

**Virginia Division of Consolidated Laboratory Services (DCLS)
Virginia Environmental Laboratory Accreditation Program (VELAP)**

FREQUENTLY ASKED QUESTIONS

**40 CFR 136 METHODS UPDATE RULE (MUR) IMPLEMENTATION
APRIL 23, 2013**

What is the 40 CFR 136 Methods Update Rule?

The United States Environmental Protection Agency (US EPA) has issued a final rule to approve new or revised analytical methods for use in water quality monitoring programs for Clean Water Act compliance. The new or revised methods include new technologies and updated versions of previously approved methods. The rule also provides clarification of the process for requesting limited or nationwide review of alternate test procedures (ATP) and additional examples of allowed flexibility to modify approved analytical methods. It also includes new standardized quality assurance and quality control (QA/QC) requirements, and makes some changes to sample collection, preservation, and holding times.

Most of these changes allow more flexibility or options for laboratories. This document cannot describe or summarize every change; laboratories are encouraged to review the MUR in full for information relevant to testing they perform (see link below or perform an internet search for Methods Update Rule).

This information from DCLS is focused on the process of **updating current certifications held by laboratories** to the related MUR-compliant method and associated QA/QC.

When must my laboratory be MUR-compliant?

The Virginia Department of Environmental Quality (DEQ) and the Virginia Division of Consolidated Laboratory Services (DCLS) have worked cooperatively to determine that laboratories performing environmental testing in support of 9VAC25-31 will be given until **February 1, 2014** to be **fully compliant with the MUR.**

How can I determine what I need to change so that my laboratory will be MUR-compliant?

A laboratory may compare its certified methods used for Clean Water Act compliance testing to the listings published in the Methods Update Rule at 40 CFR 136, located at http://www.ecfr.gov/cgi-bin/text-idx?c=ecfr&tpl=/ecfrbrowse/Title40/40cfr136_main_02.tpl. As a convenience to VELAP labs, DCLS will provide “personalized” reports that will list the changes required for MUR compliance for that laboratory.

If a laboratory requires that it remain certified or accredited for a method that the MUR has removed, the laboratory must provide justification. Justification can be in the form of a document such as a copy of a permit specifying the method exception.

How do I get my VELAP certification updated?

1. The report provided by DCLS in April/May 2013 lists the method for each Field of Certification (FOC) requiring an update, and the associated “most recently approved method revision” of that FOC. The laboratory must determine if the “most recently approved method revision” will be the method of choice to implement.
2. Prior to February 1, 2014, DCLS will automatically convert any non-compliant Fields of Certification listed on the laboratory’s certificate to the most recently approved method

revision unless the laboratory communicates that another method will be selected. No Change in Scope requests or fees are required by DCLS for this automated update. **The laboratory MUST contact the Lead Assessor if this method selection will not be implemented.**

3. A laboratory may alternately opt to use another method listed in 40 CFR 136.3 instead of the most recently approved method revision. In this case the laboratory will need to submit a Change in Scope request to DCLS. Change in scope fees may apply. The laboratory should contact DCLS for information on the appropriate form to communicate this request, the required data packet, and the fees associated with the requested update.

When should I make the changes in my laboratory?

The laboratory may update its operating practices, SOPs, Quality Manual, reporting to DEQ, and PT reporting to be MUR-compliant **at any time before February 1, 2014.**

A laboratory may make changes at any time. DCLS requests that the laboratory communicate with its Lead Assessor when the MUR-compliant changes have been implemented.

DCLS will assess the laboratory for compliance with the Method Update Rule after February 1, 2014.

When will I receive an updated VELAP certificate?

DCLS will provide updated certificates to all laboratories prior to February 1, 2014. During this transition period the laboratory may begin referencing the MUR-compliant method in its reports and PTs prior to the certificate re-issuance. Virginia's Department of Environmental Quality (VA DEQ) and Department of Health (VDH) will be given a "cross-walk" document that lists the old method with the corresponding most recent revision method.

My laboratory uses Standard Methods. The new MUR does not tell me what edition number to use. Can you explain these changes?

The naming conventions for methods in the *Standard Methods for the Examination of Water and Wastewater* no longer use an edition number. It used to be that a method was labeled by publication "book" or "edition", such as *SM 5210 B, 19th Edition*. The new naming convention indicates the "-year" the method was approved by the *Standard Methods* Committee, such as *SM 5210 B-2001*. This "-year" designation is the key information for determining if a method is approved for use. Below are examples that illustrate how to tell that a method is the MUR-compliant one.

From 40 CFR 136.3:

TABLE IB—LIST OF APPROVED INORGANIC TEST PROCEDURES

Parameter	Methodology ⁵⁸	EPA ⁵²	Standard methods	ASTM	USGS/AOAC/Other
1. Acidity, as CaCO ₃ , mg/L.	Electrometric endpoint or phenolphthalein endpoint.	2310 B-1997	D1067-06	I-1020-85. ²

From SM 20th Edition and SM 21st Edition:

2310 ACIDITY*

From SM 22nd Edition:

2310 ACIDITY*

2310 A. Introduction

Acidity of a water is its quantitative capacity to react with a strong base to a designated pH. The measured value may vary significantly with the end-point pH used in the determination. Acidity is a measure of an aggregate property of water and can be interpreted in terms of specific substances only when the

chemical compounds, weak acids, weak acid salts such as measured acids. Acids contribute action rates, c measurement water.

*Approved by Standard Methods Committee, 1997.

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* Approved by Standard Methods Committee, 1997. Editorial revisions, 2011.

First, check 40 CFR 136.3 for approved methods. Note that in the example above, Acidity by Standard Methods must be done by “2310 B-1997”. Next, note that the approval year (-1997) listed in the 40 CFR reference for Acidity can ALSO be seen in a footnote near the beginning of the method. Verify that the footnote of the published method your lab is using has the APPROVAL YEAR matching what is in the MUR, or what has been provided by DCLS in your lab’s report as the “most recently approved method revision”.

Some laboratories will need to **RE-FORMAT THE NAME** of their methods. For example, if a laboratory was already using a MUR-compliant Standard Method, the laboratory will not have to switch to a new revision but will have to change the format of the name, when reporting results, so that the name is consistent with the format now used in 40 CFR 136. For example, SM 2540 D, 20th Edition is renamed to SM 2540 D-1997 in 40 CFR 136. **Laboratory SOPs, reports to customers, and PT reporting references must be revised for the new naming format prior to February 1, 2014.**

DCLS has provided a Technical Assistance Document located on the VELAP web page (www.dgs.virginia.gov/dcls) with other MUR-related documents to assist labs in reformatting the name of their Standard Methods in accordance with this new format.

If we implement method changes before February 1, 2014 will the data be acceptable to DEQ before my certificate is updated?

Yes! DCLS and DEQ are working cooperatively toward the MUR implementation date of February 1, 2014. Both agencies understand that this will be a transitional period for laboratories, for DCLS, and for DEQ. Your MUR-compliant data will be acceptable to DEQ at any time between now and February 2014. Both agencies encourage laboratories to transition to MUR compliance at their earliest convenience.

Will the 22nd Edition of Standard Methods be approved for Clean Water Act use?

On June 20, 2012, EPA provided a letter that **both allowed and recommended** the use of over 100 methods which were **editorially revised** in the **22nd Edition** of *Standard Methods*. Editorially revised means that the method procedure is unchanged from the one previously approved by the Standard Methods Committee but is updated to include a specific reference to the QA/QC that is intended for use in the method.

Note that the QA/QC modules for SM 2020, 3020, 4020, 5020, 6020, 7020, 8020, and 9020 are available at no charge at Standard Methods Online. Module 1020 requires a fee, currently \$69. These methods are labeled by their EDITORIALY REVISED DATE, which in every case is “-2011”.

Methods that were approved and recommended by EPA as EDITORIALY REVISED in 2011 are now the MOST RECENTLY APPROVED REVISION. DCLS has provided a Guidance Document located on the VELAP web page (www.dgs.virginia.gov/dcls) with other MUR-related documents to provide important information regarding Standard Methods 22nd Edition QA/QC to labs accredited under 1VAC30-46.

My laboratory typically runs non-potable water samples and drinking water samples using the same Standard Method and by the same SOP. Why does the report from DCLS requiring changes to my Scope of Accreditation only address the non-potable water changes?

The information in this document pertains only to Clean Water Act testing done under 40 CFR 136. Safe Drinking Water Act testing under 40 CFR 141 and 143 was not updated by this Methods Update Rule.

However, DCLS will change the naming convention on the laboratory’s certificate for all Standard Methods references (as described on page 3), at the time that MUR updates are made to the laboratory’s certificate.

Can you help me be sure I’ve done everything I need to do for MUR-compliance?

The attached Self-Audit Checklist (page 5) is a tool that was designed for the laboratory to use to review and assure that all aspects of MUR-compliance have been addressed.

Please address any questions to your laboratory’s Lead Assessor or e-mail them to Lab_Cert@dgs.virginia.gov.

SELF-AUDIT CHECKLIST

- Determine what method the laboratory will use for MUR compliance
 - ❑ If the laboratory will use the most recently approved revised method(s) listed on the report from DCLS, no response is needed. DCLS will automatically update certificates prior to February 1, 2014. The laboratory will be assessed to these methods beginning February 1, 2014.
 - ❑ If the laboratory is choosing a different MUR-compliant method than the one on the report from DCLS, submit a Change in Scope Request.

- Obtain a copy of the method(s) chosen for MUR compliance
NOTE: For *Standard Methods*, the laboratory may purchase single methods using Standard Methods Online or may purchase a hard copy of the compendium.

- Update the laboratory's Quality Manual to accurately reflect all method(s) for which certification is held.

- Update the laboratory's Standard Operating Procedure(s) to reflect the change in method(s), including procedural changes, QA/QC updates, and naming conventions, if applicable.

- Be sure to review the new method carefully **as well as the relevant QA/QC chapters** to assure that the laboratory's SOP is fully compliant with the published method **and its associated QA/QC**.

- Submit a Change in Scope packet to DCLS **if switching to a different method** than what is listed on the personalized report received in April/May 2013 from DCLS. (Change in Scope packet will include SOP, demonstration of capability, PT studies, if applicable). DCLS will calculate fee requirements to be paid before approval can be granted.)

- Be sure that the revised SOP has been approved by management and read and understood by relevant staff.

- Update reporting procedures (to customers and for PTs) to reflect the change in methods.

- **Please notify the laboratory's Lead Assessor by phone or e-mail when the laboratory has made MUR-compliance changes. This will assist DCLS in updating the certification database.**