



Requirements for Analyst Certification

A. Certification

1. Certified

Each certified analyst is required to perform all QC requirements, including calibrations, standardizations and verifications as detailed in Chapter 8.0 of the [“Ohio EPA Laboratory Manual for Chemical Analyses of Public Drinking Water 2020”](#), for each plant control test method and [“Ohio EPA Laboratory Manual for Microbiological Analyses of Public Drinking Water 2020”](#), for each test method. For chemical certification, each certified analyst must complete drinking water sample analysis at a minimum rate of three days per month for all methods which the analyst is certified. For microbiological certification, each certified analyst must complete drinking water sample analysis at a minimum rate 10% of the routine samples for all methods which the analyst is certified.

2. Operational Certification

a. Operational Certification for Plant Control Tests

Operational certification may be granted per rule 3745-89-01 of the OAC for an analyst to perform one or more of the plant control tests for alkalinity, alkalinity stability, chloride, chlorine, chlorite, chlorine dioxide, fluoride, hardness, pH, or turbidity, including daily calibration and standardization, but neither including the preparation of standards or reagents, nor the required monthly or every three-month calibration and standardization. Operationally certified analysts may not perform calibrations, standardizations and other QC activities unless otherwise noted in Chapter 8, Section 6.2 of the “Ohio EPA Laboratory Manual for Chemical Analyses of Public Drinking Water 2020”. Each operationally certified analyst must complete drinking water sample analysis at a minimum rate of three days per month for all methods which the analyst is certified.

Operational certification is not available to commercial laboratory personnel.

b. Operational Certification for Microbiological Tests

Operational certification may be granted per rule 3745-89-01 of the OAC for an analyst to perform MMO-MUG (SM 9223 B) and Quanti-Tray (SM 9223 B), limited to set up and interpretation of samples, including positive and negative controls. Each operationally certified analyst must complete drinking water sample analysis at a minimum rate of one set of samples per month for each method which the analyst is certified.

Operational certification is not available to commercial laboratory personnel.

B. Interim Authorization

1. Interim Authorization for Plant Control Tests

A laboratory with a valid and unexpired certification may apply for interim authorization for an analyst to perform one or more of the plant control tests for pH, turbidity, alkalinity, stability, hardness, fluoride, chloride, chlorine dioxide, chlorite and chlorine, according to the following requirements:

- Interim Authorization will be granted to the applying analyst(s) upon demonstration of acceptable

performance in a 20-day parallel testing period. Acceptable performance is defined as follows.

- For each plant control test other than pH and turbidity, obtaining results within $\pm 10\%$ of the certified analyst.
 - For pH, obtaining results within ± 0.1 pH units of the certified analyst.
 - For turbidity results less than 0.3 NTU, obtaining results within ± 0.03 NTU of the certified analyst.
 - For turbidity results equal to or greater than 0.3 NTU, obtaining results within $\pm 10\%$ of the certified analyst.
- A laboratory must submit an application for interim authorization including the following information:
 - The name, address and telephone number of the laboratory and of the individual(s) responsible for the laboratory.
 - The list of analysts specified on the laboratory's applicable certificates and the plant control tests which each analyst currently performs.
 - The list of individuals and the plant control tests for which interim authorization is sought.
 - Documentation for each individual on each plant control test requested for interim authorization of at least twenty days of analytical results generated in parallel testing with an analyst included on a certificate for those same plant control tests. The previous certification of an individual to perform plant control tests may be considered for satisfying this requirement.

An on-site survey will be scheduled within six months of an interim authorization. Interim authorization shall remain in effect for a period not to exceed six months unless an extension is granted.

2. Interim Authorization for MMO-MUG (SM 9223) Tests

A laboratory with a valid and unexpired certification may apply for interim authorization for an analyst to perform MMO-MUG (SM 9223 B) tests, according to the following requirements:

- The trainee seeking interim authorization must analyze three sets of samples in parallel with a certified analyst over a period of three separate days. Each set of samples must include 5 samples, a positive control and a negative control. Interim Authorization will be granted to the applying analyst(s) upon demonstration of acceptable performance. "Acceptable performance" is defined as containing no false negatives and no more than one false positive, including the required quality control samples. The results generated in parallel testing must be performed with an analyst included on a certificate for MMO-MUG (SM 9223 B) tests.
- A laboratory must submit an application for interim authorization which includes the following:
 - The name, address and telephone number of the laboratory and of the individual(s) responsible for the laboratory.
 - The list of analysts specified on the laboratory's applicable certificates.
 - The list of individuals and MMO-MUG (SM 9223 B) tests for which interim authorization is sought.
 - Documentation for each individual requesting interim authorization for MMO-MUG (SM 9223 B) must include three sets of samples in parallel with a certified analyst over a period of three separate days. Each set of samples must include 5 samples, a positive control and a negative control, along with results generated in parallel testing from an analyst included on a certificate for MMO-MUG (SM 9223 B) tests. The previous certification of an individual to perform MMO-MUG (SM 9223 B) tests may be considered for satisfying this requirement.

An on-site survey will be scheduled within six months of an interim authorization. Interim authorization shall remain in effect for a period not to exceed six months unless an extension is granted.

3. Interim Authorization for New Contaminants and New Methods

Interim authorization for new analytes and new methods, as defined in rule 3745-89-01 of the OAC, may be granted for certified laboratories following these procedures:

- Interim authorization shall only be available to laboratories which currently have valid certification for the same type of drinking water analysis (microbiological analytes or plant operational tests.) as the drinking water analyses to be included in the interim authorization.
- In order to be considered for interim authorization, the laboratory must submit an application for interim authorization which includes the following information:
 - The name, address and telephone number of the laboratory and of the individual(s) responsible for the laboratory.
 - Statement of the drinking water analyses and methods for which interim authorization is sought and the analysts to be included in the interim authorization to perform the analyses. The analysts must be individuals already identified on a valid certificate for the laboratory for performing similar analyses or for analyzing the same type of contaminant.
 - Documentation that the laboratory obtained acceptable results within the past twelve months for at least one proficiency test (PT), in accordance with Chapter 2, Section F of this manual, for each drinking water analysis to be included in the interim authorization.
 - Documentation that a method detection limit study has been completed by the laboratory for each drinking water chemistry analysis to be included in the interim authorization, with the studies indicating the laboratory is capable of meeting any specified analytical reporting requirements.
 - Documentation that the laboratory has successfully passed one microbiological PT set, in accordance with Chapter 2, Section F of this manual, with the method not approved by Ohio EPA. The test data must be sent directly to the Laboratory Certification Section from the PT provider. The laboratory must pass the PT study with the method for which interim authorization is being sought.
- When granted, the interim authorization will state the individual(s) and drinking water analyses included in the interim authorization and the length of time the interim authorization will remain in effect.
- An on-site survey must be scheduled to verify acceptable performance by the laboratory granted interim authorization. Interim authorization will remain in effect until the on-site survey has been completed and certification granted.