

## REVISIONS TO TEST PROCEDURES FOR WASTEWATER AND BIOSOLIDS UNDER 40 CFR §§136 & 503

Revisions to analytical test procedures for wastewater and biosolids were published in the March 12, 2007 and March 26, 2007 issues of the *Federal Register*.

In general, 109 methods from EPA's 1979 *Methods for the Chemical Analysis of Water and Wastes* were deleted from "Table IB-List of Approved Inorganic Test Procedures" in 40 CFR §136. Newer EPA method manuals such as *Methods for the Determination of Metals in Environmental Samples* (1994) and *Methods for the Determination of Inorganic Substances in Environmental Samples* (1993) are referenced. *Standard Methods Online* is now approved for most parameters.

Some of the revisions that impact accredited wastewater laboratories are as follows:

- Five (5) new methods for E. coli and two (2) new enterococci methods approved for wastewater.
- Two (2) new fecal coliform methods and one (1) salmonella method approved for biosolids.
- Ion Chromatography approved for anions such as Ammonia Nitrogen, Bromide, Chloride, Fluoride, Hexavalent Chromium, Nitrate, Nitrate-Nitrite, Nitrite, Orthophosphate and Sulfate.
  - Cyanide by Flow Injection Analysis.
  - Metals by ICP-AES, ICP-MS and STGFAA.
  - Low Level Amperometry for Chlorine.
  - Use of Ion Selective Electrode for Chloride, Cyanide, Nitrate and Sulfate.
  - Replacement of Mercuric Sulfate with Copper Sulfate for TKN.

In addition, revisions are made to Table II-Required Containers, Preservation Techniques and Holding Times in 40 CFR §136, as follows:

- Holding time for fecal coliform is extended to 24 hours in biosolids that are classified as Class A composted,

or Class B aerobically or anaerobically digested.

- Refrigeration temperature for most analyses is now  $\leq 6^{\circ}\text{C}$  instead of  $4^{\circ}\text{C}$ .
- Procedures for removal or suppression of Cyanide interferences.

• Different preservative and holding time for Hexavalent Chromium determined by ion chromatography.

So what, you may say. How does this affect me? For those of you who have applied for and received interim accreditation, and have not yet had your onsite assessment by DEP Laboratory Accreditation Program (LAP) staff, you may need to change some of the test methods that you listed on the accreditation application. If you only used *Standard Methods* method numbers on the application, you are probably okay.

Here are a few examples that may impact your laboratory or the laboratory you may contract with to conduct your facility's regulatory analytical testing.

- If you still use the Nessler Method for Ammonia Nitrogen, the EPA method is no longer valid. You must use the Nessler method from the 18th edition of *Standard Methods* or the approved ASTM, AOAC or USGS method.
  - The 1979 EPA methods for BOD, CBOD, Chlorine Residual, pH, TKN, Nitrate-Nitrite, Nitrite, Settleable Solids, Total Solids, TDS, TSS, Surfactants and Temperature, to name a few, have been eliminated. Revised EPA methods or those approved from *Standard Methods* may be used instead.

DEP provides a table on their website that shows deleted, revised and new methods if you have not received a copy in the mail from DEP. Follow the link below for DEP's webpage:

[www.depweb.state.pa.us/labs/lib/labs/2007\\_0320\\_r1\\_mur\\_crosswalk\\_npw.pdf](http://www.depweb.state.pa.us/labs/lib/labs/2007_0320_r1_mur_crosswalk_npw.pdf)

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