

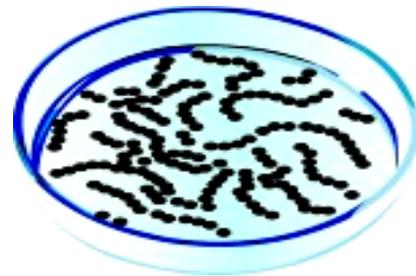
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## Pocket II DPD Kits

We are still coming across Hach Pocket II DPD chlorine kits that need to either be repaired or replaced because of the broken stabilizing tabs in the cell compartment. If the kit is still under warranty, the Hach Company may replace it. If you have one of the affected units, you should contact Hach with the serial number to find out if your kit is under warranty. If it is not covered under the warranty, you may want to repair the kit yourself. You can purchase a new cell compartment cup and metal retaining springs from Hach for around \$5.00. You will need to take 5 torx screws out to open the kit to replace the cell compartment cup. Two of the screws are hidden in the battery compartment under the label. The Hach part # for the cell compartment cup is 5954000 and for the metal retaining spring is 5857100.

## Micro Q.C. Log Book

As per page 49 of the current edition of the *Laboratory Manual for the Microbiological Analysis of Public Drinking Water*, quality control records must be kept for a minimum of five years. The majority of the laboratories store their Q.C. records in three ring binders. Most laboratories then file their Q.C. records annually or on a three year cycle in the original binder(s) with indexed tabs. However, at the end of the year some laboratories remove the Q.C. records and store them together in a 'bulk' file folder labelled with only the year. They then recycle the binder and dividers. This practice makes it difficult to retrieve for review any specific Q.C. test record since they are all stored together 'en mass' with no labels for individual Q.C. tests. If a laboratory chooses to follow this practice of 'bulk' storage by year they will need to 'index' (label) each type of Q.C. record on file with some form of 'index tab'. This may be as simple as a small 1.5" by 2" 'Post-it' labelled with the corresponding type of Q.C. form and used as a tab on a blank sheet of paper (divider) at the start of each section. This should make access to specific Q.C. records much more efficient. Failure to follow this practice in the future will be a **DEVIATION** from standard protocol.



## Micro Lab Thermometers

The Laboratory Certification Section has received several inquiries pertaining to mercury-in glass thermometers. The following will attempt to clarify the position of the certification program.

NIST certified thermometers for calibration of thermometers and maximum registering autoclave thermometers are only available as Hg-in-glass devices. Thermometers for incubators and refrigerators are available in both Hg-in-glass and non-Hg-in glass units. The non-Hg-in-glass thermometers must come with a certificate from the manufacturer that they have a coefficient of linear expansion that is as accurate as Hg-in-glass thermometers and meet NIST standards.

All thermometers must have their calibration verified annually with this data recorded in the QC log. The complete procedure for each type of thermometer may be found on pages 21 & 22 of the current edition of the Laboratory Manual for the Microbiological Analysis of Public Drinking Water.

Any of the laboratory thermometers may be equipped with a Teflon coating to reduce the chance of breakage and to help contain the mercury (if they are of that type) if they should become broken. New thermometers may be purchased with a Teflon coating or you may contact

ERTCO Precision            or    Brooklyn Thermometer

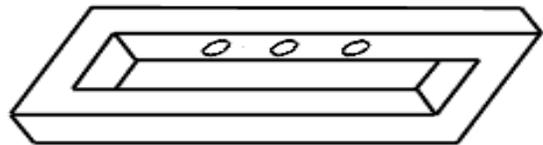
Ever Ready Therm. Co.                            (800) 241-6316  
(800) 553-0039

to make arrangements to have existing thermometers equipped with a protective Teflon coating.



## Jennifer Tom

Please welcome Jennifer Tom to the Laboratory Certification unit. She has been with the Ohio EPA since August of 1999 and joined the Lab Cert. staff in November of 2007 as secretary, the position formerly held by Jacqueline Coleman-Williams. Jennifer will be assisting the certification officers by processing reports and helping to organize the unit. If anyone needs to get in contact with one of the certification officers when they are out of the office, call Jennifer at **614-644-4245** for assistance.



## Ratio Turbidity Meters

If you are one of the many laboratories that are using a bench top turbidity meter that is also capable of the 'Ratio' measurement, we are now allowing testing to be done in the Ratio mode. This means that the next time you calibrate your meter; you will leave the ratio setting 'on' to read the 1.0 NTU standard and to reset the calibrated values for the secondary standards. All measurements thereafter for secondary standards, air readings and water samples must be made in the ratio mode. You will notice a difference in the values for the secondary standards and the air reading and a less significant difference in the finished water. You will need to be sure that all the operators are aware of this change in procedure and that they will have to check the secondary standards with the ratio set to on. Also, make an entry in you calibration record book that the secondary standards have been assigned values with the ratio mode turned on. If you have question concerning this change in procedure, please call or email James Dolfi or Charlie Vasulka.

# Reporting Review

The Division of Drinking and Ground Waters (DDAGW) is presenting this information to assist laboratories in submitting reports that will be acceptable for compliance and to prevent the occurrence of violations.

1. Identify correct sample monitoring point codes for entry point samples.

Reports have been received incorrectly listing a DS000 distribution code for samples that had been collected at the entry point. Monitoring required to be collected at the entry point for routine compliance includes nitrate, nitrite, inorganics, VOCs, SOCs, and radiologicals. The proper code for an entry point sample is EP00 followed by third number, usually 1 (EP001) unless systems have more than one entry point, then a code for EP002, EP003, etc. is possible.

2. Report correct and complete sample location information for disinfection byproduct samples (Trihalomethanes and Haloacetic Acids).

One of two sample monitoring point codes should be used for these samples, MR00# or RD00# where the # is usually 1 (MR001, RD001), although systems with multiple sample locations will have codes for MR002, MR003, etc. and RD002, RD003, etc. In addition, the address or description of the sample location should be included in the remarks section of the report as provided by the public water system.

3. Submit arsenic results reported to the nearest 0.001 mg/L.

Arsenic results are required to be reported at this level. Analytical data should be rounded, if necessary, to meet this requirement: increase the last number by one if the preceding dropped digit is 5 or greater; do not change the last number if the preceding dropped digit is less than 5. For example, a result of 8.5 ug/L should be reported as 9 ug/L, and a result of 8.4 ug/L should be reported as 8 ug/L.

4. Use monitoring schedules for public water systems as a reference.

Monitoring schedules may be accessed on the DDAGW's internet site [www.epa.state.oh.us/ddagw/SchedulesByCounty.htm](http://www.epa.state.oh.us/ddagw/SchedulesByCounty.htm) . The schedules include identification information for systems such as PWSID and STU numbers and list sample locations along with the testing requirements.

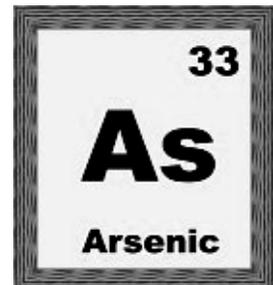
5. Subscribe to the DDAGW list serve for compliance updates.

Sign up for this free service at [www.epa.state.oh.us/ddagw/listserveCMCU.htm](http://www.epa.state.oh.us/ddagw/listserveCMCU.htm) .

A subscription will provide access to periodic updates on compliance and monitoring issues.

If you have any questions regarding chemical monitoring or reporting requirements, please contact one of the staff members listed below at (614) 644-2752.

- Δ Community Inorganics/Asbestos – **Kathy Pinto**
- Δ Noncommunity Inorganics – **Emily Cushman**
- Δ Noncommunity Nitrate/Nitrite – **Justin Burke**
- Δ Community Nitrate/Nitrite, SOCs, and Radiological – **Wendy Sheeran**
- Δ Disinfection Byproducts and VOCs – **Sarah Byerly**



## Low Fluoride Slope?

Some people have been having problems achieving an acceptable slope for their fluoride calibration or constantly getting a low slope. If you have experienced this condition and can't seem to resolve the problem, you may want to try a suggestion from Shannen Dye of the DelCo Water Company. Shannen never has problems with low slopes. She calibrates her meter using three standards, a 0.50mg/L, a 1.00mg/L and a 10.0mg/L. This is an acceptable way to calibrate the meter since the sample concentration range is bracketed by standards. We have had other labs use the three standard calibration replacing a 5.0mg/L standard for the 10.0mg/L. This method has also improved the slope readings. Give it a try!



## Last Minute Note

Recently, a laboratory was having a problem with their alkalinity titrant standardization. Their results were unexpectedly coming out extremely low; about 15ml of acid would achieve the endpoint. After a lengthy trial and error trouble shooting investigation, we found that their DI water system was producing water with a pH of 2.5! Normal DI water should have a pH that is slightly less than 7.0. This was the cause of their problem. Normally for chemistry, we do not require you to check the pH of the laboratory pure water, but you may want to check yours periodically.

2008

## Ohio Microbiological Water Testing Course

The final Micro course for the year will be held on October 15 -17 at the Dayton Water Plant. Membrane Filter, MMO-MUG and Colilert-18 will be offered, Tim Truman will be the instructor. Sign up early.

Contact OTCO for registration information  
at (614) 268-6826.



## The Pipeline

Ted Strickland, Governor

Chris Korleski, Director

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