WEST VIRGINIA
Department of
Health & Human Resources
BUREAU FOR PUBLIC HEALTH

Office of Laboratory Services

Main Laboratory 167 11th Avenue South Charleston WV 25303
Big Chimney Laboratory 4710 Chimney Drive Suite G Charleston WV 25302
Kearneysville Laboratory 1948 Wiltshire Road Suite 7 Kearneysville WV 25403

Laboratory Certification for Drinking Water Analyses

(Reciprocity Only)

Re.: Application for Laboratory Certification

Thank you for applying to the West Virginia Drinking Water Certification Program. There is a nonrefundable fee of $150.00 that must be submitted with your application before the data packet will be reviewed. Please make check payable to WVDHHR-Laboratory Services.

Please complete the tabular section of the application, indicate the methods for which you desire West Virginia certification.

Please supply the following documents with the application:

A. Copy of your most recent on-site evaluation reports.
   1. Initial Audit report listing findings
   2. Laboratory's Corrections to findings
   3. Finial closeout audit report

B. Copy of your Quality Assurance Manual.

C. Copy of your current certificate with scope of accreditation (from your home state or NELAP certifying authority).

D. This year and last year's Proficiency Testing Water Studies and Corrective Action Report for any failures. Proficiency Testing Water Study results must be Email to the WV Certification Program directly from the water study provider (no photocopies will be accepted).
   - Microbiological parameters Michael.A.Flesher@wv.gov
   - Chemistry parameters Gregory.W.Young@wv.gov

Once a review of your application packet has been completed, you will be notified of your potential certification and an invoice will be mailed to your designated contact person. Annual fees for certification of laboratories to perform laboratory testing on water to meet State and EPA requirements under the Safe Drinking Water Act for each of the four following groups are $1000: Microbiological, Inorganic, THM's/VOC's/HAA5's and Pesticides/Herbicides/SOC's. If a laboratory applies for certification after March 30, the fees are then pro-rated quarterly.

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I. Laboratory Information

Administration

Laboratory Director: _____ E-mail: _____

Quality Assurance Officer: _____ E-mail: _____

Certification Contact: _____ E-mail: _____

Laboratory Phone Number: _____

Physical Address

Street Address: _____

City: _____ State: _____ Zip: _____

Mailing Address (if different from Physical Address)

Street Address: _____

City: _____ State: _____ Zip: _____

Accrediting Body

Name of Accrediting Body: _____

Contact: _____ E-mail: _____

Street Address: _____

City: _____ State: _____ Zip: _____

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II. Microbiology

Please place an "X" in each appropriate box for each parameter and method the laboratory is seeking certification to perform.

Analyte / Method	Current Status in Home State		
	Certified	Provisional / Conditional	Decertified
☐ **TOTAL COLIFORM**			
☐ **SM 9221 B (Multi Tube Fermentation):** ☐ 100 mL ☐ 10 Tube ☐ 5 Tube			
☐ **SM 9221 D (Presence-Absence)**			
☐ **SM 9222 B (Membrane Filtration)**			
☐ **SM 9223 (Enzyme Substrate):** ☐ Colilert® ☐ Colisure® ☐ ReadyCULT® ☐ E*Colite™ ☐ QuantiTray® System			
☐ **m-ColiBlue24®**			
☐ **Other (_____)**			
☐ **FECAL COLIFORM**			
☐ **SM 9221 E (EC Medium)**			
☐ **Other (_____)**			
☐ **E. COLI**			
☐ **SM 9221 F (EC Medium+MUG)**			
☐ **SM 9223 (Enzyme Substrate)**			
☐ **m-ColiBlue24®**			
☐ **Other (_____)**			
☐ **HETEROTROPHIC BACTERIA**			
☐ **SM 9215 B (Pour Plate)**			
☐ **SM 9215 C (Spread Plate)**			
☐ **Other (_____)**			

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III. Parameters for SDWA Certification - Inorganic

Please place an "X" in each box for each parameter and method the laboratory is seeking certification.

Contaminant	Methodology[1]	EPA	ASTM[2]	SM[3] (18th -21st)	SM(Online)[4]	Other
Antimony	Axially viewed ICP	☐ 200.5 R4.2				
	ICP-MS	☐ 200.8 R5.4				
	Hydride-AA		☐ D3697-92 ☐ D3697-02			
	AA; Platform	☐ 200.9 R2.2				
	AA; Furnace			☐ 3113 B	☐ 3113 B-99	
Arsenic[6]	Axially viewed ICP	☐ 200.5 R4.2				
	ICP-MS	☐ 200.8 R5.4				
	AA; Platform	☐ 200.9 R2.2				
	AA; Furnace		☐ D2972-97C ☐ D2972-03C	☐ 3113 B	☐ 3113 B-99	
	Hydride-AA		☐ D2972-97B ☐ D2972-03B	☐ 3114 B	☐ 3114 B-97	
Asbestos	TEM	☐ 100.1 ☐ 100.2				
Barium	Axially viewed ICP	☐ 200.5 R4.2				
	ICP	☐ 200.7 R4.4		☐ 3120 B[3]	☐ 3120 B-99	
	ICP-MS	☐ 200.8 R5.4				
	AA; Direct			☐ 3111 D	☐ 3111 D-99	
	AA; Furnace			☐ 3113 B	☐ 3113 B-99	
Beryllium	Axially viewed ICP	☐ 200.5 R4.2				
	ICP	☐ 200.7 R4.4		☐ 3120 B[3]	☐ 3120 B-99	
	ICP-MS	☐ 200.8 R5.4				
	AA; Platform	☐ 200.9 R2.2				
	AA; Furnace		☐ D3645-97B ☐ D3645-03B	☐ 3113 B	☐ 3113 B-99	
Bromate	IC	☐ 300.1 R1.0	☐ D6581-00			
	IC w/ PC Reagent	☐ 317 R2.0[22] ☐ 321.8[22,23] ☐ 326 R1.0[22]				
Cadmium	Axially viewed ICP	☐ 200.5 R4.2				
	ICP	☐ 200.7 R4.4				
	ICP-MS	☐ 200.8 R5.4				
	AA; Platform	☐ 200.9 R2.2				
	AA; Furnace			☐ 3113 B	☐ 3113 B-99	
Chromium	Axially viewed ICP	☐ 200.5 R4.2				
	ICP	☐ 200.7 R4.4		☐ 3120 B[3]	☐ 3120 B-99	
	ICP-MS	☐ 200.8 R5.4				
	AA; Platform	☐ 200.9 R2.2				
	AA; Furnace			☐ 3113 B	☐ 3113 B-99	
Chlorite	IC	☐ 300.0 R2.1 ☐ 300.1 R1.0				
	IC w/ PC Reagent	☐ 317 R2.0 ☐ 326 R1.0				
Copper	Axially viewed ICP	☐ 200.5 R4.2				
	AA; Furnace		☐ D1688-95C ☐ D1688-02C	☐ 3113 B	☐ 3113 B-99	
	AA; Direct Aspiration		☐ D1688-95A ☐ D1688-02A	☐ 3111 B	☐ 3111 B-99	
	ICP	☐ 200.7 R4.4		☐ 3120 B[3]	☐ 3120 B-99	
	ICP-MS	☐ 200.8 R5.4				
	AA; Platform	☐ 200.9 R2.2				
Cyanide	Preliminary Distillation Step		☐ D2036-98A ☐ D2036-06A	☐ 4500 CN C		
	Spectrophotometric Manual		☐ D2036-98A ☐ D2036-06A	☐ 4500 CN E	☐ 4500 CN E-99	☐ I-3300-85[7]
	Spectrophotometric Semi-automated	☐ 335.4 R1.0				
	Spectrophotometric, Amenable		☐ D2036-98B ☐ D2036-06B	☐ 4500 CN G	☐ 4500 CN G-99	
	ISE			☐ 4500 CN F	☐ 4500 CN F-99	
	UV/Distillation/ Spectrophotometric					☐ Kelada 01[8]
	Distillation/ Spectrophotometric					☐ 10-204-00-1-X[9]
	Ligand Exchange and Amperometry[10]		☐ D6888-04			☐ OIA-1677-DW[11]
	GC-MS					☐ ME355.01[12]

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Contaminant	Methodology[1]	EPA	ASTM[2]	SM[3] (18th -21st)	SM(Online)[4]	Other
Fluoride	IC	☐ 300.0 R2.1 ☐ 300.1 R1.0	☐ D4327-97 ☐ D4327-03	☐ 4110 B	☐ 4110 B-00	
	Preliminary Distillation; Colorimetric SPADNS			☐ 4500 F B,D	☐ 4500 F B,D-97	
	Manual Electrode		☐ D1179-93B ☐ D1179-99B ☐ D1179-04B	☐ 4500 F C	☐ 4500 F C-97	
	Automated Electrode					☐ 380-75WE[13]
	Automated Alizarin			☐ 4500 F E	☐ 4500 F E-97	☐ 129-71W[13]
	Capillary Ion Electrophoresis					☐ D6508 R2[14]
Lead	Axially viewed ICP	☐ 200.5 R4.2				
	AA; Furnace		☐ D3559-96D ☐ D3559-03D	☐ 3113 B	☐ 3113 B-99	
	ICP-MS	☐ 200.8 R5.4				
	AA; Platform	☐ 200.9 R2.2				
	Differential Pulse Anodic Stripping Voltammetry					☐ Method 1001[5]
Mercury	Manual, Cold Vapor	☐ 245.1 R3.0	☐ D3223-97 ☐ D3223-02	☐ 3112 B	☐ 3112 B-99	
	Automated, Cold Vapor	☐ 245.2				
	ICP-MS	☐ 200.8 R5.4				
Nickel	Axially viewed ICP	☐ 200.5 R4.2				
	ICP	☐ 200.7 R4.4		☐ 3120 B[3]	☐ 3120 B-99	
	ICP-MS	☐ 200.8 R5.4				
	AA; Platform	☐ 200.9 R2.2				
	AA; Direct Aspiration			☐ 3111 B	☐ 3111 B-99	
	AA; Furnace			☐ 3113 B	☐ 3113 B-99 ☐ 3113 B-04	
Nitrate	IC	☐ 300.0 R2.1 ☐ 300.1 R1.0	☐ D4327-97 ☐ D4327-03	☐ 4110 B	☐ 4110 B-00	☐ B-1011[15]
	Automated Cadmium Reduction	☐ 353.2 R2.0	☐ D3867-90A	☐ 4500 NO3 F	☐ 4500 NO3 F-00	
	ISE			☐ 4500 NO3 D	☐ 4500 NO3 D-00	☐ 601[16]
	Manual Cadmium Reduction		☐ D3867-90B	☐ 4500 NO3 E	☐ 4500 NO3 E-00	
	Capillary Ion Electrophoresis					☐ 6508 R2[14]
	Reduction/colorimetric					☐ SYSTEA EASY (1-REAGENT)[17]
Nitrite	IC	☐ 300.0 R2.1 ☐ 300.1 R1.0	☐ D4327-97 ☐ D4327-03	☐ 4110 B	☐ 4110 B-00	☐ B-1011[15]
	Automated Cadmium Reduction	☐ 353.2 R2.0	☐ D3867-90A	☐ 4500 NO3 F	☐ 4500 NO3 F-00	
	Manual Cadmium Reduction		☐ D3867-90B	☐ 4500 NO3 E	☐ 4500 NO3 E-00	
	Spectrophotometric			☐ 4500 NO2 B	☐ 4500 NO3 B-00	
	Capillary Ion Electrophoresis					☐ 6508 R2[14]
	Reduction/colorimetric					☐ SYSTEA EASY (1-REAGENT)[17]
Selenium	Axially viewed ICP	☐ 200.5 R4.2				
	Hydride-AA		☐ D3859-98A ☐ D3859-03A	☐ 3114 B	☐ 3114 B-97	
	ICP-MS	☐ 200.8 R5.4				
	AA; Platform	☐ 200.9 R2.2				
	AA; Furnace		☐ D3859-98B ☐ D3859-03B	☐ 3113 B	☐ 3113 B-99	
Sodium	Axially viewed ICP	☐ 200.5 R4.2				
	ICP	☐ 200.7 R4.4				
	AA; Direct Aspiration			☐ 3111 B ☐ 3111 B-99		
	IC					☐ ASTM D6919-03 ☐ ASTM D6919-09
Thallium	ICP-MS	☐ 200.8 R5.4				
	AA; Platform	☐ 200.9 R2.2				

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IV. Parameters for SDWA Certification - Organic

Please place an "X" in each box for each parameter and method the laboratory is seeking certification.

	Contaminant	Methodology[1]	EPA	ASTM[2]	SM[3] (18th -21st)	Other
Pesticides	Alachlor [18]	Micro-extraction / GC	☐ 505 R2.1			
		GC-NPD	☐ 507 R2.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Aldicarb	PC Derivatization / HPLC	☐ 531.1 R3.1		☐ 6610 [18th-21st ED]	
	Aldicarb Sulfone	PC Derivatization / HPLC	☐ 531.1 R3.1		☐ 6610 [18th-21st ED]	
	Aldicarb Sulfoxide	PC Derivatization / HPLC	☐ 531.1 R3.1		☐ 6610 [18th-21st ED]	
	Atrazine [18]	Micro-extraction / GC	☐ 505 R2.1			☐ SyngentaAG-625[19]
		GC-NPD	☐ 507 R2.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Carbofuran	PC Derivatization / HPLC			☐ 6610 B-04	
		PC Derivatization / HPLC	☐ 531.2 R1.0			
	Chlordane	Micro-extraction / GC	☐ 505 R2.1			
		GC-ECD	☐ 508 R3.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
	Endrin	Micro-extraction / GC	☐ 505 R2.1			
		GC-ECD	☐ 508 R3.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Heptachlor	Micro-extraction / GC	☐ 505 R2.1			
		GC-ECD	☐ 508 R3.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Heptachlor Epoxide	Micro-extraction / GC	☐ 505 R2.1			
		GC-ECD	☐ 508 R3.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Hexachlorobenzene	Micro-extraction / GC	☐ 505 R2.1			
		GC-ECD	☐ 508 R3.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Hexachlorocyclopentadiene	Micro-extraction / GC	☐ 505 R2.1			
		GC-ECD	☐ 508 R3.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Lindane	Micro-extraction / GC	☐ 505 R2.1			
		GC-ECD	☐ 508 R3.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Methoxychlor	Micro-extraction / GC	☐ 505 R2.1			
		GC-ECD	☐ 508 R3.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Oxamyl (Vydate)	PC Derivatization / HPLC	☐ 531.1 R3.1		☐ 6610 B [18th-21st ED] ☐ 6610 B-04	
		PC Derivatization / HPLC	☐ 531.2 R1.0			
	Simazine [18]	Micro-extraction / GC	☐ 505 R2.1			
		GC-NPD	☐ 507 R2.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Toxaphene	Micro-extraction / GC	☐ 505 R2.1			
		GC-ECD	☐ 508 R3.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			

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	Contaminant	Methodology[1]	EPA	ASTM[2]	SM[3] (18th -21st)	Other
Herbicides	2,4-D[20]	L/L Extraction / GC-ECD	☐ 515.1 R4.0	☐ D5317-93 ☐ D5317-98		☐ ASTM D5317-93
		L/S Extraction / GC-ECD	☐ 515.2 R1.1			
		L/L Extraction, Derivatization / GC-ECD	☐ 515.3 R1.0			
		L/L Micro-extraction, Derivatization / GC-ECD	☐ 515.4 R1.0			
		HPLC-Photodiode Array UVD	☐ 555 R1.0			
	2,4,5-TP (Silvex)[20]	L/L Extraction / GC-ECD	☐ 515.1 R4.0	☐ D5317-93 ☐ D5317-98		
		L/S Extraction / GC-ECD	☐ 515.2 R1.1			
		L/L Extraction, Derivatization / GC-ECD	☐ 515.3 R1.0			
		L/L Micro-extraction, Derivatization / GC-ECD	☐ 515.4 R1.0			
		HPLC-Photodiode Array UVD	☐ 555 R1.0			
	Dalapon	L/L Extraction / GC-ECD	☐ 515.1 R4.0			
		L/L Extraction, Derivatization / GC-ECD	☐ 515.3 R1.0			
		L/L Micro-extraction, Derivatization / GC-ECD	☐ 515.4 R1.0			
		IE L/S Extraction / GC-ECD	☐ 552.1 R1.0			
		L/L Extraction, Derivatization / GC-ECD	☐ 552.2 R1.0			
		Microextraction, Derivatization / GC-ECD	☐ 552.3 R1.0			
	Dinoseb[20]	L/L Extraction / GC-ECD	☐ 515.1 R4.0			
		L/S Extraction / GC-ECD	☐ 515.2 R1.1			
		L/L Extraction, Derivatization / GC-ECD	☐ 515.3 R1.0			
		L/L Micro-extraction, Derivatization / GC-ECD	☐ 515.4 R1.0			
		HPLC-Photodiode Array UVD	☐ 555 R1.0			
	Diquat	L/S Extraction / HPLC-Photodiode Array UVD	☐ 549.2 R1.0			
	Endothall	IE Extraction,Acidic Methanol Methylation/GC-MS	☐ 548.1 R1.0			
	Glyphosate	PC Derivatization / HPLC-FD	☐ 547		☐ 6651 [18th-21st ED]	
	Pentachlorophenol	L/L Extraction / GC-ECD	☐ 515.1 R4.0	☐ D5317-93 ☐ D5317-98		
		L/S Extraction / GC-ECD	☐ 515.2 R1.1			
		L/L Extraction, Derivatization / GC-ECD	☐ 515.3 R1.0			
		L/L Micro-extraction, Derivatization / GC-ECD	☐ 515.4 R1.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
		HPLC-Photodiode Array UVD	☐ 555 R1.0			
	Picloram[20]	L/L Extraction / GC-ECD	☐ 515.1 R4.0	☐ D5317-93 ☐ D5317-98		
		L/S Extraction / GC-ECD	☐ 515.2 R1.1			
		L/L Extraction, Derivatization / GC-ECD	☐ 515.3 R1.0			
		L/L Micro-extraction, Derivatization / GC-ECD	☐ 515.4 R1.0			
		HPLC-Photodiode Array UVD	☐ 555 R1.0			

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	Contaminant	Methodology[1]	EPA	ASTM[2]	SM[3] (18th -21st)	Other
Haloacetic Acids	Bromoacetic acid	L/L Extraction / GC-ECD	☐ 552.1 R1.0[25]			
		L/L Extraction, Derivatization / GC-ECD	☐ 552.2 R1.0		☐ 6251B [18th-21st ED][25] ☐ 6251B-94	
		L/L Microextraction, Derivatization / GC-ECD	☐ 552.3 R1.0			
	Chloroacetic acid	L/L Extraction / GC-ECD	☐ 552.1 R1.0[25]			
		L/L Extraction, Derivatization / GC-ECD	☐ 552.2 R1.0		☐ 6251B [18th-21st ED][25] ☐ 6251B-94	
		L/L Microextraction, Derivatization / GC-ECD	☐ 552.3 R1.0			
	Dibromoacetic acid	L/L Extraction / GC-ECD	☐ 552.1 R1.0[25]			
		L/L Extraction, Derivatization / GC-ECD	☐ 552.2 R1.0		☐ 6251B [18th-21st ED][25] ☐ 6251B-94	
		L/L Microextraction, Derivatization / GC-ECD	☐ 552.3 R1.0			
	Dichloroacetic acid	L/L Extraction / GC-ECD	☐ 552.1 R1.0[25]			
		L/L Extraction, Derivatization / GC-ECD	☐ 552.2 R1.0		☐ 6251B [18th-21st ED][25] ☐ 6251B-94	
		L/L Microextraction, Derivatization / GC-ECD	☐ 552.3 R1.0			
	Trichloroacetic acid	L/L Extraction / GC-ECD	☐ 552.1 R1.0[25]			
		L/L Extraction, Derivatization / GC-ECD	☐ 552.2 R1.0		☐ 6251B [18th-21st ED][25] ☐ 6251B-94	
		L/L Microextraction, Derivatization / GC-ECD	☐ 552.3 R1.0			
	Total Haloacetice Acids	L/L Extraction / GC-ECD	☐ 552.1 R1.0[25]			
		L/L Extraction, Derivatization / GC-ECD	☐ 552.2 R1.0		☐ 6251B [18th-21st ED][25] ☐ 6251B-94	
		L/L Microextraction, Derivatization / GC-ECD	☐ 552.3 R1.0			
Trihalomethanes	Bromoform	GC-PID and ECD in Series	☐ 502.2 R2.1[24]			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Bromodichloromethane	GC-PID and ECD in Series	☐ 502.2 R2.1[24]			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Chloroform	GC-PID	☐ 502.2 R2.1[24]			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Dibromochloromethane	GC-PID and ECD in Series	☐ 502.2 R2.1[24]			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Total Trihalomethanes	GC-PID and ECD in Series	☐ 502.2 R2.1[24]			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			

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	Contaminant	Methodology[1]	EPA	ASTM[2]	SM[3] (18th -21st)	Other
Volatile Organic Compounds	Benzene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	Carbon tetrachloride	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Chlorobenzene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	1,2-Dichlorobenzene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	1,4-Dichlorobenzene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	1,2-Dichloroethane	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	1,1-Dichloroethylene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	cis-Dichloroethylene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	trans-Dichloroethylene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	Dichloromethane	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	1,2-Dichloropropane	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	Ethylbenzene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	Styrene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	Tetrachloroethylene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Toluene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	1,2,4-Trichlorobenzene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	1,1,1-Trichloroethane	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	1,1,2-Trichloroethane	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Trichloroethylene	GC-PID and ECD in Series	☐ 502.2 R2.1			
		GC-MS	☐ 524.2 R4.1 ☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Vinyl chloride	GC-Photoionization and ECD in Series	☐ 502.2 R2.1			
		GC-Mass Spectrometry	☐ 524.2 R4.1 ☐ 524.3 R1.0			
	Xylenes (total)	GC-Photoionization and ECD in Series	☐ 502.2 R2.1			
		GC-Mass Spectrometry	☐ 524.2 R4.1 ☐ 524.3 R1.0			

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	Contaminant	Methodology[1]	EPA	ASTM[2]	SM[3] (18th -21st)	Other
Synthetic Organic Compounds	Benzo(a)pyrene	L/S Extraction / GC-MS	☐ 525.2 R2.0			
		L/L Extraction / HPLC-UVFD	☐ 550			
		L/S Extraction / HPLC-UVFD	☐ 550.1			
	Dibromochloropropane	Micro-extraction / GC	☐ 504.1 R1.1			
		GC-MS	☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	Di(2-ethylhexyl)adipate	L/L/S Extraction / GC-PID	☐ 506 R1.1			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
	Di(2-ethylhexyl)phthalate	L/L/S Extraction / GC-PID	☐ 506 R1.1			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
	Ethylene dibromide	Micro-extraction / GC	☐ 504.1 R1.1			
		GC-MS	☐ 524.3 R1.0			
		L/L Extraction / GC-ECD	☐ 551.1 R1.0			
	PCB (Aroclors)[21]	Micro-extraction / GC	☐ 505 R2.1			
		GC-ECD	☐ 508 R3.1			
		L/S Extraction / GC-ECD	☐ 508.1 R2.0			
		L/S Extraction / GC-MS	☐ 525.2 R2.0			
	PCB (Decachlorobiphenyl)[21]	Screening for PCBs by Perchlorination and GC	☐ 508A R1.0			
	2,3,7,8-TCDD (dioxin)	GC-MS	☐ 1613			

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V. Parameters for SDWA Certification - Radionuclide

Please place an "X" in each box for each parameter and method the laboratory is seeking certification.

Contaminant	Methodology	EPA[26]	EPA[27]	EPA[28]	EPA[29]	SM	
Grass Alpha[36]	Co-precipitation			☐ 00-02		☐ 7110 C [18th – 21st ED] ☐ 7110 C-00	
	Evaporation	☐ 900.0				☐ 7110 B [17th – 21st ED]	
Gross Beta[36]	Evaporation					☐ 7110 B [17th – 21st ED] ☐ 7110 B-00	
Cesium	Radiochemical	☐ 901.0	☐ P4			☐ 7500 Cs B [17th – 21st ED] ☐ 7500 Cs B-00	☐ ASTM[30] 2459-72 ☐ USGS[31] R-1111-76
	Gamma Spectroscopy	☐ 901.1			☐ P92		☐ ASTM[30] D3649-91 ☐ ASTM[30] D3649-06 ☐ USGS[31] R-1110-76 ☐ DOE[32] 4.5.2.3
Iodine-131	Gamma Spectroscopy	☐ 901.1			☐ P92	☐ 7120 [19th -20th ED] ☐ 7120-97	☐ ASTM[30] D3649-91 ☐ ASTM[30] D3649-98a ☐ ASTM[30] D3649-06 ☐ ASTM[30] D4785-93 ☐ ASTM[30] D4785-00a ☐ ASTM[30] D4785-08 ☐ DOE[32] 4.5.2.3
	Radiochemical	☐ 902.0					
	Precipitation		☐ P6			☐ 7500 I B [17th -21th ED] ☐ 7500 I B-00	
	Ion-Exchange					☐ 7500 I C [17th -21th ED] ☐ 7500 I C-00	
	Distillation		☐ P9			☐ 7500 I D [17th -21th ED] ☐ 7500 I D-00	
Radium-226	Radon Emanation	☐ 903.1	☐ P16	☐ Ra-04	☐ P19	☐ 305 [13th ED] ☐ 7500 Ra C [17th – 21st ED] ☐ 7500 Ra C-01	☐ ASTM[30] D3454-97 ☐ ASTM[30] D3454-05 ☐ ASTM[30] D3454-07 ☐ USGS[31] R-1141-76 ☐ DOE[32] Ra-04 ☐ NY[33]
	Radiochemical	☐ 903.0	☐ P13	☐ Ra-03		☐ 304 [13th ED] ☐ 7500 Ra B [17th – 21st ED] ☐ 7500 Ra B-01	☐ USGS[31] R-1140-76 ☐ GA[35] ☐ ASTM[30] D2460-07
Radium-228	Radiochemical	☐ 904.0	☐ P24	☐ Ra-05	☐ P19	☐ 7500 Ra D [17th – 21st ED] ☐ 7500 Ra D-01	☐ USGS[31] R-1142-76 ☐ NY[33] ☐ NJ[34] ☐ GA[35]
Uranium[37]	Radiochemical	☐ 908.0				☐ 7500 U B [17th – 21st ED] ☐ 7500 U B-00	
	Fluorometric	☐ 908.1				☐ 7500 U C [17th ED]	☐ ASTM[30] D2907-97 ☐ USGS[31] R-2280-76 ☐ USGS[31] R-1181-76 ☐ DOE[32] U-04
	ICP-MS	☐ 200.8 R5.4				☐ 3215 [20th – 21st ED]	☐ ASTM[30] D5673-03 ☐ ASTM[30] D5673-05 ☐ ASTM[30] D5673-10
	Alpha Spectroscopy			☐ 00-07	☐ P33	☐ 7500 U C [18th -20th ED] ☐ 7500 U C-00	☐ ASTM[30] D3972-09
	Laser Phosphorimetry						☐ ASTM[30] D5714-97 ☐ ASTM[30] D5714-02 ☐ ASTM[30] D5174-07
	Alpha Liquid Scintillation Spectrometry						☐ ASTM[30] D6239-09
Strontium-89	Radiochemical	☐ 905.0	☐ P29	☐ Sr-04	☐ P65	☐ 303 [13th ED] ☐ 7500 Sr B [17th – 21st ED] ☐ 7500 Sr B-01	☐ USGS[31] R-1160-76 ☐ DOE[32] Sr-01 ☐ DOE[32] Sr-02
Strontium-90	Radiochemical	☐ 905.0	☐ P29	☐ Sr-04	☐ P65	☐ 303 [13th ED] ☐ 7500 Sr B [17th – 21st ED] ☐ 7500 Sr B-01	☐ USGS[31] R-1160-76 ☐ DOE[32] Sr-01 ☐ DOE[32] Sr-02
Tritium	Liquid Scintillation	☐ 906.0	☐ P34	☐ H-02	☐ P87	☐ 306 [13th ED] ☐ 7500 $^{-3}$H B [17th – 21st ED] ☐ 7500 $^{-3}$H B-00	☐ ASTM[30] D4107-91 ☐ ASTM[30] D4107-98 ☐ ASTM[30] D4107-08 ☐ USGS[31] R-1171-76

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Footnotes

EPA	Environmental Protection Agency
ASTM	American Society for Testing and Materials International
SM	Standard Methods
AA	Atomic Absorption
ECD	Electron capture detector
GC	Gas chromatography
HPLC	High performance liquid chromatography
IC	Ion chromatography
ICP	Inductively coupled plasma
ISE	Ion selective electrode
IE	Ion exchange
L/L	Liquid / liquid
L/S	Liquid / solid
L/L/S	Liquid / liquid / solid
MS	Mass spectrometer
NPD	Nitrogen phosphorus detector
PC	Post column
PID	Photoionization detector
TEM	Transmission Electron Microscope
UV	Ultraviolet
UVFD	Ultraviolet fluoresces detector
UVD	Ultraviolet detector

1 Because MDLs reported in EPA Methods 200.7 and 200.9 were determined using a 2X preconcentration step during sample digestion, MDLs determined when samples are analyzed by direct analysis (i.e., no sample digestion) will be higher. For direct analysis of cadmium, sample preconcentration using pneumatic nebulization may be required to achieve lower detection limits. Preconcentration may also be required for analysis of antimony, lead, and thallium by Method 200.9; antimony and lead by Method 3113 B; and lead by Method D3559-90D unless multiple in-furnace depositions are made.

2 Annual Book of ASTM Standards, 1994, 1996 or 1999, Vols. 11.01 and 11.02, American Society for Testing and Materials International (ASTM) ; any year containing the cited version of the method may be used. The previous versons of D1688-95A, D1688-95C (copper), D3559-95D (lead), D1293-95 (pH), D1125-91A (conductivity) and D859-94 (silica) are also approved. These previous versions D1688-90A, C; D3559-90D, D1293-84, D1125-91A and D859-88, respectively are located in the Annual Book of ASTM Standards, 1994, Vol. 11.01. Copies may be obtained from ASTM International, 100 Barr Harbor Drive, West Conshohocken, PA 19428.

3 Standard Methods for the Examination of Water and Wastewater, 18th edition (1992), 19th edition (1995), 20th edition (1998), or 21st edition (2005). American Public Health Association (APHA), 800 I Street, NW, Washington, DC 20001-3710. The cited methods published in any of these three editions may be used, except that the versions of 3111 B, 3111 D, 3113 B and 3114 B in the 20th edition may not be used.

4 Standard Methods Online is available at *http:/www.stanadrdmethods.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.

5 The description for Method Number 1001 for lead is available from Palintest , LTD, 21 Kenton Lands Road, P.O. Box 18395, Erlanger, KY 41018. Or from the Hach Company, P.O. Box 389, Loveland, CO 80539.

6 If ultrasonic nebulization is used in the determination of arsenic by Methods 200.8 the arsenic must be in the pentavalent state to provide uniform signal response. For direct analysis of arsenic with Method 200.8 using ultrasonic nebulization, samples and standards must contain one mg/L of sodium hypochlorite.

7 Method I-2601-90, Methods for Analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of Inorganic and Organic Constituents in Water and Fluvial Sediment, Open File Report 93-125, 1993; for Methods I-1030-85; I-1601-85; I-1700-85; I-2598-85; I-2700-85; and I-3300-85 see Techniques of Water Resources Investigation of the U.S. Geological Survey, Book 5, Chapter A-1, 3rd ed., 1989; available from Information Services, U.S. Geological Survey, Federal Center, Box 25286, Denver, CO 80225-0425.

8 The description for the Kelada 01 Method, "Kelada Automated Test Methods for Total Cyanide, Acid Dissociable Cyanide, and Thiocyanate," Revision 1.2, August 2001, EPA 821-B-01-009 for cyanide is available from the National Technical Information Service (NTIS), PB 2001-108275, 5285 Port Royal Road, Springfield, VA 22161. The toll free telephone number is 800-553-6847.

9 The description for the QuikChem Method 10-24-00-1-X, "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 for cyanide is available from Lachat Instruments, 6645 W. Mill Rd., Milwaukee, WI 53218. Telephone 414-358-4200.

10 Sulfide levels below those detected using lead acetate paper may produce positive method interferences. Test samples using a more sensitive sulfide method to determine if sulfide interference is present, and treat samples accordingly.

11 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.

12 Method ME355.01, Revision 1.0. "Determination of Cyanide in Drinking Water by GC/MS Headspace," May 26, 2009. Available at *http://www.nemi.gov* or from James Eaton, H & E Testing Laboratory, 221 State Street, Augusta, ME 04333. (207) 287–2727.

13 Industrial Method No. 129-71W, "Fluoride in Water and Wastewater," December 1972, and Method No. 380-75WE, "Fluoride in Water and Wastewater," February 1976, Technicon Industrial Systems. Copies may be obtained from Bran and Luebbe, 1025 Busch Parkway, Buffalo Grove, IL 60089.

14 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.

15 Method B-1011, "Waters Test Method for Determination of Nitrite/Nitrate in Water Using Single Column Ion Chromatography," August 1987. Copies may be obtained from Waters Corporation, Technical Services Division, 34 Maple Street, Milford, MA 01757.

16 The procedure shall be done in accordance with the Technical Bulletin 601 "Standrd Method of Test for Nitrate in Drinking Water," July 1994, PN 221890-001, Analytical Technology, Inc. Copies may be obtained from ATI Orion, 529 Main Street, Boston, MA 02129

17 Systea Easy (1-Reagent). "Systea Easy (1-Reagent) Nitrate Method," February 4, 2009. Available at *http://www.nemi.gov* or from Systea

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Scientific, LLC., 900 Jorie Blvd., Suite 35, Oak Brook, IL 60523.

18 Substitution of the detector specified in Method 505, 507, 508 or 508.1 for the purpose of achieving lower detection limits is allowed as follows. Either an electron capture or nitrogen phosphorous detector may be used provided all regulatory requirements and quality control criteria are met.

19 This method may not be used for the analysis of atrazine in any system where chlorine dioxide is used for drinking water treatment. In samples from all other systems, any result for atrazine generated by Method AG–625 that is greater than one-half the maximum contaminant level (MCL) (in other words, greater than 0.0015mg/L or 1.5 µg/L) must be confirmed using another approved method for this contaminant and should use additional volume of the original sample collected for compliance monitoring. In instances where a result from Method AG–625 triggers such confirmatory testing, the confirmatory result is to be used to determine compliance.

20 Accurate determination of the chlorinated esters requires hydrolysis of the sample as described in EPA Methods 515.1, 515.2, 515.3, 515.4 and 555 and ASTM Method D5317-93.

21 PCBs are qualitatively identified as Aroclors and measured for compliance purposes as decachlorobiphenyl. Users of Method 505 may have more difficulty in achieving the required detection limits than users of Methods 508.1, 525.2 or 508.

22 Ion chromatography & post column reaction or IC/ICP-MS must be used for monitoring of bromate for purposes of demonstrating eligibility of reduced monitoring, as prescribed in §141.132(b)(3)(ii).

23 Samples must be preserved at the time of sampling with 50 mg ethylenediamine (EDA)/L of sample and must be analyzed within 28 days.

24 IF TTHMs are the only analytes being measured in the sample, then a PID is not required.

25 The samples must be extracted within 14 days of sample collection.

26 "Prescribed Procedures for the Measurement of Radioactivity in Drinking Water," EPA 600/4-80-032, August 1980. Available at the U.S. Department of Commerce, National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, VA 22161 (Telephone 800-553-6847), PB 80-224744.

27 "Interim Radiochemical Methodology for Drinking Water," EPA 600/4-75-008 (revised), March 1976. Available NTIS, ibid.

28 "Radiochemistry Procedures Manual," EPA 520/5-84-006, December 1987. Available NTIS, ibid.

29 "Radiochemical Analytical Procedures for Analysis of Environmental Samples," March 1979. Available at NTIS, ibid. EMSL LV 053917.

30 Annual Book of ASTM Standards,Vol. 11.01 and 11.02, 2002; ASTM International; any year containing the cited version of the method may be used. Copies of these two volumes and the 2003 version of D 5673-03 may be obtained from ASTM International, 100 Barr Harbor Drive, P.O. Box C700, West Conshohocken, PA 19428-2959.

31 "Methods for Determination of Radioactive Substances in Water and Fluvial Sediments," Chapter A5 in Book 5 of Techniques of Water-Resources Investigations of the United States Geological Survey,1977. Available at U.S. Geological Survey (USGS) Information Services, Box 25286, Federal Center, Denver, CO 80225-0425.

32 "EML Procedures Manual," 28th (1997) or 27th (1990) Editions, Volumes 1 and 2; either edition may be used. In the 27th Edition Method Ra-04 is listed as Ra-05 and Method Ga-01-R is listed as Sect. 4.5.2.3. Available at the Environmental Measurements Laboratory, U.S. Department of Energy (DOE), 376 Hudson Street, New York, NY 10014-3621.

33 "Determination of Ra-226 and Ra-228 (Ra-02)," January 1980, Revised June 1982. Available at Radiological Sciences Institute for Laboratories and Research, New York State Department of Health, Empire State Plaza, Albany, NY 12201.

34 "Determination of Radium 228 in Drinking Water," August 1980. Available at State of New Jersey, Department of Environmental Protection, Division of Environmental Quality, Bureau of Radiation and Inorganic Analytical Services, 9 Ewing Street, Trenton, NJ 08625.

35 "The Determination of Radium-226 and Radium-228 in Drinking Water by Gamma-ray Spectrometry Using HPGE or Ge(Li) Detectors," Revision 1.2, December 2004. Available from the Environmental Resources Center, Georgia Institute of Technology, 620 Cherry Street, Atlanta, GA 30332-0335, USA, Telephone: 404-894-3776. This method may be used to analyze for radium-226 and radium-228 in samples collected after January 1, 2005 to satisfy the radium-226 and radium-228 monitoring requirements specified at 40 CFR 141.26.

36 Natural uranium and thorium-230 are approved as gross alpha calibration standards for gross alpha with co-precipitation and evaporation methods; americium-241 is approved with co-precipitation methods.

37 If uranium (U) is determined by mass, a 0.67 pCi/µg of uranium conversion factor must be used. This conversion factor is based on the 1:1 activity ratio of U-234 and U-238 that is characteristic of naturally occurring uranium.

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VI. Quality Assurance

Please reference each item to the page number of the Laboratory Quality Assurance Manual. If a particular item is not relevant, then provide a brief explanation.

Quality Assurance Topic	Page Number	Comment
Laboratory organization and responsibility		
• Title and approval sheet showing laboratory name, names, titles, signatures, and signature dates of the approving officials.		
• Include a chart or table showing the laboratory organization and lines of responsibility, including QA managers;		
• List the key individuals who are responsible for ensuring the production of valid measurements and the routine assessment of measurement systems for precision and accuracy (e.g., who is responsible for internal audits and reviews of the implementation of the plan and its requirements);		
• Reference the job descriptions of the personnel and describe training to keep personnel updated on regulations and methodology, and document that laboratory personnel have demonstrated proficiency for the methods they perform.		
Process used to identify clients' Data Quality Objectives		
• Description the process used to identify the clients data quality objects as it relates to SDWA compliance monitoring.		
SOPs with dates of last revision		
• The laboratory should maintain SOPs that accurately reflect all phases of current laboratory activities		
• keep a list of SOPs with current revisions and approval dates. This should not be limited to only testing/method SOP's but include pipette, balance and thermometer calibration verification procedures, along with a Laboratory Information Management System SOP if appropriate.		
• ensure that current copies of SOPs are in the laboratory and in the QA Managers files;		
• ensure that SOPs are reviewed annually and revised as changes are made;		
• ensure that SOPs have signature pages and revisions dated		
Analytical procedures (may reference SOP)		
• cite complete method manual		
• describe quality control procedures required by the methods that need to be followed		
Field sampling procedures		
• describe the process used to identify sample collectors, sampling procedures and locations, required preservation, proper containers, correct sample container cleaning procedures, sample holding times from collection to analysis, and sample shipping and storage conditions		
• ensure that appropriate forms are legibly filled out in indelible ink or hard copies of electronic data are available.		
• describe how samples are checked when they arrive for proper containers and temperature and how samples are checked for proper preservation (e.g., pH, chlorine residual) before analysis		
• ensure that sampling protocol is written and available to samplers (sampling instructions provided to the client are included within the QA Manual)		

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Laboratory sample receipt and handling procedures			
•	bound laboratory note books, if used, should be filled out in ink; entries dated and signed (A secure, password protected, electronic data base is acceptable);		
•	store unprocessed and processed samples at the proper temperature, isolated from laboratory contaminants, standards and highly contaminated samples and, sometimes, each other; holding times may not be exceeded		
•	maintain integrity of all samples, (e.g., by tracking samples from receipt by laboratory through analysis to disposal);		
•	require Chain-of-Custody procedures for samples likely to be the basis for an enforcement action or as evidence for litigation		
•	specify criteria for rejection of samples which do not meet shipping, holding time and/or preservation requirements and procedures for notification of sample originators		
Instrument calibration procedures (may reference SOP)			
•	specify type of calibration used for each method and frequency of use		
•	describe calibration standards' source, age, storage, labeling		
•	perform data comparability checks		
•	use control charts and for radiochemistry, report counting errors with their confidence levels		
Data reduction, validation, reporting and verification (may reference SOP)			
•	describe data reduction process: method of conversion of raw data to mg/L, picocuries/L, coliforms/100 mL, etc		
•	describe data validation process		
•	describe reporting procedures, include procedures and format		
•	describe data verification process		
•	describe procedure for data corrections		
Type of quality control (QC) checks and the frequency of their use.(may reference SOP)			
•	instrument performance check standards		
•	frequency and acceptability of method detection limit (MDL) calculations		
•	frequency and acceptability of demonstration of low level capability		
•	calibration, internal and surrogate standards		
•	laboratory reagent blank, field reagent blank and trip blank		
•	field and laboratory matrix replicates		
•	quality control and proficiency testing samples		
•	laboratory fortified blank and laboratory fortified sample matrix replicates		
•	initial demonstration of method capability		
•	use of control charts		
•	qualitative identification/confirmation of contaminants		

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List schedules of internal and external system and data quality audits and inter laboratory comparisons (may reference SOP)		
• Internal reviews conducted of technical operations		
• Internal reviews done by management to assure the quality system is effective and appropriate.		
Preventive maintenance procedures and schedules		
• describe location of instrument manuals and schedules and documentation of routine equipment maintenance. This section needs to incorporate analytical balance, pipettes and thermometers along with the testing equipment (ICP/MS, GC/MS, IC, pH, HPLC, etc…)		
• describe availability of instrument spare parts in the laboratory		
• list any maintenance contracts in place		
Corrective action contingencies		
• describe response to obtaining unacceptable results from analysis of PT samples and from internal QC checks		
• name persons responsible for the various corrective actions		
• describe how corrective actions taken are documented		
Record keeping procedures		
• describe procedures and documentation of those procedures;		
• list length of storage, media type (electronic or hard copy)		
• describe security policy of electronic databases		
• all electronic data should have software support so it may be regenerated		
Data Integrity/Ethics (CLADW Supplement 1, EPA 815-F-08-006, June 2008)		
• Ethics policy		
• Ethics training (including examples of ethical and unethical procedures and fraud detection techniques)		
• Ethics program (e.g., reporting procedures if suspected unethical procedures)		

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VII. Documentation

For each method and analyte for which your laboratory seeks SDWA certification please collect the following files and return with the Pre-survey Package

1. Copy of your most recent on-site evaluation reports.
   - Initial Audit report listing findings
   - Laboratory's Corrections to findings
   - Finial closeout audit report
2. Copy of your Quality Assurance Manual.
3. Copy of your current certificate with scope of accreditation (from your home state or NELAP).
4. This year and last year's Proficiency Testing Water Studies and Corrective Action Report for any failures. Proficiency Testing Water Study results must be Email to the WV Certification Program directly from the water study provider (no photocopies will be accepted).

VIII. Additional Information

1. For the regulate SDWA contaminants that your laboratory does not have the capability to perform, please list the contract laboratories utilized.

   _____

   _____

   _____

   _____

IX. Important Program Requirements

States in which all drinking water compliance analyses are not conducted at State operated laboratories, are required to establish a certification program for drinking water laboratories [40 CFR 142.10(b)(3)(i)]. All State certification programs must enforce compliance with all provisions of the National Primary Drinking Water Regulations (NPDWR). The Environmental Protection Agency (EPA) encourages all States to base the certification of drinking water laboratories upon the criteria contained in the most recent edition of the Manual for the Certification of Laboratories Analyzing Drinking Water and upon state-developed equivalents that are at least as stringent.

All laboratories providing drinking water test results for EPA compliance monitoring shall be certified by the State or EPA. The procedures and mechanisms used by the EPA to certify the Primary State Drinking Water Laboratory are the same as those used by the State to certify commercial laboratories.

The West Virginia Drinking Certification Program for Drinking Water Laboratories has developed these additional requirements below to comply with the requirements and criteria in 40 CFR Part 141 of the NPDWR, Code of Federal Regulations, West Virginia Code of Regulation 64-3-13, in addition to policies and publications from the EPA and Region III oversight body.

1) The West Virginia Office of Environmental Health Services (OEHS) Compliance and Enforcement Division is requiring Nitrate, Nitrite, combined Nitrate/Nitrite, and Coliform sample results that exceeded the Maximum Contaminant Level (MCL) be reported in a timely manner. All such elevated results must be FAXed to OEHS Data Management at (304)558-0139 within 24 hours. Persistent or repeated failure to immediately report MCL exceedances may

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jeopardize the certification status of the laboratory. It is also requested that all additional regulatory compliance drinking water sample results be mailed to:

Office of Environmental Health Services
Regulatory Development and Compliance
Capitol and Washington Street
350 Capital Street Room 313
Charleston WV 25301-1798

2) The West Virginia Certifying Authority must receive at least one acceptable PTWS result for all certifiable parameter(s) and by all method(s) for which they hold, by September 30 of each year. If a laboratory does not provide the West Virginia Certifying Authority with an acceptable PTWS results by September 30th of each year those parameters will be downgraded to "not certified". West Virginia accepts all commercial Proficiency Testing programs acceptable to the EPA Office of Drinking Water. No photocopies of PTWS results will be accepted from the laboratory. Laboratories are to instruct the Proficiency Testing provider to forward test results to:

Microbiology Parameters
Office of Laboratory Services
Environmental Microbiology Laboratory
167 11th Avenue
South Charleston, WV 25303

Chemistry Parameters
Office of Laboratory Services
Environmental Microbiology Laboratory
4710 Chimney Drive, Suite G
Charleston WV 25302

3) For each parameter and method the laboratory holds certification and receives an unacceptable evaluation from the proficiency testing provider, shall submit a replacement proficiency testing study to the Commissioner within 90 days of being notified of the unacceptable result. Failure to comply shall result in the parameter or method, or both, being downgraded.

4) It is the laboratory's responsibility to assure that the West Virginia Certifying Authority receives a corrective action report within thirty days of being notified of any unacceptable PTWS result. If the corrective action report from the laboratory is not submitted, it is at the discretion of the Certifying Authority to begin downgrading procedures.

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X. STATEMENT OF VALIDATION

I have read the above statements and as the designated Laboratory Director, I submit this completed Application to the State of West Virginia Drinking Water Certification Program for Drinking Water Laboratories. I attest that the information is true, accurate, and complete to the best of my knowledge. I agree to notify the West Virginia Certifying Authority within 30 days of changes in laboratory name, ownership, laboratory director, location, personnel, facilities, equipment, methodology, and/or record keeping practices, or any other factors which might impair the ability of the laboratory to perform in accordance with the Safe Drinking Water Act.

With the attached application, I hereby apply for certification in accordance with the terms and condition stated above.

_____
Name of Laboratory Director (type or print)

_____
Signature of Laboratory Director and Date

Please send the questionnaire to:

WVDHHR Bureau of Public Health
Office of Laboratory Services
Environmental Chemistry Laboratory
4710 Chimney Drive, Suite G
Charleston, WV 25302

If you have any questions please call.

Gregory Young, Chemistry Certification Officer
Phone: (304)965-2694 Ext. 2222
FAX: (304)965-2696
Gregory.W.Young@wv.gov