

### Conductivity/Resistivity Meter Calibration

Microbiologically suitable water must have a conductivity of  $<2.0 \mu\text{s}/\text{cm}$  or a resistivity of  $>0.5 \text{ megohm}/\text{cm}$ . To verify laboratory pure water is meeting this standard, monthly readings are taken with a conductivity or resistivity meter. As with all laboratory meters, they need to be calibrated with a known standard in the range of use. However, conductivity standards are not stable in the range of  $<2.0 \mu\text{s}/\text{cm}$ . Therefore, the meter must be calibrated with a standard that is as close as possible. The standard should be  $<100 \mu\text{s}/\text{cm}$  and there are commercially available standards of  $10 \mu\text{s}/\text{cm}$ .

If you have a meter that is only capable of calibration at one set point ( $1413 \mu\text{s}/\text{cm}$  is common) or you have a 'fixed' meter that has no calibration adjustment you must use the  $<100 \mu\text{s}/\text{cm}$  standard as a 'check standard'. When the probe is placed in the low level standard the reading must be  $\pm 10\%$  of the true value. If it is not the meter will need to be serviced or replaced.

Keep in mind conductivity is temperature dependent. If you do not have an ATC probe/meter you will need to use the conversion chart or formula supplied with the standard to obtain the 'true value'.

### OTCO Workshop

The 2005 Operator Training Committee of Ohio (OTCO) Water Lab Analyst Workshop will take place on May 11 at the Ramada Plaza, 400 Sinclair Road in Columbus. Tentative workshop topics include: Maintenance, Optimization and Troubleshooting for Ion Specific Electrodes; Rapid Toxicity Test Kits; GC-MS Optimization; Microbial Testing; Protecting your PC and Network; A System for Detecting Distribution System Contamination; Lab Ethics; Customer Service; and the long-awaited, much anticipated "Microbiology Updates on New Compliance Methods" and "Chemistry Calibration and Quality Control Issues". For registration information see [www.ohiowater.org/OTCO](http://www.ohiowater.org/OTCO)



### 2005 Microbiological Wa- ter Testing Courses

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

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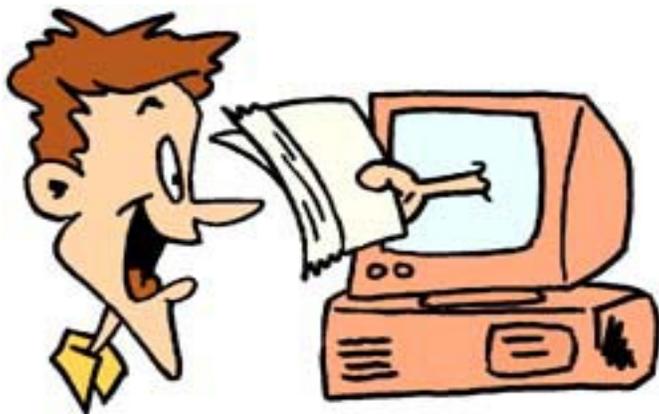
- > March 17-18 MMO-MUG Procedure at the Dayton Water Plant Laboratory
- > June 2-3 MMO-MUG Procedure at the Canton Water Plant Laboratory
- > October 19, 20, 21 MMO-MUG & Membrane Filter at the Del-Co Water Company/Alum Creek Laboratory

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



## Reporting Reminders

If you report results through DRINKware, please read the information on our web site located at [http://www.epa.state.oh.us/ddagw/Documents/ElectronicSSR\\_Instructions\\_2004.pdf](http://www.epa.state.oh.us/ddagw/Documents/ElectronicSSR_Instructions_2004.pdf) If you report results using paper sample submission report forms (SSRs), please read the information located at [http://www.epa.state.oh.us/ddagw/Documents/PaperSSR\\_Instructions\\_2004.pdf](http://www.epa.state.oh.us/ddagw/Documents/PaperSSR_Instructions_2004.pdf)



A few important reminders include the following:

1) **Timely Reporting** - Chemical results are required to be reported to Ohio EPA by the tenth day following the month in which the chemical analyses are completed. We have reminded the water systems that they should sample early in the monitoring period to ensure that results are submitted within 10 days after the monitoring period. Results above the MCLs are required to be submitted to Ohio EPA and the water systems by the end of the next business day. Please use the Chemical MCL Fax Notification form at <http://www.epa.state.oh.us/ddagw/Documents/MCLfaxform.pdf> or the Bacteria MCL Notification form at <http://www.epa.state.oh.us/ddagw/Documents/MicroFaxForm.pdf>. You may submit a completed SSR form for results above the MCLs as long as the forms are received by Ohio EPA and the water systems by the end of the next business day.

2) **Avoid Duplicate SSR Submittals** - If you are uncertain whether or not a DRINKware submittal was received, please check the following web site <http://www.epa.state.oh.us/ddagw/drinkware/receiveddata.html>

If you still have questions about whether or not the data was received, or you want to submit a corrected SSR, please call Brian Tarver, DRINKware administrator, at 614-728-1740. You can also email Brian at [brian.tarver@epa.state.oh.us](mailto:brian.tarver@epa.state.oh.us) Please do not resubmit results without following these steps.

3) **Sample Monitoring Points/Preservatives/Methods** - Please make sure that you are receiving the sample monitoring point (smp) information from the water systems so you can correctly report the results to Ohio EPA. Please contact the water systems if they fail to provide the smp information, or call CMCU at 614-644-2752. The typical smp for compliance samples are listed on the last page of the reporting instructions. Do not submit results without the proper smp information. The description of the sample location (e.g. street address; kitchen tap) should be described in the Remarks section of the SSR.

Also, all preservatives that are used for a sample must be correctly marked on the SSR. If a preservative was not used, then "unpreserved" should be marked. If the method used for analysis is not on the DRINKware list, select "Generic Method", and then type the actual method name in the Remarks box.

4) **Lab Accidents/Quality Control Issues** - In the event that a lab accident occurs, or the quality control indicates that the results are invalid, please submit a case narrative explaining the situation to Ohio EPA as soon as possible. Also, please contact the water system immediately so that they can make arrangements to collect another sample if necessary. A quick response on your part may prevent the water system from receiving a violation for missed monitoring.

If you have any questions about this information, please contact Todd Kelleher or any of the CMCU staff listed below at 614-644-2752:

Ken Baughman - VOCs / SOCs  
Richard Ciotola - TTHMs / HAAs  
Holly Kaloz - Noncommunity Nitrates/Nitrites  
Kathy Pinto - Inorganics / Asbestos  
Wendy Sheeran - Community Nitrates/Nitrites / Rads

## New Part-Time Laboratory Evaluation Officer

Dan Lauer from the Division of Environmental Services, otherwise known as the Ohio EPA Laboratory, has joined the laboratory certification section as a part-time Laboratory Evaluation Officer. Dan graduated from the University of Dayton in 1993 with a Bachelor's Degree in chemistry. He started with the Ohio EPA in February of 2004 working in the organic section. He has eight years of pharmaceutical laboratory experience prior to joining the Ohio EPA.



Dan has been training in the laboratory certification section since December 26, 2004 and will be returning to the DES Laboratory in May of 2005. Currently, he is traveling with either James Dolfi or Charles Vasulka and will soon be conducting surveys on his own. Please make him feel welcome.

Dan may be contacted at (614) 644-4255 or e-mailed at [Daniel.Lauer@epa.state.oh.us](mailto:Daniel.Lauer@epa.state.oh.us)

## Laboratory Certification Applications

Applications for laboratory certification may be obtained by accessing our laboratory certification website at <http://www.epa.state.oh.us/ddagw/labcert.html> or by contacting the laboratory certification office at (614) 644-4245.

### Submittal of Applications

#### Three Year Renewal:

- Applications should be submitted to the survey office no earlier than four months from the certification expiration date, but no later than one month prior to the certification expiration date.

#### Interim Authorization:

- Applications may be submitted to the survey office immediately upon completion of the twenty days of parallel testing.

Any questions regarding the application process should be directed to the attention of James Evans at (614) 644-4222.

## The Pipeline

Bob Taft, Governor  
Joe Koncelik, Director

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