
State Water Resources Control Board
Division of Drinking Water

**CLARIFICATION ON PROCEDURES IN STANDARD METHOD
SM 9221E AND SM 9221F**

**THE DETERMINATION IN THIS MEMORANDUM WAS MADE IN CONSULTATION WITH
U.S. EPA**

This announcement is being distributed to California Environmental Laboratory Accreditation Program (ELAP) laboratories to clarify confusion about acceptable procedures for SM 9221E and SM 9221F.

ELAP has discovered that some laboratories are combining procedures from SM 9221E with procedures from SM 9221F for simultaneous detection of fecal coliform and E. coli. This is done by transferring positive cultures to a single tube that contains both EC Broth with MUG (for E. coli detection by fluorescence) and a Durham tube (to capture gases from fermentation of fecal coliform). This practice is not approved by US EPA and is a deviation from method protocols.

It has also come to our attention that ELAP assessors may have approved this practice in the past. Assessors are not allowed to approve Alternative Test Procedures (ATPs); all ATPs must be approved by US EPA. Any laboratory engaging in the practice of transferring positive cultures to a single tube that contains both EC Broth with MUG and a Durham tube for simultaneous detection of fecal coliform and E. coli must immediately stop and revise their procedures to comply with the appropriate version of SM 9221.

Drinking water analysis must be done in accordance with US EPA approved methods as prescribed at 40 CFR parts 141.21 through 141.42, 141.66 and 141.89. (22 Cal. Code Regs. 64415.)

Contact ELAP with questions about this announcement at (916) 323-3431 or email elapca@waterboards.ca.gov

This announcement is posted on the Division of Drinking Water website at http://www.waterboards.ca.gov/drinking_water/programs/ as well as the California ELAP website at www.waterboards.ca.gov/elap.

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