

**Chapter 246-390 WAC**  
**DRINKING WATER LABORATORY CERTIFICATION AND DATA REPORTING RULES**

AMENDATORY SECTION (Amending WSR 92-15-152, filed 7/22/92, effective 8/22/92)

**WAC 246-390-001 Purpose(~~Objectives~~).** (1) The purpose of this chapter is to (~~establish a state drinking water program for certification of laboratories analyzing public drinking water under RCW 43.20.050. The certification program is designed to satisfy the intent of the primacy agreement with United States Environmental Protection Agency and the state, in compliance with 40 C.F.R. 142.10, 7/1/90.~~

~~(2) The department certification program:~~

~~(a) Requires laboratories to demonstrate capability to accurately analyze drinking water samples;~~

~~(b) Aids laboratories in improving quality assurance;~~

~~(c) Offers technical assistance in all drinking water analyses;~~

and

~~(d) Fosters cooperation between the state department of health, local health agencies, and operators of laboratories~~) set minimum certification and data reporting requirements for laboratories that analyze drinking water samples.

(2) This chapter conforms to EPA primary enforcement responsibility requirements of 40 Code of Federal Regulations (C.F.R.) 142.10 for the certification of laboratories.

(3) Certified laboratories must comply with the requirements of this chapter, chapter 173-50 WAC, and applicable state and federal drinking water laws and regulations.

AMENDATORY SECTION (Amending WSR 92-15-152, filed 7/22/92, effective 8/22/92)

**WAC 246-390-010 Definitions, abbreviations, and acronyms.** The definitions, abbreviations, and acronyms in this section ((shall)) apply throughout this chapter, unless the context clearly ((indicated)) indicates otherwise.

~~(1) ("Administrative Procedure Act" means the adjudicative proceedings governed by chapter 34.05 RCW and chapter 246-08 WAC.~~

~~(2) "Analytical data" means the recorded qualitative and/or quantitative results of a chemical, physical, biological, microbiological, or radiological determination.~~

~~(3) "Certification" means the formal contractual agreement between the department and the certified laboratory indicating a laboratory is capable of producing accurate analytical data and is authorized to test drinking water compliance samples. The department will issue a certificate to the laboratory indicating the contaminants the laboratory is authorized to analyze. Certification does not guarantee validity of analytical data submitted by a certified laboratory.~~

~~(4) "Certification authority" means the designated official or a representative of the official authorized by the department as the head of the certification program.~~

~~(5) "Certification manual" means the most recent revision of the procedural and technical criteria of the drinking water certification rules. This document, entitled "Certification Manual for Laboratories Analyzing Washington State Drinking Water," is available from the Department of Health, Public Health Laboratory, Drinking Water Certification Program, 1610 NE 150th St., Seattle, Washington 98155-7224.~~

~~(6) "Certification official (CO)" means the designated official authorized by the department to certify drinking water laboratories.~~

~~(7)) "Analyte" means the constituent or property of a sample measured using an analytical method for compliance purposes under chapters 246-290 and 246-291 WAC.~~

~~(2) "Close of business" means the latest time during a business day when a lab is no longer in routine operation for accepting or performing drinking water sample analysis.~~

~~(3) "Compliance sample" means a drinking water sample collected ((in accordance with WAC 246-290-300 and/or 246-290-320 and submitted to a state certified laboratory for analysis)) and analyzed for compliance purposes under chapter 246-290 or 246-291 WAC.~~

~~((8)) (4) "Composite sample" means to combine more than one source sample (up to five different sources) by mixing equal parts of water from each source sample and then analyzing the combined samples as a single sample.~~

~~(5) "Confirmation" means to demonstrate the accuracy of a sample result by analyzing another sample from the same location.~~

~~(6) "Contracting lab" means a certified lab that enters into an agreement with another certified lab to analyze drinking water samples.~~

~~(7) "Department" means the Washington state department of health. ((9) "EMSL-CI" means the EPA Environmental Monitoring and Support Laboratory, Cincinnati, Ohio.~~

~~(10) "EMSL-LV" means the EPA Environmental Monitoring System Laboratory, Las Vegas, Nevada.~~

~~((11)) (8) "Ecology" means the Washington state department of ecology.~~

~~(9) "EPA" means United States Environmental Protection Agency.~~

~~((12) "Intercomparison studies" means a series of cross check samples sent to radiochemistry laboratories by EPA to compare the results between participating laboratories.~~

~~(13) "Laboratory" means any facility under the ownership and technical management of a single entity in a single geographical locale. A laboratory is where scientific examinations are performed on drinking water samples.~~

~~(14) "Maximum contaminant level (MCL)") (10) "Lab" or "certified lab" means an environmental lab accredited under chapter 173-50 WAC for one or more drinking water analytes and meets the requirements of this chapter.~~

~~(11) "MCL (maximum contaminant level)" means the maximum permissible level of a contaminant in water ((the purveyor)) that a public water system delivers to ((any public water system user, measured at the location identified under WAC 246-290-300, Table 4.~~

~~(15) "Official methods" means methodologies specified by EPA drinking water regulations under 40 C.F.R. 141.21 - 141.30, 141.41 - 141.42, 7/1/90 and approved by the department.~~

~~(16) "Parameter" means a single determination or group of related determinations using a specific written official method.~~

~~(17) "Performance evaluation (PE)" means an evaluation of the results of analysis of samples from an external testing source whose true values are unknown to the laboratory conducting the analysis. The external testing service must be approved by the department and/or CO if other than EPA sources are used.~~

~~(18) "On-site audit" means an on-site inspection performed by the department to determine a laboratory's capabilities and facilities.~~

~~(19) "Quality assurance (QA)" means all those planned and systematic actions necessary to provide confidence that an analysis, measurement, or surveillance program produces data of known and defensible quality.~~

~~(20) "Quality controls (QC)" means internal written procedures and routine analyses of laboratory reference materials, samples, and blanks to insure precision and accuracy of methodology, equipment and results.~~

~~(21) "State advisory level (SAL)" means a department-established value for a chemical without an existing MCL. The SAL represents a level which when exceeded, indicates the need for further assessment to determine if the chemical is an actual or potential threat to human health.) consumers. MCLs are established in chapters 246-290 and 246-291 WAC.~~

(12) "Practical quantitation limit" means the lowest concentration of an analyte that can be quantified with a statistical degree of confidence.

(13) "Public water system" is defined and referenced under WAC 246-290-020.

(14) "SRL (state reporting level)" means the minimum concentration of an analyte as required under WAC 246-390-035(3).

AMENDATORY SECTION (Amending WSR 92-15-152, filed 7/22/92, effective 8/22/92)

**WAC 246-390-030 Certification.** (~~(1) The department may grant certification to a laboratory after conducting a complete assessment of the laboratory's capabilities, including:~~

~~(a) Submission of a completed application;~~

~~(b) Submission of the proper fees;~~

~~(c) Satisfactory performance on PE studies, and intercomparison samples where necessary;~~

~~(d) Submission of an updated QA plan; and~~

~~(e) Successful completion of an on-site inspection.~~

~~(2) The department may grant less than full certification based on terms and conditions incorporated in the contractual agreement between the laboratory and the department.) To be certified to analyze drinking water samples, a lab shall:~~

(1) Be accredited under chapter 173-50 WAC; and

(2) Comply with data reporting requirements under this chapter.

NEW SECTION

**WAC 246-390-035 Data reporting.** (1) A lab shall report analytical results to the department and the public water system that are:

- (a) Complete;
- (b) Legible;
- (c) Accurate; and
- (d) Valid.

(2) A lab shall complete and submit to the department a data report in accordance with the instructions in the (guidance "Title and Date").

(3) A lab reporting analytical data shall report results to the department and the public water system as follows:

(a) A result that is less than the SRL and less than the lab's established practical quantitation limit for an analyte shall be reported as "nondetect" or "ND."

(b) A result that is equal to or greater than the SRL but less than the lab's established practical quantitation limit for an analyte shall be reported as an estimated number.

(c) A result that is equal to or greater than the lab's established practical quantitation limit for an analyte shall be reported as a number.

(4) The SRL for each analyte is specified in Table 1.

Table 1

Analyte Name	Analyte Number	Units	SRL
1,1 Dichloroethane	0058	µg/L	0.5
1,1 Dichloroethylene	0046	µg/L	0.5
1,1 Dichloropropene	0062	µg/L	0.5
1,1,1 Trichloroethane	0047	µg/L	0.5
1,1,1,2 Tetrachloroethane	0072	µg/L	0.5
1,1,2 Trichloroethane	0067	µg/L	0.5
1,1,2,2 Tetrachloroethane	0080	µg/L	0.5
1,2 Dichlorobenzene	0084	µg/L	0.5
1,2 Dichloroethane	0050	µg/L	0.5
1,2 Dichloropropane	0063	µg/L	0.5
1,2,3 Trichlorobenzene	0098	µg/L	0.5
1,2,3 Trichloropropane	0079	µg/L	0.5
1,2,4 Trichlorobenzene	0095	µg/L	0.5
1,2,4 Trimethylbenzene	0091	µg/L	0.5
1,3 Dichloropropane	0070	µg/L	0.5
1,3 Dichloropropene	0154	µg/L	0.5

Analyte Name	Analyte Number	Units	SRL
1,3,5 Trimethylbenzene	0089	µg/L	0.5
1,4 Dichlorobenzene	0052	µg/L	0.5
2,2 Dichloropropane	0059	µg/L	0.5
2,3,7,8 TCDD (dioxin)	0149	ng/L	0.011
2,4 - D	0037	µg/L	0.22
2,4 DB	0135	µg/L	1
2,4,5 T	0136	µg/L	0.4
2,4,5 TP (Silvex)	0038	µg/L	0.44
3,5 Dichlorbenzoic Acid	0226	µg/L	0.5
4,4 DDD	0232	µg/L	0.1
4,4 DDE	0233	µg/L	0.1
4,4 DDT	0234	µg/L	0.1
Acenaphthylene	0244	µg/L	0.2
Acifluorfen	0223	µg/L	2
Alachlor	0117	µg/L	0.44
Aldicarb	0142	µg/L	1.1
Aldicarb Sulfone	0143	µg/L	0.8
Aldicarb Sulfoxide	0144	µg/L	1.76
Aldrin	0188	µg/L	0.07
Alkalinity-Lab	0403	mg/L	5
Anthracene	0246	µg/L	0.2
Antimony	0112	mg/L	0.003
Arochlor 1016	0180	µg/L	0.08
Arochlor 1221	0173	µg/L	20
Arochlor 1232	0174	µg/L	0.5
Arochlor 1242	0175	µg/L	0.3
Arochlor 1248	0176	µg/L	0.1
Arochlor 1254	0177	µg/L	0.1
Arochlor 1260	0178	µg/L	0.2
Arsenic	0004	mg/L	0.001
Asbestos	0115	MFL	0.01
Atrazine	0119	µg/L	0.22
Barium	0005	mg/L	0.1
Bentazon	0220	µg/L	0.5
Benzene	0049	µg/L	0.5
Benzo (a) anthracene	0247	µg/L	0.2
Benzo (a) Pyrene	0120	µg/L	0.044
Benzo (b) fluoroanthene	0248	µg/L	0.2
Benzo (k) fluoranthene	0250	µg/L	0.2
Benzyl Butyl Phthalate	0258	µg/L	1.0
Beryllium	0110	mg/L	0.0003
Bromacil	0179	µg/L	0.2
Bromate	0419	mg/L	0.0001
Bromobenzene	0078	µg/L	0.5
Bromochloromethane	0086	µg/L	0.5
Bromodichloromethane	0028	µg/L	0.5
Bromoform	0030	µg/L	0.5
Bromomethane	0054	µg/L	0.5
Butachlor	0121	µg/L	0.4

Analyte Name	Analyte Number	Units	SRL
Cadmium	0006	mg/L	0.001
Carbaryl	0145	µg/L	2
Carbofuran	0146	µg/L	1.98
Carbon Tetrachloride	0048	µg/L	0.5
Cesium 134	0107	pCi/L	10
Chlordane (total)	0122	µg/L	0.44
Chloride	0021	mg/L	20
Chlorite	0418	mg/L	0.02
Chlorobenzene	0071	µg/L	0.5
Chloroethane	0055	µg/L	0.5
Chloroform	0027	µg/L	0.5
Chloromethane	0053	µg/L	0.5
Chromium	0007	mg/L	0.007
Chrysene	0251	µg/L	0.2
Cis- 1,2 Dichloroethylene	0060	µg/L	0.5
Cis- 1,3 Dichloropropene	0065	µg/L	0.5
Color	0018	CU	15
Conductivity	0016	Umhos/cm	70
Copper	0023	mg/L	0.02
Cyanide	0116	mg/L	0.05
Dalapon	0137	µg/L	2.2
DBCP	0103	µg/L	0.044
DBCP (screening)	0428	µg/L	.5
DCPA Acid Metabolites	0225	µg/L	0.1
Di (Ethylhexyl) Adipate	0124	µg/L	1.32
Di (Ethylhexyl) Phthalate	0125	µg/L	1.32
Dibromoacetic Acid	0415	µg/L	1.0
Dibromochloromethane	0029	µg/L	0.5
Dibromomethane	0064	µg/L	0.5
Dicamba	0138	µg/L	0.2
Dichloroacetic Acid	0412	µg/L	1.0
Dichlorodifluoromethane	0104	µg/L	0.5
Dichlorprop	0221	µg/L	0.5
Dieldrin	0123	µg/L	0.1
Diethyl Phthalate	0260	µg/L	1.0
Dimethyl Phthalate	0261	µg/L	1.0
Di-n-butyl Phthalate	0259	µg/L	1.0
Dinoseb	0139	µg/L	0.44
Diquat	0150	µg/L	0.88
EDB	0102	µg/L	0.022
EDB (screening)	0427	µg/L	.5
Endothal	0151	µg/L	19.8
Endrin	0033	µg/L	0.022
EPTC	0208	µg/L	0.03
Ethylbenzene	0073	µg/L	0.5
Fluoranthene	0253	µg/L	0.2
Fluorene	0254	µg/L	0.2
Fluoride	0019	mg/L	0.2
Glyphosate	0152	µg/L	13.2

Analyte Name	Analyte Number	Units	SRL
Gross Alpha	0165	pCi/L	3
Gross Alpha (Minus Uranium)	0041	pCi/L	*
Gross Beta	0042	pCi/L	4
HAA(5)	0416	µg/L	*
Hardness	0015	mg/L	10
Heptachlor	0126	µg/L	0.088
Heptachlor Epoxide	0127	µg/L	0.044
Hexachlorobenzene	0128	µg/L	0.22
Hexachlorobutadiene	0097	µg/L	0.5
Hexachlorocyclo Pentadiene	0129	µg/L	0.22
Iodine 131	0108	pCi/L	1
Iron	0008	mg/L	0.1
Isopropylbenzene	0087	µg/L	0.5
Lead	0009	mg/L	0.001
Lindane (bhc - gamma)	0034	µg/L	0.044
M- dichlorobenzene	0083	µg/L	0.5
M/P Xylenes (mcl for total)	0074	µg/L	0.5
Manganese	0010	mg/L	0.01
Mercury	0011	mg/L	0.0002
Methomyl	0147	µg/L	4
Methoxychlor	0035	µg/L	0.22
Methylene Chloride (Dichloromethane)	0056	µg/L	0.5
Metolachlor	0130	µg/L	1
Metribuzin	0131	µg/L	0.2
Molinate	0218	µg/L	0.2
Monobromoacetic Acid	0414	µg/L	1.0
Monochloroacetic Acid	0411	µg/L	2.0
Naphthalene	0096	µg/L	0.5
N-Butylbenzene	0094	µg/L	0.5
Nickel	0111	mg/L	0.005
Nitrate-n	0020	mg/L	0.5
Nitrite-n	0114	mg/L	0.1
N-Propylbenzene	0088	µg/L	0.5
O- Chlorotoluene	0081	µg/L	0.5
O- Xylene (MCL for total)	0075	µg/L	0.5
Oxamyl	0148	µg/L	4.4
P- Chlorotoluene	0082	µg/L	0.5
Paraquat	0400	µg/L	0.8
PCB (as Decachlorobiphenyl)	0401	µg/L	0.22
Pentachlorophenol	0134	µg/L	0.088
Phenanthrene	0256	µg/L	0.2
Picloram	0140	µg/L	0.22
P-Isopropyltoluene	0093	µg/L	0.5
Propachlor	0132	µg/L	0.1
Pyrene	0257	µg/L	0.2
Radium 226	0039	pCi/L	1
Radium 226 + 228	0040	pCi/L	*
Radium 228	0166	pCi/L	1
Radon	0109	pCi/L	*

Analyte Name	Analyte Number	Units	SRL
Sec- Butylbenzene	0092	µg/L	0.5
Selenium	0012	mg/L	0.002
Silver	0013	mg/L	0.1
Simazine	0133	µg/L	0.154
Sodium	0014	mg/L	5
Strontium 90	0044	pCi/L	2
Styrene	0076	µg/L	0.5
Sulfate	0022	mg/L	50
TDS-total dissolved solids	0026	mg/L	100
Terbacil	0190	µg/L	0.2
Tert- Butylbenzene	0090	µg/L	0.5
Tetrachloroethylene	0068	µg/L	0.5
Thallium	0113	mg/L	0.001
Toluene	0066	µg/L	0.5
Total nitrate/nitrite	0161	mg/L	0.5
Total organic carbon	0421	mg/L	0.7
Total Trihalomethane	0031	µg/L	*
Total Xylenes	0160	µg/L	0.5
Toxaphene	0036	µg/L	2.2
Trans- 1,2 Dichloroethylene	0057	µg/L	0.5
Trans- 1,3 Dichloropropene	0069	µg/L	0.5
Trichloroacetic Acid	0413	µg/L	1.0
Trichloroethylene	0051	µg/L	0.5
Trichlorofluoromethane	0085	µg/L	0.5
Trifluralin	0243	µg/L	0.2
Tritium	0043	pCi/L	1000
Turbidity	0017	NTU	0.1
Uranium	0105	µg/L	1
Vinyl Chloride	0045	µg/L	0.5
Zinc	0024	mg/L	0.2

**Key**  
**CU** = color units  
**MFL** = million fibers per liter  
**mg/L** = parts per million, or milligrams per liter  
**mL** = milliliter  
**ng/L** = nanograms per liter  
**NTU** = nephelometric turbidity units  
**pCi/L** = picocuries per liter  
**pH** = potential hydrogen units  
**µg/L** = parts per billion, or micrograms per liter  
**Umhos/cm** = micromhos per centimeter  
\* = results are calculated values based on other analytical results

(5) A contracting lab shall report results as required in WAC 246-390-075.



NEW SECTION

**WAC 246-390-055 Composite samples.** A lab may composite samples for analysis when requested by a public water system or satellite system management agency in accordance with 40 C.F.R. 141.23 and 141.24.

NEW SECTION

**WAC 246-390-065 Data reporting timeline.** (1) A lab shall submit the data report to the department and the public water system by telephone, facsimile, or e-mail as soon as possible, but no later than the close of business for:

- (a) Routine and repeat coliform sample results that are total coliform, fecal coliform, or *E. coli* bacteria present;
- (b) Routine or confirmation sample results for inorganic, organic, or radiological contaminants that exceed four times the contaminant's primary MCL under chapters 246-290 and 246-291 WAC; and
- (c) Routine or confirmation sample results for nitrate or nitrite that exceed the MCL under chapters 246-290 and 246-291 WAC.

(2) For data reports not included in subsection (1) of this section, a lab shall submit the data report to the department and the public water system no later than five business days from the last date of all analyses completed on the report.

(3) A lab shall document all attempts to notify the department and the public water system as required under subsection (1) of this section by recording the following information in a logbook and retain the information for a minimum of two years after the last entry date as follows:

- (a) Date;
- (b) Time;
- (c) Sample number;
- (d) Public water system name and department-assigned identification number;
- (e) The contact person and telephone number, facsimile number, or e-mail address for the water system;
- (f) The contact person and telephone number, facsimile number, or e-mail address of the department; and
- (g) The initials of the lab person that made the attempt.

(4) A lab shall make the logbook available to the department upon request.

NEW SECTION

**WAC 246-390-075 Reporting contracted analytical results.** (1) A certified lab that contracts with another certified lab shall:

(a) Confirm that the contracted lab is certified under chapter 173-50 WAC to analyze drinking water samples;

(b) Submit a complete report as required under WAC 246-390-035 and 246-390-065 including all analytical results from each contracted lab;

(c) Submit a copy of the contracted lab's original results.

(2) A contracted lab shall submit analytical results to the contracting lab, and not to the department.

NEW SECTION

**WAC 246-390-085 Enforcement.** (1) When a lab fails to comply with the requirements of this chapter, the department may initiate one or more of the following enforcement actions:

(a) An informal letter directing appropriate corrective measures;

(b) A notice of violation requiring appropriate corrective measures;

(c) A compliance schedule of specific actions needed to achieve compliance;

(d) A notice of correction with specific actions needed within a designated time period to achieve compliance.

(2) If a lab fails to comply with a notice of correction as specified in subsection (1)(d) of this section, the department may revoke or suspend a lab's drinking water certification in accordance with WAC 246-390-095.

NEW SECTION

**WAC 246-390-095 Revocation and suspension.** (1) The department may suspend a lab's certification for up to one year or revoke a lab's certification for up to five years if a lab fails to comply with a notice of correction as specified in WAC 246-390-085.

(2) A lab whose certification is suspended or revoked may, after the period of suspension or revocation has ended, apply for certification in conformance with the requirements at the time of application.

(3) If ecology suspends or revokes a lab's accreditation for drinking water analytes as authorized under chapter 173-50 WAC, the department shall immediately suspend or revoke a lab's certification to analyze drinking water samples. The lab must immediately notify the department and public water systems of any samples that are invalidated as a result of the revocation or suspension.

AMENDATORY SECTION (Amending WSR 92-15-152, filed 7/22/92, effective 8/22/92)

**WAC 246-390-100 Appeals.** (~~(A laboratory manager may appeal any certification action such as denial and revocation in writing to the CO. If the question is not satisfactorily resolved, the laboratory manager may appeal in writing by certified mail to the certification authority within thirty days of the decision of the CO. Decisions of the certification authority may be appealed to the secretary of the department within thirty days of notification of final action. The adjudication procedure is governed by the Administrative Procedure Act, this chapter, and chapter 246-08 WAC. Laboratories may be allowed to maintain certification during the appeal process.)~~) (1) A certified lab may appeal a revocation or suspension action taken by the department in accordance with chapters 246-10 WAC, 34.05 RCW, and RCW 43.70.115.

(2) To appeal a notice of revocation or suspension action, the certified lab must file a written appeal with the department within twenty-eight days of service. The written appeal must contain the specific grounds for an appeal.

(3) A certified lab that requests a hearing may continue to operate until the department issues a final order unless the department takes a summary action due to a high public health risk.

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 246-390-020	Requirement for certification.
WAC 246-390-040	Provisional certification.
WAC 246-390-050	Revoking or denying certification.
WAC 246-390-060	Reciprocity.
WAC 246-390-070	Third-party certification.
WAC 246-390-990	Fees.