



# “Contaminants” in Kansas Drinking Water, EPA Officials Say

Everyone should be interested in, and have an understanding of the possible contaminants in the drinking water. This understanding, or misunderstanding, results in the public's perception of the drinking water quality provided by cities and RWDs. This perception also contributes greatly to bottled water sales.

The definition of "contaminant" is something that contaminates. To "contaminate" means: 1. To make impure or unsuitable by contact or mixture with something unclean, bad, etc., or 2. To render harmful or unusable by adding material to. Common synonyms for "contaminant" are contamination, impurity, poison, toxin and pollutant. Thus, the meaning of the word "contaminant" is essential for a comprehensive understanding.

In general, and in common usage, contaminant is something undesirable, unwanted, harmful, and negative. Thus, the federal government has established maximum contaminant levels (MCLs) for specific substances in drinking water.

Now, the US Environmental Protection Agency (EPA) employees want to issue new regulations, so that it can now be said that all public water supplies in Kansas are providing drinking water with contaminants, lots of contaminants.

## Background

On April 5, 2023, EPA published proposed regulations in the Federal Register to revise the Consumer Confidence Report (CCR) Rule and require reporting compliance monitoring data to EPA. The employees likely have been working on these regulations for several years.

The EPA employees gave the public and public water suppliers until May 22 – only 48 days, to read, study, and provide written comments on the proposed revisions. Also, they stated that comments on information collected provisions are best assured of consideration if the Office of Management and Budget (OMB) received a copy of comments on or before May 5.

In the Federal Register, there are 18, three-column pages of background material on what EPA employees are thinking with regard to these proposed regulations. The proposed regulations are more than five and a half pages. But one must also have the lengthy, existing regulations for reference to understand these new additions, changes, and overall effect on issuing CCRs and reporting compliance monitoring.

## The BIG Change

In the proposed regulations 40 CFR 141.153 (ii) (see sidebar 1), there is a definition of "Contaminants" being “ANY physical, chemical, biological, or radiological substance or matter in water”, emphasis added by KRWA.

## EPA's Proposed Definition of “Contaminants”

EPA's proposed CCR rule change includes the following:

(i) Both tap water and bottled water come from rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material. The water can also pick up and transport substances resulting from the presence of animals or from human activity. These substances are also called contaminants.

(ii) Contaminants are any physical, chemical, biological, or radiological substance or matter in water.

As background, the present regulation 141.153 (i) and (ii) (see sidebar 2) discuss substances in water that can be “contaminants” that are harmful or undesirable; it even lists contaminants. There are existing regulations to limit the amount of those contaminants that are harmful in water.

Examples of such contaminants are arsenic, nitrate, fecal coliform, and turbidity from surface water sources. For such contaminants there are established, regulated levels such as MCLs, Treatment Techniques (TT) or presence/absence tests.

The proposed definition change to ANY results in all publicly supplied drinking water as containing contaminants. This change will cause, allow further confusion of what actually is the drinking water quality of water with all these contaminants.

For example, if present, high-quality groundwater of 350 mg/L of total hardness and a total dissolved solids (TDS) concentration of 500 mg/L is being supplied by a city of RWD, it can be stated that drinking water has more than 35 times more contaminants of bottled water. That groundwater could also be said to contain 70 to 100 times the contaminants of water from a household reverse osmosis (RO) treatment unit.

It should be emphasized that EPA has not presently issued MCLs for either total hardness or TDS "contaminants". EPA's present, stated positions are probably that EPA does not intend at this time or in the near future to issue MCLs for total hardness or TDS.

Later in the proposed regulations, this statement is made: "The presence of contaminants does not necessarily mean that the water poses a health risk". Try explaining to customers of municipal and rural water districts! While the water contains “contaminants” under the new regulation, the customer need not be bothered because the EPA employees and you say there is no health risk. We all will be drinking federally defined, EPA-blessed drinking that has contaminants in it.

## Current CCR Rule Definition in 40 CFR 141.153 (h) (1) (ii)

Contaminants that may be present in source water include:

(A) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

(D) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

(E) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

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## Kansans drinking water with contaminants!

Kansas citizens and others reading the proposed regulation know that the words “contaminants” and “contamination” mean something. A vast majority of people commonly understand that contaminants or contamination is something harmful by some measure or at least, possibly, probably, undesirable.

This writer thinks that the new definition of "contaminant" is a step for possible additional regulations of "contaminants"; or to influence how the public thinks about water quality and whether the water is safe to drink even if no documented harm is being done or MCL applies.

Presently there are regulations on chemicals in the water that do not cause harm. One example is Total

Organic Carbon (TOC) at surface water treatment plants. The TOC regulations are a percentage-removal requirement based on what a few employees thought would be good even though TOC does no harm. EPA documents state that no known harm is caused by TOC levels in the drinking water; thus, there is no MCL for TOC in drinking water.

EPA and KDHE employees have asked public water suppliers not to use certain wells because of manganese. They state that the manganese does harm but EPA continues to delay promulgating a MCL for manganese.

### Summary

EPA employees have proposed a substantial change to the common understanding and definition of "contaminant" as it relates to drinking

water. This new definition may / will result in the public's incorrect perception of the water quality supplied by cities and RWDs is safe. This new definition may also result in further regulations of the many "contaminants" presently in drinking water that cause no harm and, in fact, are beneficial.

Also, be sure to read all the changes in the CCR issuances and other requirements on cities and RWDs briefly mentioned earlier. These requirements have big effects and more EPA requirements are probably coming on the operation of public water supplies. These water supplies have provided very good quality drinking to Kansas citizens for many, many decades.

**A vast majority of people commonly understand that contaminants or contamination is something harmful by some measure or at least, possibly, probably, undesirable.**

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