

## QUONOCHONTAUG CENTRAL BEACH FIRE DISTRICT August 27, 2019

DearGreetings!

Results of our 2 wells and distribution samples taken yesterday morning are not promising.

Well #1 returned TC+/EC-, Well #2 returned TC+/EC+, and the distribution system returned TC+.

We had chlorinated the tank yesterday, after the above samples were obtained, hoping that the wells, or at least well #1, would return negative allowing us to get off Boil Water Advisory one day earlier.

Unfortunately we will continue to be on an indefinite Boil Water Advisory until we can resolve this unusual and unprecedented persisting contamination.

PW Committee will meet this Saturday with representatives of NWSI who operate and manage our water system to determine options and alternatives.

Just to clarify, since everyone is curious, Well #2, has consistently been returning positive for E Coli (EC+) which is a fecal coliform. Most strains of EC fecal coliform are innocuous however some e coli can excrete toxins which cause illness in humans. For this reason the presence of e coli in drinking water mandates a boil water advisory as potential for more severe E Coli strands exists.

Total coliform (TC+) are not fecal coliform however presence of TC represents soil contaminated surface water which is entering the water supply. While not directly linked to human illness, i.e. water is still safe to drink, it is an indicator that the water entering the well is contaminated with bacteria and therefore potential exists for e coli or fecal coliform bacteria to just as easily gain access to the well water. Typically this occurs because the water entering the well does not go through its usual filtration through several feet of soil, gravel, sand etc which removes the surface bacteria contaminants as it converts to ground water.

Well #2, the EC+ well, has been OFF line to our water system for well over 1 week and Well #1, which is TC+ but EC-, has been the sole supplier of the water within our system. The distribution system water sample is TC+/EC- which is what we would expect since no EC+ water has been introduced into the system since well #2 was taken off line.

Water which is TC+/EC- (as we presently have had within our system for the past 10 days) would otherwise be "safe" to drink without requiring a boil water advisory except for very young children or those with compromised immune systems. However since we are still under a RIDOH mandated Boil Water Advisory I cannot state anything other than what the Boil Advisory says. You must boil water for 1 minute prior to consumption.

Briefly the Level 2 onsite assessment by RIDOH touched on the following:

- 1. Unrestricted public access, including dogs, within the well areas with trash being left behind
- 2. Possibility of animals nesting and burrowing within the irregular terrain and areas of dense vegetation around the two wells.
- 3. Presumption that the ground water of our wells is now under the direct influence of surface water.

Unfortunately no immediately correctable causes or obvious solutions were identified/offered but we await further clarification and discussion with NWSI and RIDOH.

There is no concern about residual chlorine in the water system at this time. It has dissipated.

Vincent Reppucci PW Chair

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