

PROFICIENCY TEST REQUIREMENTS FOR A DRINKING WATER OR A WASTEWATER MICROBIOLOGY LABORATORY

Laboratories seeking certification for Drinking Water Microbiology shall be certified in accordance with *USEPA Manual for the Certification of Laboratories Analyzing Drinking Water*, 5th Edition (2005), EPA 815-R-05 2004 (EPA Manual).

Laboratories seeking certification for Wastewater Microbiology shall be certified in accordance with *Commonwealth of Kentucky Wastewater Laboratory Certification Manual* (2013).

Enumerated below are criteria for microbiology laboratories that wish to become certified or maintain certification for the microbiological analysis of drinking water or wastewater compliance samples in the Commonwealth of Kentucky.

1. Proficiency test (PT) studies are required every year and should be performed early in the year to ensure that passing PTs are completed for all method/analytes within the same calendar year.
2. Participate in a PT Study offered by a Kentucky approved provider for all analyte-methods for which the lab is currently certified or for which certification is being requested. **The KY Approved Proficiency Test Providers List** is available online or by request.
3. Make sure to inform PT Study Provider to add Kentucky to the list of certifying authorities to receive a copy of the PT Study directly from the provider. PTs must be submitted by the PT provider via dowptresults@ky.gov.
4. For methods used to test the presence or absence of an organism in a sample, each PT set shall contain ten samples.
5. All labs reporting presence/absence (P/A) results for Total Coliform Rule (from P/A or MPN method) must complete a 10-sample PT set.
6. To be acceptable, a laboratory shall correctly analyze a minimum of nine of the ten P/A samples, with no false-negative results (a single false-positive result is acceptable).
7. If a drinking water laboratory completes a ten-sample set for MPN, the lab can receive credit for P/A as well for that set. A single MPN sample will not be accepted for credit for P/A.
8. Each PT set shall be used only with a single analytical method (aside from the exception above in #7).

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9. Separate PTs shall be completed for Colilert and Colilert-18. Report specifically whether Colilert or Colilert-18 is used for the PT; do not report only SM 9223B as the method. KY method codes can be used to distinguish between Colilert and Colilert-18 (see below):
- a. KY Method Codes:
 - i. 305: Colilert-18 MPN
 - ii. 306: Colilert MPN
 - iii. 308: Colilert-18 Presence/ Absence (P/A)
 - iv. 309: Colilert P/A
10. Separate PTs shall be completed for drinking water and wastewater.
- a. WP and DMR-QA studies are acceptable for wastewater.
 - b. WS studies are acceptable for drinking water, and a source water (SW) sample in a WS study is acceptable for drinking water MPN methods (LT2-ESWTR).

Table 1. SM 9223B Microbiology PTs to be Performed

Laboratory's Certified Method(s)	Drinking Water PT(s)	Wastewater PT(s)
Method 305: MPN: Colilert-18	10 P/A samples and 1 MPN SW sample in WS study. -OR- 10 MPN samples in WS study.	1 MPN sample in WP or DMR-QA study
Method 306: MPN: Colilert	10 P/A samples and 1 MPN SW sample in WS study. -OR- 10 MPN samples in WS study.	1 MPN sample in WP or DMR-QA study
Method 308: P/A Colilert-18	10 P/A samples in WS study	N/A
Method 309: P/A Colilert	10 P/A samples in WS study	N/A
Methods 306 and 309: P/A and MPN Colilert	10 P/A samples and 1 MPN SW sample in WS study. -OR- 10 MPN samples in WS study.	N/A
Methods 305 and 308: P/A And MPN Colilert-18	10 P/A samples and 1 MPN SW sample in WS study. -OR- 10 MPN samples in WS study.	N/A