

Issue Statement for the need for an EPA approved quick turnaround testing method for total coliform:

When water systems have depressurizations due to water main breaks or other service disruptions, they need to ensure that harmful bacteria are not present when service is restored. As a precaution, operators issue boil advisories to customers until TC sample results are negative. Though boil advisories may be appropriate to ensure residents have safe drinking water, having to boil water until the advisory is inconvenient to their customers. These boil advisories are typically in place until the next day, but in some more rural areas where sampling is delayed because of the distance to the lab, it can be even longer. In addition, if there are critical users affected, systems also provide water to those users until the advisory is lifted, which also takes additional resources for the system. If systems could use a quicker method to screen water for total coliform, the need to issue boil advisories would be less and there would be less impacts to their customers. In 2014, there were some companies (Veolia, YSI, and UES) that were attempting to develop hand-held immunoassay based sensors that could be used in the field to screen water for TC. However, since the only USEPA approved TC method is a laboratory based method, most companies were hesitant to expend resources to develop such a technology without support and method approval by USEPA. Below is link to a presentation prepared by Veolia in 2014 that requested support from USEPA for this type of method and can provide additional details from their perspective:

<http://www2.epa.gov/sites/production/files/2014-06/documents/gallant.pdf>