

January 2008

U.S. Environmental Protection Agency Method Update Rule and its Impact to Hach and Lachat Methods

Methods Update Rule

Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act; National Primary Drinking Water Regulations; and National Secondary Drinking Water Regulations; Analysis and Sampling Procedures

Summary of Rule

This Methods Update Rule (MUR) withdraws approximately 109 EPA methods that have an equivalent promulgated consensus-based method, and modifies the testing procedures approved for chemical analysis and sampling under the Clean Water Act and Safe Drinking Water Act. EPA proposed these changes for public comment on August 18, 2003 and April 6, 2004. Final Rule was promulgated March 12, 2007.

The Clean Water and Safe Drinking Water Act changes adopted in these final rules provide increased flexibility to the regulated community and laboratories in the selection of analytical methods and methods modification. Method changes that meet the requirements of 136.6 in the Method Update Rule will no longer be reviewed by EPA, nor will EPA issue acceptance letters of equivalency.

Example of Method Modifications allowed by the Method Update Rule

The March 12th Method Update Rule promulgated 40 CFR 136.6, which allows for certain modifications of methods. These changes include:

- Changes between manual methods, flow analyzer and discrete instrumentation.
- Changes between automated and manual sample preparation digestions, distillations, and extractions; in-line sample preparation is an acceptable form of automated sample preparation for Clean Water Act methods.
- Changes in calibration (provided that the modified range covers any relevant regulatory range).
- Changes in equipment operating parameters such as minor changes in the monitoring wavelength of a colorimeter or modifying temperature program for a specific chromatographic column, or sensible changes in reaction time and temperature as needed to achieve the chemical reaction defined in the unmodified Clean Water Act method.
- Adjusting sample sizes or changing extraction solvents to optimize method performance in meeting regulatory requirements.

- Minor changes in reagents used where the underlying reaction principles remain virtually the same. Examples of some of these changes include:
 - Changes in pH
 - Changes in pH adjustment reagents
 - Changes in buffer reagents
 - Changes in complexing reagents

Evaluating Method Modifications

Method Developer Responsibilities – EPA recommends that the developer of the modified method provide the following documentation to the end-user of the modified method:

- Provide a side-by-side method comparison table. The comparison table should include the number and title of each method, the latest revision date (do not change the revision dates for editorial changes).
- Make available to the modified method in EPA EMMC format.
- Provide a copy of the data comparing the modified method performance to the approved method to demonstrate that the method is capable of yielding reliable data for compliance monitoring purposes.

Impact of the Method Update Rule on Current Hach and Lachat Methods

All Lachat and Hach methods that have a letter of acceptance from EPA remain valid for use in drinking water and wastewater regulatory compliance programs. Equivalent methods that referenced a withdrawn EPA method should now reference the updated method in the MUR. A new side-by-side study should be conducted that demonstrates equivalency to the referenced approved method.