The Pipeline

Drinking Water Laboratory
Policy & Procedures Update

A publication of the Ohio EPA/DES/DDAGW — Fall 1999

Reporting Microbiological Test Results

In this Issue:

Laboratories analyzing samples from both public and private sources should be aware that these samples are to be analyzed and reported to the appropriate agency in the same manner. In other words, your certified drinking water laboratory must only have one standard operating procedure that is used for both public and private water supply samples.

Chlorine Kit Calibration Update

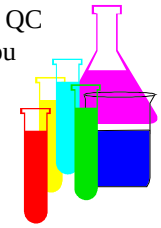
When using potassium permanganate ($KMnO_4$) for calibrating chlorine test kits, use the total chlorine DPD packets, rather than the free chlorine DPD packets to ensure accurate readings in the upper ranges. It has become apparent during on-site surveys that the total chlorine reagent gives more accurate results when $KMnO_4$ is used for chlorine kit calibrations. If you are using a commercial standard, such as the Hach chlorine ampules, you may use free chlorine DPD packets. Additionally when using either type (free or total) you must double the DPD dose when chlorine levels, including standards, are greater than or equal to 2 mg/L.

Certification Applications

Microbiological and chemistry applications are now available for downloading from the Ohio EPA Division of Drinking and Ground Waters web site at http://www.epa.state.oh.us/ddagw
You may also contact the laboratory certification section for applications as well.

Fluoride QC Check Samples

It is acceptable to obtain a sufficient quantity of fluoride sample from one of the PT providers to allow the testing of separate samples for up to three months. The fluoride PT sample should be kept refrigerated when not being used. In other words, if you receive a 500 mL QC check sample from a PT supplier, you may use it initially, then refrigerate and use again for two consecutive months. Remember to allow refrigerated samples and standards to come to room temperature before testing.



Iron and Manganese Testing

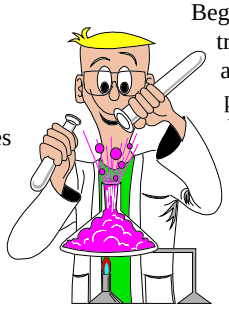
Iron (Fe) and manganese (Mn) test kits are permissible for compliance monitoring purposes provided that the following requirements are met:
1. The public water system monitors daily for Fe and Mn at the plant tap using an in-house test kit. The test kit must have a minimum detection level of 0.2 mg/L for Fe, and 0.02 mg/L for Mn.
2. The public water system has one split-sample analyzed monthly by the in-house test kit and by a certified laboratory. If your laboratory is certified to perform Fe and Mn, you may perform both of the split sample analyses. The deviation between results shall be no greater than 0.2 mg/L for Fe and 0.04 mg/L for Mn. If the split-sample results for either Fe or Mn vary by more than 0.2 mg/L for Fe and 0.04 mg/L for Mn, the public water system shall resume weekly monitoring using a certified laboratory. A public water system may return to a reduced frequency of certified laboratory analyses for Fe and Mn once the deviation between split-sample results is within the acceptance limits.

3. The public water system is required to record all daily and monthly results on their monthly operating report (MOR) form, and circle those results that are reported by the certified laboratory.

Laboratory certification is not necessary for Fe/Mn analysis with test kits, but is necessary when using the certified test method.

Any questions regarding this procedure can be directed to the attention of James Evans at 614-644-4222.

Proficiency Testing (PT) Program



The National Institute for Standards and Technology (NIST) has recently finished auditing those companies that wish to be accredited to provide PT samples as a replacement for the discontinued USEPA Water Supply (WS) program. It is anticipated that the list of accreditated PT providers will be issued by November 1, 1999. Laboratories will be provided with the list of accreditated PT providers when it becomes available. PT samples will be required for the fourth quarter of 1999, even if the USEPA has not completed its accreditation process for PT suppliers. PT tests already performed after July 1, 1999 will be acceptable. The data must be sent by the PT provider directly to the Ohio EPA at the address listed below. If after November 10, 1999 there are no accreditated PT suppliers, you may use one of the suppliers that have applied for NIST approval. A list of suppliers is attached to this newsletter. Laboratories performing tests for organics, primary metals, cyanide, nitrates, nitrites and sulfates are required to perform PT samples. Microbiology laboratories should begin making plans to do a set of PT samples (formerly called PE samples) in the 2000 calendar year. The PT supplier must send all PT data to: James Evans, Ohio EPA, Division of Environmental Services, 1571 Perry Street, Columbus, Ohio 43201.

Chemistry Certification Manual

The Chemistry Certification Manual has been updated, and will be sent to those laboratories that are currently certified for chemistry testing. The manual may be sent out by December 1, 1999.

Analog Meters

The laboratory certification program is initiating the phase-out of analog read-out meters due to the variation in readability at low levels. Laboratories should begin making preparations to replace their analog meters with digital meters for turbidity, pH, fluoride, chlorine, etc. prior to the renewal of their certification (analog amperometric titrators will remain acceptable). Laboratories using analog meter(s) during their renewal of certification will be required to replace their meter(s) with a digital model to maintain certification.

Haloacetic Acid Certification

The laboratory certification office is now offering certification for Haloacetic Acid (HAA5) analyses. The HAA5 analyses are required as part of the recently promulgated Disinfectants and Disinfection Byproducts Rule. Further information regarding HAA5 certification requirements can be obtained by contacting James Dolfi at 614-644-4068.

Reporting of Laboratory Data

The Ohio EPA Division of Drinking and Ground Waters (DDAGW) recently informed laboratories that submit data to the Ohio EPA for drinking water requirements, of several important changes to the data submission procedures. These changes will require the use of new versions of the current monthly operating report (MOR), and sample submission report (SSR). Beginning in late October, the DDAGW will be offering training sessions to review the new data requirements and forms, and to review electronic data submission procedures.

We encourage you to attend this important training, as it will significantly change the way in which laboratory data is reported to the Ohio EPA, DDAGW. Questions regarding this training should be directed to the attention of Kevin Mills at 614-644-2752.

Proposed Reporting Limits for Inorganics and Trihalomethanes

The Ohio EPA is proposing reporting limits for asbestos (0.2 MFL), cyanide (0.02 mg/L), fluoride (0.5 mg/L), nitrate (0.5 mg/L), nitrite (0.1 mg/L), and the trihalomethanes bromoform, bromodichloromethane, chloroform, and dibromochloromethane (0.5 ug/L per individual and total trihalomethanes). The reporting limits will become effective on January 1, 2000. Laboratories will be notified about the finalized reporting limits.

OhioEPA

Bob Taft, Governor of Ohio
Christopher Jones, Director of Ohio EPA

The Pipeline Newsletter is published as information becomes available. It is produced by The Ohio EPA, Division of Environmental Services, Laboratory Certification and Division of Drinking & Ground Waters, Enforcement & Water Quality Section. It is distributed to all certified drinking water laboratories.