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–ClO2–D[3,4]	Chlorine Dioxide
	4500–ClO2–E[5,6]	Chlorite
	4500–ClO2–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–NO2⁻ B[4,5, 6]	Nitrite
	4500–NO2⁻ B–00[16]	Nitrite
	4500–NO3⁻ D[4,5, 6]	Nitrate
	4500–NO3⁻ D–00[16]	Nitrate
	4500–NO3⁻ E[4,5, 6]	Nitrate Nitrate + Nitrite Nitrite
	4500–NO3⁻ E–00[16]	Nitrate Nitrate + Nitrite Nitrite
	4500–NO3⁻F[4,5, 6]	Nitrate Nitrate + Nitrite Nitrite
	4500–NO3⁻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–SiO2–C[5]	Silica
	4500–SiO2–D[5]	Silica
	4500–SiO2–E[5]	Silica
	4500–SiO2–C–97[8]	Silica
	4500–SiO2–D–97[8]	Silica
	4500–SiO2–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[7]	Alkalinity
	I–1601–85[7]	Orthophosphate
	I–2598–85[7]	Orthophosphate
	I–2601–90[7]	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

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)[12]	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[5]	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.

[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]	***Trihalomethanes Analyte Group***
		Bromodichloromethane
		Bromoform
		Chloroform
		Dibromochloromethane
	524.2[1]	***Trihalomethanes Analyte Group***
		Bromodichloromethane
		Bromoform
		Chloroform
		Dibromochloromethane
	551.1[1]	***Trihalomethanes Analyte Group***
		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]	***Volatile Organic Compounds Analyte Group by EPA Method 502.2***
		Regulated VOCs
		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)
		Unregulated VOCs
		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
	524.2[1]	***Volatile Organic Compounds Analyte Group by EPA Method 524.2***
		Regulated VOCs Analyte Group
		1,1,1–Trichloroethane
		1,1,2–Trichloroethane

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)
		Unregulated VOCs Analyte Group
		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.