FAQ's Concerning City of Florence TOC Violation Letter

Are there health risks?

- **There are no health risks associated with TOC. This violation was triggered by a clerical/testing error of undetermined origin.**

What is the Purpose of the Letter?

- To inform the public of a non-health risk violation. A non-heath risk violation relates to the process of providing water, but not the water's immediate safety, such as a failure to submit a report on time.
- The State of Colorado, specifically the Colorado Department of Health and Environment Drinking Water Division requires a public notice to be sent to all customers of the water system in the event of a violation like this. In addition, in the event there are outside users, we are required to post hard copies in several locations. This is standard practice required by the State.

What is the violation, specifically?

- As noted in the letter, Florence's 3rd quarter results for TOC (Total Organic Carbon) removal caused the running annual average removal ratio to be at 0.52, which is below the 1.0 removal ratio requirement. This one 3rd quarter testing result pulled Florence's running annual average below required guidelines.

What is TOC?

- Total organic carbon (TOC) is the amount of carbon-based compounds in a water sample, primarily from the decomposition of natural organic matter and synthetic sources.
- As stated in the letter, TOC has no direct, known health effects. However, TOCs provide the opportunity for the formation of disinfection byproducts when reacting to the process of disinfecting drinking water. Such byproducts include total trihalomethanes (TTHM) and Haloacetic acids (HAA5). The Maximum Contaminate Level (MCL) for TTHM is 80 parts per billion (ppb or µg/L), and the MCL for HAA5 is 60 parts per billion (ppb or µg/L). Florence's current highest running annual average for TTHM is 54.6 ppb and for HAA5 it is 27.8 ppb.
- One example of TOC is coffee or tea. The dissolved organic compounds form the coffee beans or tea leaves that leach into the water are organic carbons.

What happens now and next?

- Florence will increase its monitoring for TOC to comply with state requirements. This means that instead of sampling quarterly, Florence will now sample for TOC monthly.
- Florence will return to quarterly sampling for TOC once the running annual average removal ratio meets or exceeds the required 1.0 ratio requirement.
- As a response and precaution, additional training and safeguards have been put in place.

If there are any further questions, please don't hesitate to reach out to me by phone or email.

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