

The Pipeline

Drinking Water Laboratory
Policy & Procedures Update

A publication of the Ohio EPA/DES/DDAGW

Winter 1998

Colisure Taken Over by Idexx

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Millipore has settled the "Defined Substrate Technology Patent Infringement" lawsuit with Idexx out of court. As a result, Millipore will transfer the "Colisure" product line to Idexx. Millipore will continue to ship the product through approximately February 1998. Idexx will begin to sell the "Colisure" product direct sometime after January 1998. By March 1998, Idexx plans to take over all aspects of the "Colisure" business. Idexx will add the "Colisure" product while continuing to supply their "Colilert" products. Idexx plans to only sell "Colisure" direct the same as it has with "Colilert", therefore the product will no longer be available through outside vendors such as Fisher.

Idexx possibly will only supply the more popular form of "Colisure" which is the granular reagent in the small screw capped vials. The lyophilized powder form pre-dispensed in 4 oz glass bottles may be discontinued.

The following is included only for informational purposes and does not constitute an endorsement of any product by the Ohio EPA.

Idexx has a new contact person for the "Colilert" and "Colisure" product line:

*Jay Levesque, 800-321-0207
Ext. 4303*

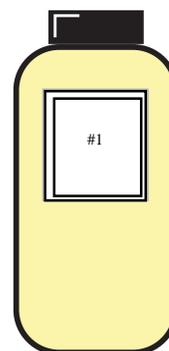
To complete contract transfers for ordering "Colisure" from Idexx contact:

*Andy Meyer
(Andymeyer@idexx.com)
800/248-2483
Fax 207/856-0346 Idexx
Laboratories, Inc.
1 Idexx Drive
Westbrook, ME 04092*

Laboratories approved by the Ohio EPA for chromogenic substrate tests (MMO-MUG) may use either the "Colilert" or "Colisure" reagent. To switch reagents, laboratories must do the following:

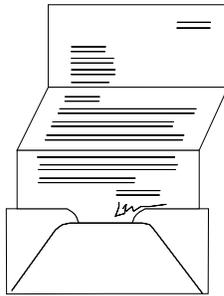
1. Perform the new lot MMO-MUG reagent QC with the three test organisms and record the results in the QC log.
2. Be able to identify the type of reagent that was used to analyze all samples tested. This information may be recorded on the laboratory *Microbiological Test Date Sheet* (Bench Sheet).

We will keep laboratories informed as more information becomes available.



Reporting Microbiological Test Results

Possessing drinking water laboratory certification for microbiological tests does not grant any type of authorization to test raw water, wastewater, soil or other non-drinking water samples. Some laboratories have used drinking water laboratory certification as a means of validating non-drinking water tests.



A result of "Total Coliform Negative" is a valid **and complete** coliform test analysis of potable water when total coliforms are not detected in a sample. If total coliforms are not detected, the group of organisms necessary to test for the presence of fecal coliforms or *E. coli* were not identified in the test sample and the analysis is therefore complete at the total coliform level.

Laboratories may report fecal coliform or *E. coli* tests, however, these tests are not yet required. The final rules that will **require** you to report these parameters should be proposed in February 1998. The current plan is to place the new microbiological regulations in effect concurrently with the Ohio EPA's new data management program (DRINK), which probably will go into effect in the fall of 1998.



Subcontracting Sample Analyses

Commercial laboratories often subcontract certain test parameters to other certified laboratories. This can happen for a variety of reasons, such as loss of certified personnel, a planned means of extending your laboratory's capabilities or to assist during peak work periods. Whenever a test is subcontracted, the sample container or kit must come from the laboratory that actually performed the analysis. For example, if Dolfi Environmental Services is accepting samples for trace metals from its customers and is not certified for trace metals, but instead shipping the samples to a certified trace metal laboratory, Sheeran Testing Lab, Sheeran Testing Lab **MUST** supply all sample containers or kits.

In-Line Ratio Turbidimeters

In the Fall 1997 edition of the "Pipeline" there was a discussion of ratio bench top turbidimeters no longer being acceptable. We have received many calls inquiring about ratio in-line turbidimeters. If you are using a Great Lakes ratio, in-line turbidimeter, and following the manufacturer's recommended procedures, you are using an approved method. The USEPA lists approved method, GLI Method 2, which is specific for Great Lakes instrument. For all other in-line turbidimeters, you may use ratio models as long as you are calibrating them, as you should already be doing, by comparing them daily to a non-ratio bench top instrument.

High Level Chlorine



When you are using a Hach Pocket Colorimeter and Hach reagents to check for total chlorine in the high range (0 to 4.5 mg/L) be sure to add **two** packets of reagent to the sample. For the low range you add only one packet of reagent for both free and total chlorine. According to Hach customer service, the Hach Pocket Colorimeter must not be used for free chlorine in the high range (0-4.5 mg/L).

NELAC

For the past several years the USEPA, the states and private concerns have been meeting twice each year at the National Environmental Laboratory Accreditation Conference (NELAC) to discuss standardization of environmental regulatory functions between all the various environmental testing disciplines. The areas that will be covered by NELAC are drinking water, wastewater and other environmental programs. The USEPA is currently sponsoring the program. The result of NELAC is the National Environmental Laboratory Accreditation Program (NELAP). NELAP is scheduled to begin sometime after January 31, 1998 when the first states have applied for certification under NELAP. Under NELAP, states will be granted certification as the Accrediting Authority if they follow all NELAP rules.

If a state decides to become a NELAP state, they agree to accept tests performed by any NELAP laboratory in the country. Eventually, international reciprocity is planned, since ISO standards are incorporated into the rules. A state may elect to have all of its environmental programs become part of NELAP or just some of them, e.g. wastewater but not air.

Once a state is a NELAP state, they may elect to have a two tiered program, that consists of either all NELAP certified laboratories or a combination of NELAP certified laboratories and state certified laboratories. With a two tiered program, only the NELAP certified laboratories may have their results used out of state. Currently, Ohio does not have reciprocity in any form for drinking water.

How would NELAP affect laboratories? Many things in NELAP are different than Ohio's current program. Some of the major items include:

- ◆ Extensive QA procedures involving measurement traceability and calibration as well as other QA parameters.
- ◆ Surveys done once every two years, instead of once every three years.
- ◆ There will most likely be a separate NELAP certification fee.
- ◆ Laboratory tests would be acceptable within a state as long as a NELAP laboratory performed the test. For example a water supply in Ohio could choose the lowest priced laboratory of all NELAP certified labs to perform tests. The lowest priced lab may be in New Jersey, but the results would be acceptable to Ohio if Ohio was a NELAP state.
- ◆ More stringent personnel requirements. The need and qualifications for laboratory analysts, managers and QC managers is outlined. Laboratories must have QC managers.
- ◆ Extensive educational requirements for the "responsible party of record" (manager).
- ◆ Educational requirements for laboratory analysts, which may consist of an operator's license for water plants.

- ◆ PE testing would change significantly.
- ◆ Stringent training requirements for laboratory evaluation staff.
- ◆ The on-site survey procedures would be changed significantly, with NELAP spelling out the required procedures.
- ◆ A different certification application process in addition to Ohio's application process.

These are just a very small sampling of some of the highlights of NELAP. All requirements are spelled out in the NELAP documents. NELAP documents can be found at their web site which is: <http://134.67.104.12/html/nelac/nelac.htm>

You are encouraged to download these documents and read them.



Ohio EPA on the WWW

Currently, the microbiological and chemistry certification manuals and QC forms are located on the world wide web. Soon all survey applications will also be on the web. To obtain these documents go to: <http://www.epa.ohio.gov/ddagw/labcert.html> and follow the links listed. To use the files after downloading you must have a copy of Adobe Acrobat, which is free from various web sources such as, <http://www.download.com> and <http://www.adobe.com> as well as other sources. Search for ACROBAT and follow the links to Adobe Acrobat Reader. Documents can be read by any platform (PC, Windows, Macintosh, etc.) when using Acrobat.



Reporting Results for Preserved Nitrate Samples

If a sample for nitrate analysis is preserved by acidification, it is not possible to identify individual nitrate or nitrite species. The analytical results for an acidified sample represent a nitrate-nitrite combined total. Individual measurement of nitrate or nitrite may only be done if a sample is not acidified.

The following instructions indicate how nitrate analytical results should be reported on Ohio EPA Inorganic Form 5020 for acid preserved samples.

Report forms for nitrate analytical results will be returned to your laboratory for correction if not completed in accordance with these instructions.

Nitrate Analysis Performed on Acidified Sample, Nitrite Analysis Not Separately Performed

1. Report the nitrate-nitrite combined total as **analyzed** on line 1038, nitrate-nitrite.
2. mReport nitrate on line 1040 as the same value as the combined total.

NOTE: This section is applicable only if your laboratory is also certified to perform **nitrite** testing.

1. If the combined total is 0.5 mg/L or less (non-detection or detection at 0.5 mg/L or less), report nitrite on line 1041 as less than (<) the analyzed combined total.
2. If the combined total is greater than 0.5 mg/L, do not report on line 1041 for nitrite.

Nitrate Analysis Performed on Acidified Sample, Nitrite Analysis Separately Performed prior to Acidification

1. Report the nitrate-nitrite combined total as **analyzed** on line 1038, nitrate-nitrite.
2. Report the nitrite result as analyzed on line 1041.
3. Subtract the nitrite result from the nitrate-nitrite combined total, and report the difference as nitrate on line 1040.

If you have any questions regarding this information, please contact either Wendy Sheeran or Kathy Pinto at (614) 644-2752.



Goodbye Frederick

Frederick Jones, Ohio EPA chemical laboratory certification officer, has recently been promoted to Environmental Specialist in the Air Pollution Division of the Ohio EPA. Fred will be working with the E-Check Program. He will be missed by the Laboratory Certification Section and we are sure, by all the labs he has worked so hard to assist over the past several years.

It will take some time to fill Fred's position. You may experience difficulties directly contacting Lab Cert staff, since less staff will be on the road more often to fill in for Fred.

Please don't be afraid to leave a phone or e-mail message for the Lab Cert staff, we will get back to you as soon as possible. For emergencies, and other urgent items, Lab Cert staff are equipped with pagers. Jacqueline Coleman-Williams will be available to take messages and forward pages, at (614) 644-4245. This should be a short term problem that will be alleviated when a new survey officer is trained.

Revisions to Laboratory Certification Rules

Revisions have been made to the Ohio Administrative Code (OAC) section 3745-89 concerning drinking water laboratory certification. A notice regarding these revisions was mailed in February to all laboratories certified by the Ohio EPA to perform drinking water testing. If your laboratory is interested in receiving a copy of the rule revisions, contact Judy Sellers at (614) 644-2752.

Any comments to these revisions should be submitted to Judy Sellers by April 17, 1998 at the following address:

Ohio EPA
Division of Drinking and
Ground Waters
P.O. Box 1049
Columbus, OH 43216-1049



George Wainwright, Governor of Ohio
Dorothy R. Schepers, Director of Ohio EPA



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