

P. The Pipeline

Drinking Water Laboratory
Policy & Procedures Update

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Chemistry Approval Requirements

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There are two types of approval offered to laboratories connected to water production facilities: Full approval and operational approval. Full approval is granted to individuals who will be doing all the calibrations and standardizations. This includes: pH meter monthly slope and 4.0 standard check; three month turbidity check; monthly alkalinity, hardness and chloride titrant standardizations; weekly fluoride slope and 1.0 mg/L standard check; three month chlorine kit calibrations; and the actual QC and analysis of the 'complex' tests such as nitrate, nitrite, iron, copper, manganese, and others. Operational approval is granted to individuals who perform the actual analyses for pH, turbidity, alkalinity, stability, hardness, chloride, fluoride and chlorine (analysts may perform field chlorine tests with documented training-see certification manual). This includes 'shift' calibration of the pH meter, fluoride meter, 0-2 and 0-20 NTU turbidity checks and all cross checks between final effluent inline meters and benchtop meters. It does **not** include monthly pH meter slope and 4.0 standard checks and weekly fluoride slopes and 1.0 mg/L checks.

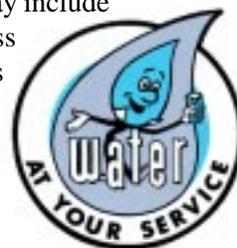
A person must have at least operational approval to perform any test that affects water treatment. For example, if a person who is not approved checks turbidity, "just for your own records and not for reporting" and that person is not approved, your laboratory is in violation and is subject to loss of certification and other enforcement action. A person 'in training' may **not** perform tests on their own.

They may run tests in parallel with the approved analyst as long as their results will not be used for reporting purposes or to affect treatment.

The previous paragraph only pertains to tests listed on a laboratory's certificate of approval. It does not apply to tests performed, that are neither required by the Ohio EPA nor for tests not listed on your certificates of approval. For example, if you are running turbidity on well water for your own purposes and are not required to run turbidity by the Ohio EPA and you do not have approval for turbidity, then anyone may run the test.

This does apply to the final effluent (finished water) inline turbidimeter, but does **not** apply to inline turbidimeters on the individual filters, where any qualified employee of the facility may perform required calibrations.

If it is discovered that people are running tests and are not approved but the person who is approved is 'signing off' on the tests, it will be considered falsification of official documents. In this case appropriate action will be taken which may include loss of certification, loss of all pertinent licenses and possible prosecution on criminal charges for all involved.



If you currently have unapproved analysts performing these types of tests you may save yourself some trouble by obtaining interim authorization forms from our web site (<http://www.epa.state.oh.us/ddagw/labcert.html>) or contacting us as soon as possible to have those persons surveyed.

If you make us aware of an accidental oversight on your part, we will work with your lab to get approval for the individuals.

All persons performing microbiological tests must be certified.

Operational approval does not apply to microbiological laboratories or laboratories that test water they do not produce, such as a commercial laboratory.



Chlorine DPD Dispensers

Recently, a few companies have introduced automatic DPD powder dispensers for chlorine. These are acceptable for use in Ohio as long as the formulation for the DPD is correct. We have not seen one yet where the formula was incorrect, so more than likely, they all are fine. These dispensers are much quicker than opening individual dose packets. They also do not generate the waste associated with empty packets. When using the dispensers, it may **not** be necessary to add two doses of DPD when the chlorine levels are >2.0 mg/L as they seem to deliver an adequate amount of DPD for high levels of chlorine. However, the only way to know for sure is, if your lab sees high chlorine levels, to test with one dose and two doses. If the two dose difference is less than or equal to 0.1, then two doses are not necessary. When using the dispensers, they will need to be shaken when new and occasionally during use to keep the reagent settled. As the dispensers get near the end of their supply, the dose level may drop. This is the time to get a new dispenser or to obtain a refill cartridge.

2002 Microbiological Water Testing Courses

Operator Training Committee of Ohio, Inc. in conjunction with the Ohio EPA/DES Laboratory Certification Section has three microbiological laboratory courses scheduled this year.

March 21-22 MMO-MUG Procedure at the Cincinnati Water Plant Laboratory

June 6-7 MMO-MUG Procedure at the Canton Water Plant Laboratory

October 23, 24, 25 MMO-MUG & Membrane Filter at the Del-Co Water Company/Alum Creek Laboratory

Contact OTCO at (614) 268-6826 or go to the OTCO home page at <http://www.ohiowater.org> and click on OTCO Training, Water Short Schools for registration forms, fees, and continuing education **contact hours** for these courses.

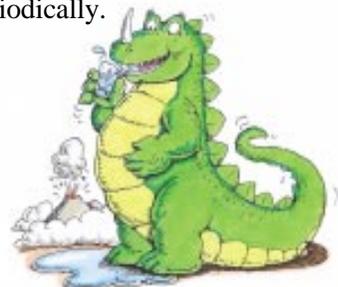
Environmental Testing for Anthrax

As a result of the recent cases of anthrax in the United States, public and private organizations are considering requesting environmental microbiological testing for *B. anthracis*. The Ohio Department of Health Laboratory would like to maintain a listing of all Ohio laboratories, clinical, animal, or environmental, that are capable of performing testing for biologic agents that may be used in terrorist activities. For more information and/or inclusion in the list of biological testing (BT) labs in Ohio, please contact Dr. Bill Becker, Medical Director, Ohio Department of Health Laboratory by phone at 1-888-ODH-LABS or by e-mail at bbecker@gw.odh.state.oh.us.

Rule Changes

The Stage 1 Disinfectants and Disinfection Byproducts Rule (D/DBPR) has been adopted in the Ohio Administrative Code (OAC). These changes became effective in Ohio on January 1, 2002. The following items are relevant to certified drinking water laboratories:

DPD Colorimeter Calibrations: Rule 3745-81-27 of the OAC approves the use of DPD colorimetric test kits for public water supplies (PWSs) to monitor for total chlorine residual in the distribution system. This rule applies to water supplies which do not have a certified laboratory. In order to use a test kit for compliance monitoring, the analyst(s) must be approved by Ohio EPA. One condition of approval is to have the test kits periodically calibrated by a certified laboratory. Ohio EPA is still working on the approval procedure, but it is likely that calibrations will be required at least once or twice a year. Between January 1, 2002 and December 31, 2003 only the PWSs serving greater than 9,999 persons and using surface water as a source will be required to have their test kits calibrated. This is about seventy PWSs. Starting January 1, 2004, those community and nontransient water systems that disinfect and serve $< 10,000$ persons (an additional 1500 PWSs) will need to have DPD test kit calibrated periodically.

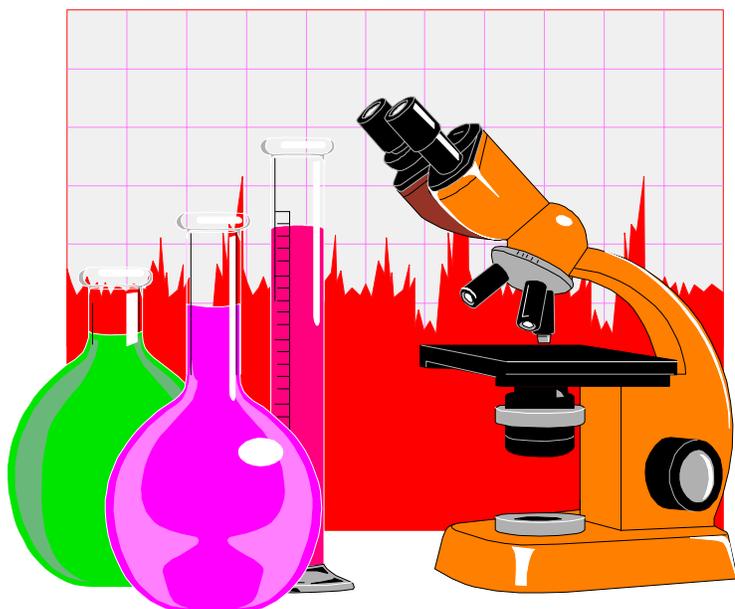


Sample Location Description: The OAC now requires PWSs to complete a sample monitoring plan (SMP) for disinfection byproducts (DBPs). In order to determine compliance with the sample monitoring plan, the sample submission report (SSR) for TTHMs and HAA5 has to report the sample location description as well as the sample monitoring point identifier (SMPID). The sample location descriptions should be reported in the "Sample Location Description/Lab Remarks" box on the 5022 SSR. An example of correct reporting is MR001 for a SMPID and "City Hall" as a sample location description. A complete mailing address is not necessary. In some cases sampling may be done at a location without a mailing address, for example "Booster #8". Most PWSs already report this information to their laboratory and most labs already submit this information along with the data. Labs that fail to report this information are in violation of 3745-89-08(D). In addition, the water system the laboratory is reporting for will be in violation of OAC 3745-81-75(G)(1) if this information is not reported.

Reporting of Results by PWSs and Certified Laboratories: Results for all TTHM and HAA5 analyses shall be reported directly to the Ohio EPA by the certified lab that also reports the results to the public water systems. A new paper version of the 5022 SSR has been developed for 2002. Copies of this SSR were sent to the PWSs along with their schedules. Certified labs may obtain a copy of the new form by contacting Richard Ciotola at 614.644.2752. If your laboratory received a copy of the 5022 prior to January 31, 2002, you will need to contact Richard Ciotola for an updated version. DRINKware can still be used to submit TTHM and HAA5 data electronically.

The following parameters do not have to be reported by certified labs on the 5022 SSR unless requested by Ohio EPA: Total organic carbon, dissolved organic carbon, chlorite, bromate, bromide, UV254 and SUVA. The PWSs are required to submit these results on their monthly and quarterly operating reports. These reports are currently not available in DRINKware. Paper copies of these forms can be obtained from the Ohio EPA District Offices.

Unregulated VOCs/SOCs: Public water systems are no longer required to sample for the unregulated VOCs and SOCs as part of their compliance monitoring. Only those water systems that are part of the Unregulated Contaminant Monitoring Rule (UCMR) monitoring program are required to monitor for these unregulated contaminants.



OhioEPA

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The Pipeline Newsletter is published three times each year. It is produced by The Ohio EPA, Division of Environmental Services, Laboratory Certification Section with contributions from the Division of Drinking & Ground Waters. It is distributed to all certified drinking water laboratories.