

Chapter NR 149

APPENDIX II

Methods, Analytes, and Analyte Groups for Certification in the Drinking Water Matrix

**TABLE A
DISINFECTION BYPRODUCTS**

| Class | Analytical Method | Analyte |
|-------------------------|-----------------------------|--------------------------------------------|
| Disinfection Byproducts | | |
| | 300.0 ¹ | Bromide Chlorite |
| | 300.1 ² | Bromate Bromide Chlorate Chlorite |
| | 317.0 rev. 2.0 ⁸ | Bromate Chlorite |
| | 321.8 ⁸ | Bromate |
| | 326.0 ⁸ | Bromate Chlorite |
| | 327.0 rev. 1.1 ⁸ | Chlorite |
| | 552.1 ³ | Haloacetic Acids (five) |
| | 552.2 ⁴ | Haloacetic Acids (five) |
| | 552.3 ⁸ | Haloacetic Acids (five) |
| | 4500-CIO2-D ^{3,4} | Chlorine Dioxide |
| | 4500-CIO2-E ^{5,6} | Chlorite |
| | 4500-CIO2-E ^{3,4} | Chlorine Dioxide |
| | 4500-O3-B ^{3,4} | Ozone |
| | 6251B ⁶ | Haloacetic Acids (five) |
| | D6581-00 ⁷ | Bromate |

¹ “Methods for the Determination of Inorganic Substances in Environmental Samples”, EPA/600/R-930100, August 1993, Available at NTIS, PB 94-121811.

² “Methods for the Determination of Organic and Inorganic Compounds in Drinking Water- Volume I”, EPA-815-R-00-014, August 2000. Available from NTIS, PB2000-106981, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

³ “Methods for the Determination of Organic Compounds in Drinking Water- Supplement II”, EPA-600/R-92/129, DATE, Available at NTIS, PB92-207703.

⁴ “Methods for the Determination of Organic Compounds in Drinking Water- Supplement III”, EPA-600/R-95/131, DATE, Available at NTIS PB95-261616.

⁵ “Standard Methods for the Examination of Water and Wastewater”, American Public Health Association, American Water Works Association, Water Pollution Control Federation, 18th edition, 1989, 1015 Fifteenth Street N.W., Washington DC 20005.

⁶ “Standard Methods for the Examination of Water and Wastewater”, American Public Health Association, American Water Works Association, Water Pollution Control Federation, 19th edition, 1995, 1015 Fifteenth Street N.W., Washington DC 20005.

⁷ “Annual Book of ASTM Standards, Vols. 11.01 and 11.02, 2001. Available from the American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103. The same method on the current edition may be used if the date of method revisions is the same as the 1991 edition.

⁸ These methods can be accessed and downloaded directly on-line at <http://www.epa.gov/safewater/methods/sourcalt.html> or at <http://www.epa.gov/safewater/safewater/methods/compmon.html>.

**TABLE B
PRIMARY INORGANICS**

| Class | Analytical Method | Analyte |
|----------------------------------------|-------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Primary Inorganic Contaminants- Metals | | |
| | 200.7 ² | Barium Beryllium Cadmium Chromium Copper Nickel |
| | 200.8 ² | Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Lead Mercury Nickel Selenium Thallium |
| | 200.9 ² | Antimony Arsenic Beryllium Cadmium Chromium Copper Lead Nickel Selenium Thallium |
| | 245.1 ² | Mercury |
| | 245.2 ³ | Mercury |
| | 3111B ^{4,5} | Copper Nickel |
| | 3111B-99 ¹⁶ | Copper |
| | | Nickel |
| | 3111D ^{4,5} | Barium |
| | 3111 D-99 ¹⁶ | Barium |
| | 3112B ^{4,5} | Mercury |
| | 3112B-99 ¹⁶ | Mercury |
| | 3113B ^{4,5} | Antimony Arsenic Barium Beryllium Cadmium Chromium Copper Lead Nickel Selenium |
| | 3113B-99 ¹⁶ | Antimony Arsenic Barium Beryllium Cadmium Chromium Copper |

| Class | Analytical Method | Analyte |
|--------------------------------------------|--------------------------------|-----------------------------------------------------|
| | | Lead Nickel Selenium |
| | 3114B ^{4,5} | Arsenic Selenium |
| | 3114 B-97 ¹⁶ | Arsenic Selenium |
| | 3120B ^{4,5,6} | Barium Beryllium Chromium Copper Nickel |
| | 3120B-99 ¹⁶ | Barium Beryllium Chromium Copper Nickel |
| | D1688-95,02 A ¹¹ | Copper |
| | D1688-95,02 C ¹¹ | Copper |
| | D2972-97,03 B ¹¹ | Arsenic |
| | D2972-97,03 C ¹¹ | Arsenic |
| | D3223-97,02 ¹¹ | Mercury |
| | D3559-96,03 D ¹¹ | Lead |
| | D3645-97,03 B ¹¹ | Beryllium |
| | D3697-92,02 ¹¹ | Antimony |
| | D3859-98,03 A ¹¹ | Selenium |
| | D3859-98,03 B ¹¹ | Selenium |
| | Palintest 1001 ¹⁵ | Lead |
| Primary Inorganic Contaminants- Non-Metals | | |
| | 300.0 ¹ | Fluoride Nitrate Nitrate + Nitrite Nitrite |
| | 300.1 ¹⁷ | Fluoride Nitrate Nitrate + Nitrite Nitrite |
| | 335.4 ¹ | Cyanide |
| | 353.2 ¹ | Nitrate Nitrate + Nitrite Nitrite |
| | 4110B ^{4,5, 6} | Fluoride Nitrate Nitrate + Nitrite Nitrite |
| | 4110B-00 ¹⁶ | Fluoride Nitrate Nitrate + Nitrite Nitrite |
| | 4500-CN- C,E ^{4,5, 6} | Cyanide |
| | 4500-CN- C,E-99 ¹⁶ | Cyanide |
| | 4500-CN- C,F ^{4,5, 6} | Cyanide |
| | 4500-CN- C,F-99 ¹⁶ | Cyanide |
| | 4500-CN- C,G ^{4,5, 6} | Cyanide, Amenable |
| | 4500-CN- C,G-99 ¹⁶ | Cyanide, Amenable |
| | 4500F- B, D ^{4,5, 6} | Fluoride |

| Class | Analytical Method | Analyte |
|-------|-------------------------------------------|-----------------------------------------------------|
| | 4500F ⁻ B, D-97 ¹⁶ | Fluoride |
| | 4500F ⁻ C ^{4,5, 6} | Fluoride |
| | 4500F ⁻ C-97 ¹⁶ | Fluoride |
| | 4500F ⁻ E ^{4,5, 6} | Fluoride |
| | 4500F ⁻ E-97 ¹⁶ | Fluoride |
| | 4500-NO ₂ -B ^{4,5, 6} | Nitrite |
| | 4500-NO ₂ -B-00 ¹⁶ | Nitrite |
| | 4500-NO ₃ -D ^{4,5, 6} | Nitrate |
| | 4500-NO ₃ -D-00 ¹⁶ | Nitrate |
| | 4500-NO ₃ -E ^{4,5, 6} | Nitrate Nitrate + Nitrite Nitrite |
| | 4500-NO ₃ -E-00 ¹⁶ | Nitrate Nitrate + Nitrite Nitrite |
| | 4500-NO ₃ -F ^{4,5, 6} | Nitrate Nitrate + Nitrite Nitrite |
| | 4500-NO ₃ -F-00 ¹⁶ | Nitrate Nitrate + Nitrite Nitrite |
| | QuikChem10-204-00-1-X ⁷ | Cyanide |
| | 129-71W ⁸ | Fluoride |
| | 380-75WE ⁸ | Fluoride |
| | 601 ⁹ | Nitrate |
| | B-1011 ¹⁰ | Nitrate Nitrate + Nitrite Nitrite |
| | D1179-93, 99B ¹¹ | Fluoride |
| | D2036-98A ¹¹ | Cyanide |
| | D2036-98B ¹¹ | Cyanide |
| | D3867-90A ¹¹ | Nitrate Nitrate + Nitrite Nitrite |
| | D3867-90B ¹¹ | Nitrate Nitrate + Nitrite Nitrite |
| | D4327-97, 03 ¹¹ | Fluoride Nitrate Nitrate + Nitrite Nitrite |
| | D6508, Rev 2 ¹⁹ | Fluoride Nitrate Nitrate + Nitrite Nitrite |
| | D6888-04 ¹¹ | Cyanide |
| | I-3300-85 ¹² | Cyanide |
| | Kelada 01 ¹³ | Cyanide |
| | OIA-1677, DW ¹⁸ | Cyanide |

¹ "Methods for the Determination of Inorganic Substances in Environmental Samples", EPA-600/R-93-100, August 1993. Available at NTIS PB94-121811.

² "Methods for the Determination of Metals in Environmental Samples- Supplement I", ORD Publications, EPA/600/R-94-111 May 1994. Available from National Technical Information Service, Order #PB94-18492, 5285 Port Royal Road, Springfield, VA 21161.

³ Method 245.2 is available from US EPA, EMSL, Cincinnati, OH 45268. The identical methods were formerly in "Methods for Chemical Analysis of Water and Wastes" EPA-600/4-79-020, March 1983. Available at National Technical Information Service, PB84-128677, 5285 Port Royal Road, Springfield, VA 22161.

⁴ "Standard Methods for the Examination of Water and Wastewater", 18th edition, American Public Health Association, American Water Works Association, 1992. Copies may be obtained from the American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005.

⁵ "Standard Methods for the Examination of Water and Wastewater", 19th edition, American Public Health Association, American Water Works Association, 1992. Copies may be obtained from the American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005.

⁶ "Standard Methods for the Examination of Water and Wastewater", 20th edition, American Public Health Association, American Water Works Association, 1998. Copies may be obtained from the American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005.

⁷ "Digestion and distillation of total cyanide in drinking and wastewaters using MICRO DIST and determination of cyanide by flow injection analysis", Revision 2.1, November 30, 2000, Lachat Instruments, 6645 W. Mill Road, Milwaukee, WI 53218.

⁸ The procedures shall be done in accordance with the Industrial Method No 129-71 W, "Fluoride in Water and Wastewater", December 1972 and Method Number 380-75WE, "Fluoride in Water and Wastewater", February 1976, Technicon Industrial Systems. Copies may be obtained from the Technicon Industrial Systems, Tarrytown, NY 10591.

⁹ Technical Bulletin 601 "Standard Method of Test for Nitrate in Drinking Water", July 1994, PN 221890-001, Thermo Orion, 500 Cummins Center, Beverly, MA 01915+9846. This method is identical to Orion WeWWG/5580, which is approved for nitrate analysis. ATI Orion republished the method in 1994, and renumbered it as 601, because the 1985 manual, "Orion Guide to Water and Wastewater Analysis," which contained WeWWG/5880, is no longer available.

¹⁰ Waters Test Method for the Determination of Nitrate/Nitrite in Water using Single Column Ion Chromatography", Method B-1011, Millipore Corporation, Waters Chromatography Division, 34 Maple Street, Milford, MA 01757.

¹¹ The procedures shall be done in accordance with the "Annual Book of ASTM Standards", 1994, Vols 11.01 and 11.02. Copies may be obtained from the American Society for Testing Material, 1916 Race Street, Philadelphia, PA 19103.

¹² "Methods for the Analysis of Inorganic Substances in Water and Fluvial Sediments", U.S. Department of the Interior, U.S. Geological Survey, Federal Center, P.O. Box 25425, Denver, CO 80225-0425.

¹³ Kelada Automated Test Methods for Total Cyanide, PB 2001-108275. Available from National Technical Information Service, Order #PB2001-108275, 5285 Port Royal Road, Springfield, VA 22161.

¹⁴ GLI Method 2, "Turbidity", November 2, 1992. Great Lakes Instruments, Inc. 8855 North 55th Street, Milwaukee, WI 53223.

¹⁵ "Method 1001: Lead in Drinking Water by Differential Pulse Anodic Stripping Voltammetry", August 1999, Palintest Ltd, 21 Kenton Lands Road, Erlanger, KY 41018.

¹⁶ "Standard Methods Online" are available at <http://www.standardmethods.org>. The year in which each method was approved by the Standard Methods Committee is designated by the last two digits in the method number. The methods listed are the only online versions that may be used.

¹⁷ "Methods for the Determination of Organic and Inorganic Compounds in Drinking Water," Vol. 1, EPA 815-R-00-014, August 2000. Available at NTIS, PB2000-106981.

¹⁸ "Method OIA-1677, DW", "Available Cyanide by Flow Injection, Ligand Exchange, and Amperometry," January 2004. EPA-821-R-04-001, Available from ALPKEM, A Division of OI Analytical, P.O. Box 9010, College Station, TX 77842-9010.

¹⁹ "Method D6508, Rev. 2", "Test Method for Determination of Dissolved Inorganic Anions in Aqueous Matrices Using Capillary Ion Electrophoresis and Chromate Electrolyte," available from Waters Corp, 34 Maple St, Milford, MA, 01757, Telephone: 508/482-2131, Fax: 508/482-3625.

**TABLE C
SECONDARY CONTAMINANTS**

| Class | Analytical Method | Analyte |
|---------------------------------|---------------------------|--------------------------------------------------------------------------------|
| Secondary Contaminants – Metals | | |
| | 200.7 ² | Aluminum Calcium Iron Manganese Silica Silver Sodium Zinc |
| | 200.8 ² | Aluminum Manganese Silver Zinc |
| | 200.9 ² | Aluminum Iron Manganese Silver |
| | 3111B ^{3,4} | Calcium Iron Manganese Silver Sodium Zinc |
| | 3111B-99 ⁸ | Calcium Iron Manganese Silver Sodium Zinc |
| | 3111D ^{3,4} | Aluminum |
| | 3111D-99 ⁸ | Aluminum |
| | 3113B ^{3,4} | Aluminum Iron Manganese Silver |
| | 3113B-99 ⁸ | Aluminum Iron Manganese Silver |
| | 3120B ^{3,4,5} | Aluminum Calcium Iron Manganese Silica Silver Zinc |
| | 3120B-99 ⁸ | Aluminum Calcium Iron Manganese Silica Silver Zinc |
| | 3500-Ca B ⁵ | Calcium |
| | 3500-Ca B-97 ⁸ | Calcium |
| | 3500-Ca D ^{3,4} | Calcium |

| Class | Analytical Method | Analyte |
|-----------------------------------|----------------------------------------------------------|---------------------------------------|
| | 4500-Si-D ^{3,4} | Silica |
| | 4500-Si-E ^{3,4} | Silica |
| | 4500-Si-F ^{3,4} | Silica |
| | 4500-SiO ₂ -C ⁵ | Silica |
| | 4500-SiO ₂ -D ⁵ | Silica |
| | 4500-SiO ₂ -E ⁵ | Silica |
| | 4500-SiO ₂ -C-97 ⁸ | Silica |
| | 4500-SiO ₂ -D-97 ⁸ | Silica |
| | 4500-SiO ₂ -E-97 ⁸ | Silica |
| | D511-93, 03A ⁶ | Calcium |
| | D511-93, 03B ⁶ | Calcium |
| | D859-94, 00 ⁶ | Silica |
| | D6919-03 ⁶ | Calcium Sodium |
| | I-1700-85 ⁷ | Silica |
| | I-2700-85 ⁷ | Silica |
| | I-3720-85 ⁷ | Silver |
| Secondary Contaminants –NonMetals | | |
| | 300.0 ¹ | Chloride Orthophosphate Sulfate |
| | 300.1 ¹⁰ | Chloride Orthophosphate Sulfate |
| | 365.1 ¹⁰ | Orthophosphate |
| | 375.2 ¹ | Sulfate |
| | 2320B ^{3,4,5} | Alkalinity |
| | 2320B-97 ⁸ | Alkalinity |
| | 2540C ^{3,4,5} | Total Dissolved Solids (TDS) |
| | 2540C-97 ⁸ | Total Dissolved Solids (TDS) |
| | 4110B ^{3,4,5} | Chloride Orthophosphate Sulfate |
| | 4110B-00 ⁸ | Chloride Orthophosphate Sulfate |
| | 4500-Cl ⁻ B ^{3,4,5} | Chloride |
| | 4500-Cl ⁻ B-97 ⁸ | Chloride |
| | 4500-Cl ⁻ D ^{3,4,5} | Chloride |
| | 4500-Cl ⁻ D-97 ⁸ | Chloride |
| | 4500-P E ^{3,4,5} | Orthophosphate |
| | 4500-P F ^{3,4,5} | Orthophosphate |
| | 4500-SO ₄ ²⁻ C, D ^{3,4,5} | Sulfate |
| | 4500-SO ₄ ²⁻ E ^{3,4,5} | Sulfate |
| | 4500-SO ₄ ²⁻ F ^{3,4,5} | Sulfate |
| | D1067-92, 02 B ⁶ | Alkalinity |
| | D4327-97,03 ⁶ | Chloride Orthophosphate Sulfate |
| | D512-89 (Re-approved 1999)B ⁶ | Chloride |
| | D515-88A ⁶ | Orthophosphate |
| | D516-90, 02 ⁶ | Sulfate |
| | D6508, Rev. 2 ⁹ | Chloride |

| Class | Analytical Method | Analyte |
|-------|-------------------------|---------------------------|
| | | Orthophosphate Sulfate |
| | I-1030-85 ^{1/} | Alkalinity |
| | I-1601-85 ^{2/} | Orthophosphate |
| | I-2598-85 ^{3/} | Orthophosphate |
| | I-2601-90 ^{4/} | Orthophosphate |

¹ “Methods for the Determination of Inorganic Substances in Environmental Samples”, EPA-600/R-93-100, August 1993. Available from National Technical Information Service, Order # PB94-121811 5285 Port Royal Road, Springfield, VA 21161.

² “Methods for the Determination of Metals in Environmental Samples- Supplement I”, ORD Publications, EPA/600/R-94-111 May 1994. Available from National Technical Information Service, Order #PB94-18492, 5285 Port Royal Road, Springfield, VA 21161.

³ “Standard Methods for the Examination of Water and Wastewater”, 18th edition, American Public Health Association, American Water Works Association, 1015 Fifteenth Street, N.W., Washington DC 1992.

⁴ “Standard Methods for the Examination of Water and Wastewater”, 19th edition, American Public Health Association, American Water Works Association, 1015 Fifteenth Street, N.W., Washington DC 1992.

⁵ “Standard Methods for the Examination of Water and Wastewater”, 20th edition, American Public Health Association, American Water Works Association, 1015 Fifteenth Street, N.W., Washington DC 1998.

⁶ “Annual Book of Standards, Section 11.01 and 11.02, Water and Environmental Technology”, American Society for Testing Material, 1916 Race Street, Philadelphia, PA 194, 1996 and 1999.

⁷ “Methods for Analysis of Inorganic Substances in Water and Fluvial Sediments”, U.S. Department of the Interior, U.S. Geological Survey, Denver, CO, 1989.

⁸ “Standard Methods Online” are available at <http://www.standardmethods.org>. The year in which each method was approved by the Standard Methods Committee is designated by the last two digits in the method number. The methods listed are the only online versions that may be used.

⁹ “Method D6508, Rev. 2”, “Test Method for Determination of Dissolved Inorganic Anions in Aqueous Matrices Using Capillary Ion Electrophoresis and Chromate Electrolyte,” available from Waters Corp, 34 Maple St., Milford, MA, 01757, Telephone: 508/482-2131, Fax: 508/482-3625.

¹⁰ “Methods for the Determination of Organic and Inorganic Compounds in Drinking Water,” Vol. 1, EPA 815R-00-014, August 2000. Available at NTIS, PB2000-106981.

**TABLE D
SYNTHETIC ORGANIC CONTAMINANTS**

| Class | Analytical Method | Analyte |
|---------------------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------|
| Synthetic Organic Contaminants (SOC)-Dioxin | | |
| | 1613 ⁷ | 2,3,7,8-TCDD (Dioxin) |
| SOC – Organochlorine Pesticides | | |
| | 505 ⁴ | Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Lindane Methoxychlor Toxaphene |
| | 508 ⁴ | Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Lindane Methoxychlor Toxaphene |
| | 508.1 ⁴ | Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Lindane Methoxychlor Toxaphene |
| | 525.2 ⁴ | Aldrin Chlordane Dieldrin Endrin Heptachlor Heptachlor Epoxide Lindane Methoxychlor Toxaphene |
| | 551.1 ⁴ | Endrin Heptachlor Heptachlor Epoxide Lindane Methoxychlor |
| SOC – N/P Pesticides | | |
| | 505 ⁴ | Alachlor Atrazine Simazine |
| | 507 ⁴ | Alachlor Atrazine Butachlor Metolachlor Metribuzin Propachlor |

NR 149 Appendix II

WISCONSIN ADMINISTRATIVE CODE

| Class | Analytical Method | Analyte |
|----------------|----------------------------------|----------------------------------------------------------------------------------------------|
| | | Simazine |
| | 508.1 ⁴ | Alachlor Atrazine Metolachlor Metribuzin Propachlor Simazine |
| | 525.2 ⁴ | Alachlor Atrazine Butachlor Metolachlor Metribuzin Propachlor Simazine |
| | 551.1 ⁴ | Alachlor Atrazine Simazine |
| | Syngenta AG-625 ¹¹ | Atrazine |
| SOC Herbicides | | |
| | 515.1 ¹ | 2,4,5-TP (Silvex) 2,4-D Dalapon Dicamba Dinoseb Pentachlorophenol Picloram |
| | 515.2 ⁴ | 2,4,5-TP (Silvex) 2,4-D Dicamba Dinoseb Pentachlorophenol Picloram |
| | 515.3 ⁵ | 2,4,5-TP (Silvex) 2,4-D Dalapon Dicamba Dinoseb Pentachlorophenol Picloram |
| | 515.4 ⁶ | 2,4,5-TP (Silvex) 2,4-D Dalapon Dicamba Dinoseb Pentachlorophenol Picloram |
| | 525.2 ⁴ | Pentachlorophenol |
| | 552.1 ³ | Dalapon |
| | 552.2 ⁴ | Dalapon |
| | 552.3 ¹³ | Dalapon |
| | 555 ³ | 2,4,5-TP (Silvex) 2,4-D Dicamba Dinoseb Pentachlorophenol Picloram |

| Class | Analytical Method | Analyte |
|---------------------|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| | D5317-93, 98 (Re-approved 2003) ^{1,2} | 2,4,5-TP (Silvex) 2,4-D Pentachlorophenol Picloram |
| SOC – Miscellaneous | | |
| | 504.1 ⁴ | Dibromochloropropane (DBCP) Ethylene Dibromide (EDB) |
| | 505 ⁴ | Hexachlorobenzene Hexachlorocyclopentadiene Polychlorinated Biphenyls (as Aroclors) |
| | 506 ⁴ | Di(2-ethylhexyl)adipate Di(2-ethylhexyl)phthalate |
| | 508 ⁴ | Hexachlorobenzene Hexachlorocyclopentadiene Polychlorinated Biphenyls (as Aroclors) |
| | 508.1 ⁴ | Hexachlorobenzene Hexachlorocyclopentadiene |
| | 508A ¹ | Polychlorinated Biphenyls (as Decachlorobiphenyl) |
| | 525.2 ⁴ | Benzo(a)pyrene Di(2-ethylhexyl)adipate Di(2-ethylhexyl)phthalate Hexachlorobenzene Hexachlorocyclopentadiene PCB (as decachlorobiphenyl) |
| | 531.1 ⁴ | 3-Hydroxycarbofuran Aldicarb Aldicarb Sulfone Aldicarb Sulfoxide Carbaryl Carbofuran Methomyl Oxamyl (Vydate) |
| | 531.2 ¹⁴ | 3-Hydroxycarbofuran Aldicarb Aldicarb Sulfone Aldicarb Sulfoxide Carbaryl Carbofuran Methomyl Oxamyl (Vydate) |
| | 547 ² | Glyphosate |
| | 548.1 ³ | Endothall |
| | 549.2 ³ | Diquat |
| | 550 ² | Benzo(a)pyrene |
| | 550.1 ² | Benzo(a)pyrene |
| | 551 ¹ | Dibromochloropropane (DBCP) Ethylene Dibromide (EDB) |
| | 551.1 ⁴ | Hexachlorobenzene Hexachlorocyclopentadiene |
| | 6610B ^{8,9,10} | 3-Hydroxycarbofuran Aldicarb Aldicarb Sulfone Aldicarb Sulfoxide Carbaryl Carbofuran |

| Class | Analytical Method | Analyte |
|-------|-------------------------|-----------------------------|
| | | Methomyl Oxamyl (Vydate) |
| | 6651B ^{8,9,10} | Glyphosate |

- ¹ "Methods for the Determination of Organic Compounds in Drinking Water" EPA-600/4-88-039, December 1988, Revised July 1991. Available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 21161. The toll free number is: 800-553-6847.
- ² "Methods for the Determination of Organic Compounds in Drinking Water- Supplement I", EPA-600-4-90-020, July 1990. Available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 21161. The toll free number is: 800-553-6847.
- ³ "Methods for the Determination of Organic Compounds in Drinking Water- Supplement II", EPA-600/R-92-129, August 1992. Available from National Technical Information Service, Order Port Royal Road, Springfield, VA 21161. The toll free number is: 800-553-6847.
- ⁴ "Methods for the Determination of Organic Compounds in Drinking Water- Supplement III", EPA 600/R-95/131, August 1995. Available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 21161. The toll free number is: 800-553-6847.
- ⁵ "Methods for the Determination of Organic and Inorganic Compounds in Drinking Water- Volume 1", EPA 815-R-00-014, August 2000. Available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 21161.
- ⁶ "Method 515.4 Determination of Chlorinated Acids in Drinking Water by Liquid-Liquid Microextraction, Derivatization, and Fast Gas Chromatography with Electron Capture Detection", Rev. 1.0, EPA/815/B-00/001. April 2000. Available from Technical Support Center, Office of Groundwater and Drinking Water, US EPA, Cincinnati, OH 45268.
- ⁷ "Tetra-throughOcta-Chlorinated Dioxins and Furans by Isotope-Dilution HRGC/HRMS," EPA/821-B-94-005, October 1994. Available from the National Technical Information Service, NTIS PB91-231480, PB91-146027, PB92-207703, PB95-261616 and PB95-104774, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161. The toll free number is: 800-553-6847.
- ⁸ "Standard Methods for the Examination of Water and Wastewater", 18th edition, American Public Health Association, American Water Works Association, 1992. Copies may be obtained from the American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005.
- ⁹ "Standard Methods for the Examination of Water and Wastewater", 19th edition, American Public Health Association, American Water Works Association, 1992. Copies may be obtained from the American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005.
- ¹⁰ "Standard Methods for the Examination of Water and Wastewater", 20th edition, American Public Health Association, American Water Works Association, 1998. Copies may be obtained from the American Public Health Association, 1015 Fifteenth Street, N.W., Washington DC 20005.
- ¹¹ "Method AG-625", Syngenta Corp., "Atrazine in Drinking Water by Immunoassay," February 2001, is available from Syngenta Crop Protection, Inc., 410 Swing Road, P.O. Box 18300, Greensboro, NC 27419. Telephone: 336-632-6000.
- ¹² The procedures shall be done in accordance with the "Annual Book of ASTM Standards", 1999, Vols 11.01 and 11.02. Copies may be obtained from the American Society for Testing Material, 1916 Race Street, Philadelphia, PA 19103.
- ¹³ "EPA Method 552.3", "Determination of Haloacetic Acids and Dalapon in Drinking Water by Liquid-Liquid Microextraction, Derivatization, and Gas Chromatography with Electron Capture Detection," Revision 1.0, July 2003, EPA 815-B-03-002, can be accessed and downloaded directly online at [http:// www.epa.gov/safewater/methods/sourcalt.html](http://www.epa.gov/safewater/methods/sourcalt.html).
- ¹⁴ Method 531.2 "Measurement of Nmethylcarbamoyloximes and Nmethylcarbamates in Water by Direct Aqueous Injection HPLC with Postcolumn Derivatization," Revision 1.0, September 2001, EPA 815-B-01- 002, can be accessed and downloaded directly online at <http://www.epa.gov/safewater/methods/sourcalt.html>.

**TABLE E
TRIHALOMETHANES**

| Class | Analytical Method | Analyte |
|-----------------------|--------------------|-----------------------------------------------------------------------------------------------------------------|
| Trihalomethanes (THM) | 502.2 ¹ | <i>Trihalomethanes Analyte Group</i> Bromodichloromethane Bromoform Chloroform Dibromochloromethane |
| | 524.2 ¹ | <i>Trihalomethanes Analyte Group</i> Bromodichloromethane Bromoform Chloroform Dibromochloromethane |
| | 551.1 ¹ | <i>Trihalomethanes Analyte Group</i> Bromodichloromethane Bromoform Chloroform Dibromochloromethane |

¹ “Methods for the Determination of Organic Compounds in Drinking Water– Supplement III”, EPA 600/R-95/131. Available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 21161.

TABLE F
VOLATILE ORGANIC COMPOUNDS

| Class | Analytical Method | Analyte |
|----------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Volatile Organic Compounds | 502.2 ¹ | <p><i>Volatile Organic Compounds Analyte Group by EPA Method 502.2</i></p> <hr/> <p><i>Regulated VOCs</i></p> <p>1,1,1-Trichloroethane 1,1,2-Trichloroethane 1,1-Dichloroethylene 1,2,4-Trichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,4-Dichlorobenzene Benzene Carbon Tetrachloride Chlorobenzene cis-1,2-Dichloroethylene Dichloromethane Ethylbenzene Styrene Tetrachloroethylene Toluene trans-1,2-Dichloroethylene Trichloroethylene Vinyl Chloride Xylenes (Total)</p> <hr/> <p><i>Unregulated VOCs</i></p> <p>1,1-Dichloroethane 1,1-Dichloropropene 1,2,3-Trichlorobenzene 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3-Dichloropropane 1,3-Dichloropropene (cis, trans) 2,2-Dichloropropane Bromobenzene Bromochloromethane Chloroethane Chloromethane Dibromomethane Dichlorodifluoromethane Fluorotrichloromethane Hexachlorobutadiene Isopropylbenzene m-Dichlorobenzene Naphthalene n-Butylbenzene n-Propylbenzene o-Chlorotoluene p-Chlorotoluene p-Isopropylbenzene sec-Butylbenzene tert-Butylbenzene</p> |
| | 524.2 ¹ | <p><i>Volatile Organic Compounds Analyte Group by EPA Method 524.2</i></p> <hr/> <p><i>Regulated VOCs Analyte Group</i></p> <p>1,1,1-Trichloroethane 1,1,2-Trichloroethane</p> |

| Class | Analytical Method | Analyte |
|-------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | 1,1-Dichloroethylene 1,2,4-Trichlorobenzene 1,2-Dichlorobenzene 1,2-Dichlorobenzene 1,2-Dichloroethane 1,2-Dichloropropane 1,4-Dichlorobenzene Benzene Carbon Tetrachloride Chlorobenzene cis-1,2-Dichloroethylene Dichloromethane Ethylbenzene Styrene Tetrachloroethylene Toluene trans-1,2-Dichloroethylene Trichloroethylene Vinyl Chloride Xylenes (Total) |
| | | <i>Unregulated VOCs Analyte Group</i> 1,1,2,2-Tetrachloroethane 1,1,2,2-Tetrachloroethane 1,1-Dichloroethane 1,1-Dichloropropene 1,2,3-Trichlorobenzene 1,2,3-Trichloropropane 1,2,4-Trimethylbenzene 1,3,5-Trimethylbenzene 1,3-Dichloropropane 1,3-Dichloropropene (cis, trans) 2,2-Dichloropropane Bromobenzene Chloroethane Chloromethane Dibromomethane Dichlorodifluoromethane Fluorotrichloromethane Hexachlorobutadiene Isopropylbenzene m-Dichlorobenzene Naphthalene n-Butylbenzene n-Propylbenzene o-Chlorotoluene p-Chlorotoluene p-Isopropylbenzene sec-Butylbenzene tert-Butylbenzene |
| | 551.1 ¹ | Carbon Tetrachloride 1,1,1-Trichloroethane 1,1,2-Trichloroethane Tetrachloroethylene Trichloroethylene |

¹ "Methods for the Determination of Organic Compounds in Drinking Water- Supplement III", EPA 600/R-95/131. Available from National Technical Information Service, 5285 Port Royal Road, Springfield, VA 21161.