



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 WASHINGTON, D.C. 20460

Rodger Baird
 Joint Editorial Board
 Standard Methods
 3645 Country Meadow Lane
 Escondido, CA 92025
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ATP Case Number ADMINISTRATOR
 N12-0006

Dear Mr. Baird,

June 20, 2012

The Engineering and Analytical Support Branch (EASB) has reviewed several methods published in the 22nd Edition of *Standard Methods for the Examination of Water and Wastewater* (Standard Methods) and the on-line version of Standard Methods. These methods include editorial changes to the previously approved versions of the methods that were included in the most recent Method Update Rule (MUR) published in the *Federal Register* on May 18, 2012 (77 FR 29758).

Based on this review, EASB has determined that these methods are acceptable versions of the approved methods listed at Title 40 of the Code of Federal Regulations (40 CFR) part 136.3, Tables IB and IC, and may be used for compliance monitoring performed under the Clean Water Act. Table 1 lists the approved version of each Standard Method that was included in the MUR and the corresponding editorially revised 2011 version published in the 22nd Edition of Standard Methods and the on-line version of Standard Methods.

Table 1

| Approved Standard Method in Most Recent MUR | Standard Methods 22 nd Edition Editorial Revisions |
|---|---|
| 2120 B-2001 | 2120 B-2011 |
| 2130 B-2001 | 2130 B-2011 |
| 2310 B-1997 | 2310 B-2011 |
| 2320 B-1997 | 2320 B-2011 |
| 2340 B-1997 | 2340 B-2011 |
| 2340 C-1997 | 2340 C-2011 |
| 2510 B-1997 | 2510 B-2011 |
| 2540 B-1997 | 2540 B-2011 |
| 2540 C-1997 | 2540 C-2011 |
| 2540 D-1997 | 2540 D-2011 |
| 2540 E-1997 | 2540 E-2011 |
| 2540 F-1997 | 2540 F-2011 |
| 3111 B-1999 | 3111 B-2011 |

Table 1 (continued)

| | |
|-----------------------------|-----------------------------|
| 3111 C-1999 | 3111 C-2011 |
| 3111 D-1999 | 3111 D-2011 |
| 3111 E-1999 | 3111 E-2011 |
| 3112 B-2009 | 3112 B-2011 |
| 3113 B-2004 | 3113 B-2011 |
| 3114 B-2009 | 3114 B-2011 |
| 3114 C-2009 | 3114 C-2011 |
| 3120 B-1999 | 3120 B-2011 |
| 3125 B-2009 | 3125 B-2011 |
| 3500-Al B-2001 | 3500-Al B-2011 |
| 3500-As B-1997 | 3500-As B-2011 |
| 3500-Ca B-1997 | 3500-Ca B-2011 |
| 3500-Cr B-2009 | 3500-Cr B-2011 |
| 3500-Cr C-2009 | 3500-Cr C-2011 |
| 3500-Cu B-1999 | 3500-Cu B-2011 |
| 3500-Cu C-1999 | 3500-Cu C-2011 |
| 3500-Fe B-1997 | 3500-Fe B-2011 |
| 3500-K B-1997 | 3500-K B-2011 |
| 3500-K C-1997 | 3500-K C-2011 |
| 3500-Mn B-1999 | 3500-Mn B-2011 |
| 3500 Na B-1997 | 3500-Na B-2011 |
| 3500-Pb B-1997 | 3500-Pb B-2011 |
| 3500-V B-1997 | 3500-V B-2011 |
| 3500-Zn B-1997 | 3500-Zn B-2011 |
| 4110 B-2000 | 4110 B-2011 |
| 4110 C-2000 | 4110 C-2011 |
| 4110 D-2000 | 4110 D-2011 |
| 4140 B-1997 | 4140 B-2011 |
| 4500-B B-2000 | 4500-B B-2011 |
| 4500-Cl ⁻ B-1997 | 4500-Cl ⁻ B-2011 |
| 4500-Cl ⁻ C-1997 | 4500-Cl ⁻ C-2011 |
| 4500-Cl ⁻ D-1997 | 4500-Cl ⁻ D-2011 |
| 4500-Cl ⁻ E-1997 | 4500-Cl ⁻ E-2011 |
| 4500-Cl B-2000 | 4500-Cl B-2011 |
| 4500-Cl C-2000 | 4500-Cl C-2011 |
| 4500-Cl D-2000 | 4500-Cl D-2011 |
| 4500-Cl E-2000 | 4500-Cl E-2011 |
| 4500-Cl F-2000 | 4500-Cl F-2011 |
| 4500-Cl G-2000 | 4500-Cl G-2011 |
| 4500-CN ⁻ B-1999 | 4500-CN ⁻ B-2011 |
| 4500-CN ⁻ C-1999 | 4500-CN ⁻ C-2011 |

Table 1 (Continued)

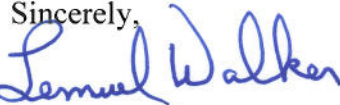
| | |
|---|---|
| 4500-CN ⁻ D-1999 | 4500-CN ⁻ D-2011 |
| 4500-CN ⁻ E-1999 | 4500-CN ⁻ E-2011 |
| 4500-CN ⁻ F-1999 | 4500-CN ⁻ F-2011 |
| 4500-CN ⁻ G-1999 | 4500-CN ⁻ G-2011 |
| 4500-F ⁻ B-1997 | 4500-F ⁻ B-2011 |
| 4500-F ⁻ C-1997 | 4500-F ⁻ C-2011 |
| 4500-F ⁻ D-1997 | 4500-F ⁻ D-2011 |
| 4500-F ⁻ E-1997 | 4500-F ⁻ E-2011 |
| 4500-H ⁺ -2000 | 4500-H ⁺ -2011 |
| 4500-N _{org} B-1997 | 4500-N _{org} B-2011 |
| 4500-N _{org} C-1997 | 4500-N _{org} C-2011 |
| 4500-N _{org} D-1997 | 4500-N _{org} D-2011 |
| 4500-NH ₃ B-1997 | 4500-NH ₃ B-2011 |
| 4500-NH ₃ C-1997 | 4500-NH ₃ C-2011 |
| 4500-NH ₃ D-1997 | 4500-NH ₃ D-2011 |
| 4500-NH ₃ E-1997 | 4500-NH ₃ E-2011 |
| 4500-NH ₃ F-1997 | 4500-NH ₃ F-2011 |
| 4500-NH ₃ G-1997 | 4500-NH ₃ G-2011 |
| 4500-NH ₃ H-1997 | 4500-NH ₃ H-2011 |
| 4500-NO ₃ ⁻ D-2000 | 4500-NO ₃ ⁻ D-2011 |
| 4500-NO ₃ ⁻ E-2000 | 4500-NO ₃ ⁻ E-2011 |
| 4500-NO ₃ ⁻ F-2000 | 4500-NO ₃ ⁻ F-2011 |
| 4500-NO ₃ ⁻ H-2000 | 4500-NO ₃ ⁻ H-2011 |
| 4500NO ₂ ⁻ B-2000 | 4500NO ₂ ⁻ B-2011 |
| 4500-O B-2001 | 4500-O B-2011 |
| 4500-O C-2001 | 4500-O C-2011 |
| 4500-O D-2001 | 4500-O D-2011 |
| 4500-O E-2001 | 4500-O E-2011 |
| 4500-O F-2001 | 4500-O F-2011 |
| 4500-O G-2001 | 4500-O G-2011 |
| 4500-P B(5)-1999 | 4500-P B(5)-2011 |
| 4500-P E-1999 | 4500-P E-2011 |
| 4500-P F-1999 | 4500-P F-2011 |
| 4500-P G-1999 | 4500-P G-2011 |
| 4500-P H-1999 | 4500-P H-2011 |
| 4500-SiO ₂ C-1997 | 4500-SiO ₂ C-2011 |
| 4500-SiO ₂ E-1997 | 4500-SiO ₂ E-2011 |
| 4500-SiO ₂ F-1997 | 4500-SiO ₂ F-2011 |
| 4500-SO ₄ ²⁻ C-1997 | 4500-SO ₄ ²⁻ C-2011 |

Table 1 (Continued)

| | |
|---|---|
| 4500-SO ₄ ²⁻ D-1997 | 4500-SO ₄ ²⁻ D-2011 |
| 4500-SO ₄ ²⁻ E-1997 | 4500-SO ₄ ²⁻ E-2011 |
| 4500-SO ₄ ²⁻ F-1997 | 4500-SO ₄ ²⁻ F-2011 |
| 4500-SO ₄ ²⁻ G-1997 | 4500-SO ₄ ²⁻ G-2011 |
| 4500-S ²⁻ B-2000 | 4500-S ²⁻ B-2011 |
| 4500-S ²⁻ C-2000 | 4500-S ²⁻ C-2011 |
| 4500-S ²⁻ D-2000 | 4500-S ²⁻ D-2011 |
| 4500-S ²⁻ F-2000 | 4500-S ²⁻ F-2011 |
| 4500-S ²⁻ G-2000 | 4500-S ²⁻ G-2011 |
| 4500-SO ₃ ²⁻ B-2000 | 4500-SO ₃ ²⁻ B-2011 |
| 5210 B-2001 | 5210 B-2011 |
| 5220 B-1997 | 5220 B-2011 |
| 5220 C-1997 | 5220 C-2011 |
| 5220 D-1997 | 5220 D-2011 |
| 5310 B-2000 | 5310 B-2011 |
| 5310 C-2000 | 5310 C-2011 |
| 5310 D-2000 | 5310 D-2011 |
| 5520 B-2001 | 5520 B-2011 |
| 5520 F-2001 | 5520 F-2011 |
| 5540 C-2000 | 5540 C-2011 |
| 6200 B-1997 | 6200 B-2011 |
| 6200 C-1997 | 6200 B-2011 |

For a method that is approved in more than one edition of a compendium an analyst must, at a minimum, follow the QA/QC in that edition. To improve consistency and ensure reliable results, laboratories are encouraged to phase-in and adopt the QA/QC procedures specified in the most recent, approved editions of that compendium.

We appreciate your interest in the development of environmental monitoring methods. If you have any questions regarding the review of these alternate test procedures, please contact me by e-mail at: walker.lemuel@epa.gov or by telephone at: 202-566-1077.

Sincerely,


Lemuel Walker
 ATP Coordinator
 Engineering and Analysis Division (4303 T)
 Engineering and Analytical Support Branch