

State Water Resources Control Board

**TO**: ELAP Laboratories

**FROM**: Christine Sotelo

 Environmental Program Manager

 **ENVIRONMENTAL LABORATORY ACCREDITATION PROGRAM**

**DATE**: November 4, 2021

**SUBJECT**: **LABORATORY FAILURES IN MAKING CRITICAL PUBLIC HEALTH NOTIFICATIONS**

The Environmental Laboratory Accreditation Program (ELAP) Enforcement Unit has discovered an ongoing issue involving drinking water laboratories failing to make critical public health notifications. In some cases, this may stem from an incorrect interpretation of ELAP’s regulations by laboratories and/or drinking water regulators (Division of Drinking Water (DDW) or local primacy agency (LPA)), while in others it may stem from intentional misconduct or fraud by laboratories. This memo provides information on the types of violations and next steps for drinking water regulators who discover these activities.

***TWO TYPES OF VIOLATIONS ARE OCCURRING***

* **Failing to notify water systems within 24 hours** of detection (after completion of analysis) of acute contaminants in drinking water samples
* Changing the designation of a compliance sample after analysis to make it appear as a non-regulatory sample and thus not subject to any notification requirement

***Failure to Notify within 24 Hours of Detection***

Laboratories must notify a drinking water supplier within 24 hours of detection of acute contaminants including total coliform, fecal coliform, and E. coli, or the exceedance of the Maximum Contaminant Level (MCL) in a Nitrate sample. ELAP has discovered some laboratories are not notifying water suppliers until after reviewing test results days or weeks after the test was performed. This delay in contacting the water system could result in extended human consumption of contaminated water.

*Laboratory Requirements and Best Practices*: Laboratories are required to have procedures in place to review data and notify a water supplier within 24 hours of detection (after completion of analysis) of the above listed contaminants (CCR Section 64819). Notification to a water system’s contact person should be made by phone call, as other methods such as email, text message, and fax may go unnoticed. If the laboratory chooses to utilize communication other than a phone call, it needs to ensure the notification has reached the designated contact person by requiring some form of response indicating when the notification was received. Laboratories are required to keep records of these notifications and responses. If the laboratory is unable to make direct contact with the supplier’s designated contact person within 24 hours, the laboratory is required to notify the regulating entity (DDW or LPA) staff.

***Changing the Sample Designation after Analysis***

Several instances of laboratories changing the designation of a “routine” compliance sample to “other” have been discovered, in most cases after the detection of an acute contaminant, following a request from a water system to do so. A common reason a water system will request the change has been a claim of problems with sampling containers.

*Laboratory Requirements and Best Practices:* Routine sample designations are not allowed to be changed for any reason after the chain of custody has been received by the laboratory.If a routine sample designation needs to be updated for any reason water systems can submit a request to the District or LPA to invalidate samples pursuant to CCR Section 64425 (for total coliform), and the sample may be invalidated only after evidence is reviewed and found acceptable. Neither DDW nor an LPA is permitted to authorize a change in sample designation.

***How to Check for these Violations***

Regulators receiving data should review the sample Chain of Custody (COC) and the final laboratory report for inconsistencies. The following questions may help in performing the review:

1. Do the COC and analysis timeline comply with notification requirements?
	1. When was the analysis of the sample finished?
	2. Did the laboratory notify the water system and/or DDW within 24hrs of finishing sample analysis (for contaminants, mentioned above, exceeding MCL)
2. Is the sample designation the same on the COC and the final laboratory report?

Contact the DDW Quality Assurance Section or ELAP at elapca@waterboards.ca.gov if you suspect a violation or need assistance interpreting the documents.

***Wastewater and Hazardous Waste Laboratories***

Though the instances cited in this memo are specific to drinking water notification requirements, ELAP considers these violations indicative of inadequate laboratory management practices. ELAP recommends review of data for red flags, such as those listed above, since many drinking water laboratories also perform work for other regulatory programs whose data may be affected.