Here is an example of a public notice showing the recent finding of coliforms in the water used for drinking and washing at a rest station in Barron Co., Wisconsin.

Note that coliforms are indicated and also that **fecal** coliforms and *E. coli* were tested for in a subsequent analysis and were found to be negative.

Boil/Bottle Water Advisory

Wi Dot Rest Area 33 R-3-33 water contains coliform bacteria

The samples listed below indicate the presence of coliform bacteria in your drinking water and are a violation of State and Federal Safe Drinking Water Regulations.

A water sample collected on 6-24-13 indicated the presence of coliform bacteria. Further sampling on 7-1-13 confirmed their presence.

What precautions should be taken at this time?

ice, food, and any beverages prepared with unsafe water must be discarded. You should boil or use commercially bottled water for drinking, food preparation, and making ice. If you boil water, the water should be heated to a rolling boil for at least ONE minute before use. Ice should be made from boiled or bottled water.

What does this mean?

Coliform bacteria are generally not harmful themselves. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

Whenever we detect coliform bacteria in any sample, we do follow-up testing to see if other bacteria of greater concern, such as fecal coliform or E. coli, are present. We did not find any fecal coliform or E. coli in our subsequent testing.

What is being done to correct the problem?

Corrective action(s) taken: Turning off public water and chlorination access starked As a precautionary measure, we will use boiled or bottled water until we inform you that our sampling shows that no bacteria are present. We are working to resolve this problem as soon as possible. you have questions regarding the safety of our drinking water, please contact: 17422 State its contained in this public notice are true and correct and have been provided to th the delivery, content, format, and deadline requirements in Subchapter VII of ch. NR 809. Tier 1 No

Indicating fecal coliforms and E. coli (separately) reflects the fact that many strains of E. coli are lactose-negative and may not show up in the usual coliform testing procedure, so an additional E. coli detection process may have been performed. If E. coli would have been identified in this analysis, there would then be proof that the substance tested was fecally contaminated.

In the above analysis, simple finding of coliforms was enough to shut down water use for drinking. As coliforms in general (which also include strains of various species of *Enterobacter*, *Klebsiella* and *Citrobacter*) are found throughout nature (in soil, on plants, etc.), finding coliforms in a water supply can indicate surface soil contamination which can bring along various deleterious substances in the soil.