihalomethane (TTHM) levels in Elmdale’s water was the “fifth-highest levels of the contaminate in the US”. This number is based on a sample

³ Katan, Martijn B. “Nitrate in Foods: Harmful or Healthy?” *The American Journal of Clinical Nutrition*, vol. 90, no. 1, 2009, pp. 11–12., doi:10.3945/ajcn.2009.28014.

taken on 9/9/2019 that showed 210 $\mu\text{g/L}$ or micrograms per liter. This city, population of 52, sampled TTHMs on 6/17/2019 with a result of 20 $\mu\text{g/L}$. The federal limit on TTHM is 80 $\mu\text{g/L}$. TTHM levels can vary widely based on multiple factors that occupy more print than this publication has space for, but the fact that the June sample was not mentioned causes concern. To really understand disinfection byproducts, a person must look beyond the reported “total” numbers and delve into the individual byproduct’s sample results. In Elmdale’s case, the levels of the individual byproducts have widely fluctuated over the last nine samples. This could be indicative of a few different causes, but most likely due to levels of bromide in the well water. A treatment solution will require research, time and money. Currently, the levels of bromide are unknown in most water supplies. The author’s job at Elmdale shows a lack of understanding the issue and is damaging to an already struggling town. Moreover, a recent cover story in the *AWWA Journal*⁴ suggests that observations between cancer and TTHM levels have been incorrectly interpreted. The article’s authors claim that cancer causality associated with TTHMs in drinking water has not been established. The risk, says the author, is likely small and is probably overwhelmed by many other, often larger, risk factors like smoking and diabetes.

As for nitrates, which the article claims Elmdale exceeded federal limits for, the numbers show the exact opposite. Of the five samples tested for nitrate in 2018 and 2019, the highest analysis shows a nitrate level of 0.3 mg/L, well below the federal limit. Readers should question what other “facts” the article cites or left out to help create a panic.

⁴ Cotruvo, Joseph A., and Heather Amato. “National Trends of Bladder Cancer and Trihalomethanes in Drinking Water: A Review and Multicountry Ecological Study.” *Dose-Response*, vol. 17, no. 1, 2019, p. 155932581880778., doi:10.1177/1559325818807781.

The biggest problem with these types of reports is the lack of accountability to the reader and solid scientific data that backs up the indications or consequences of consuming the water. They say there is some level of contaminant that will potentially cause cancer; however, they do not tell you how much you would have to consume or how many verified cases have been recorded. Public utilities, especially water and wastewater utilities, already struggle with public perception. An article written to smear our public water suppliers and create an unnecessary distrust in the utility is at the very least irresponsible and bordering on slanderous.

The Kansas Rural Water Association is dedicated to helping water utilities deliver safe and compliant drinking water to their customers. Tap water from the nearly 1,000 public water supplies is very high quality, such that waterborne disease is unheard of in this state. KRWA takes exception to any article written with the intent of discrediting public water supplies, the utility operators and the city councils and rural water district board members

who supply their customers with a virtually uninterrupted supply of clean and high-quality, not to mention inexpensive, drinking water to their homes, come rain, sleet or snow.

It is the opinion of the KRWA that the article’s author should have included praise for the utilities for continuing to serve his and his neighbors’ homes day in and day out. I am taking this opportunity to say thank you to all of our underappreciated city and rural water district operators for working on our behalf, very commonly for low pay and odd hours, to continue to deliver high-quality drinking water to our taps. Your dedication to the industry does not go unnoticed by the staff and board of KRWA, after all, this is your Association. Thank You!

Daryn Martin began work with KRWA in August 2019. He previously was a Water Program Inspector and Environmental Program Administrator at KDHE’s Wichita office. Prior to joining KDHE, he worked as an operator in the El Dorado Water Treatment Plant. He holds a Class IV water operator certification.



B&B Services

Since 1993 specializing in water control valves like: Cla-Val, Watts, Ames, OCV. For all your valve needs, and more! With fair pricing, 6 mo. warranty, and sizeable inventory. Over 20 years experience on rural water systems.

Services include:

Consulting, Scheduled Preventive Maintenance and Emergency Services.

Call Rodney today for pricing, estimates, and references.

620/341-2698 cell; 620/364-8036 home.

Or e-mail bbservices@kans.com