Washington State Register

WSR 21-23-096 PERMANENT RULES STATE BOARD OF HEALTH

[Filed November 17, 2021, 7:31 a.m., effective January 1, 2022]

Effective Date of Rule: January 1, 2022.

Purpose: Chapter 246-390 WAC, Drinking water laboratory certification and data reporting (lab rule). The adopted amendments align laboratory data reporting requirements with the adopted amendments to chapter 246-290 WAC, Group A public water supplies (Group A rule) as related to per- and polyfluoroalkyl substances (PFAS). The changes to the lab rule are for explicit PFAS reporting of sample results and notification requirements of specific PFAS contaminants and technical and clarifying edits.

Citation of Rules Affected by this Order: Amending WAC 246-390-010, 246-390-055, 246-390-065, 246-390-075, 246-390-085, and 246-390-095.

Statutory Authority for Adoption: RCW 43.20.050 and 70A.125.080. Adopted under notice filed as WSR 21-16-094 on August 3, 2021. Changes Other than Editing from Proposed to Adopted Version: WAC 246-390-010(9): The amendment clarifies the definition of "confirmation" to distinguish the difference between an inner laboratory confirmation sample and a secondary confirmation sample taken in the field. WAC 246-390-010(36): The amendment removed the word "must" from the definition because definitions should not specify requirements. The requirement is specified elsewhere in the rule.

A final cost-benefit analysis is available by contacting Nina D. Helpling, Washington State Department of Health, P.O. Box 47820, Olympia, WA 98504-7820, phone 360-236-3065, TTY 711, email nina.helpling@doh.wa.gov.

Number of Sections Adopted in Order to Comply with Federal Statute: New 0, Amended 0, Repealed 0; Federal Rules or Standards: New 0, Amended 0, Repealed 0; or Recently Enacted State Statutes: New 0, Amended 0, Repealed 0.

Number of Sections Adopted at the Request of a Nongovernmental Entity: New 0, Amended 0, Repealed 0.

Number of Sections Adopted on the Agency's own Initiative: New 0, Amended 6, Repealed 0.

Number of Sections Adopted in Order to Clarify, Streamline, or Reform Agency Procedures: New 0, Amended 0, Repealed 0.

Number of Sections Adopted using Negotiated Rule Making: New 0, Amended 0, Repealed 0; Pilot Rule Making: New 0, Amended 0, Repealed 0; or Other Alternative Rule Making: New 0, Amended 6, Repealed 0. Date Adopted: November 17, 2021.

> Michelle A. Davis Executive Director

OTS-3121.5

AMENDATORY SECTION (Amending WSR 18-09-048, filed 4/13/18, effective 5/14/18)

- WAC 246-390-010 Definitions, abbreviations, and acronyms. definitions, abbreviations, and acronyms in this section apply throughout this chapter, unless the context clearly indicates otherwise.
- (1) "μmhos/cm" means micromhos per centimeter (1 μmhos/cm = 1 S/ cm).

 - (2) " μ g/L" means micrograms per liter (1 μ g/L = 1 ppb). (3) "Acute" means posing an immediate risk to human health.
- (((2) "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.
- (3))) (4) "Bioaccumulative" means a chemical that can accumulate in the body when regular exposure occurs through drinking water.
 - (5) "C.F.R." means the Code of Federal Regulations.
 - $((\frac{4}{4}))$ (6) "CFU" means colony-forming unit.
- (7) "Chronic" means ((human exposure over many years to a contaminant at levels above the MCL)) posing a risk to human health only when exposure occurs over many years to a contaminant above a state or federal health standard.
- (((5))) (8) "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.
- (((6))) <u>(9)</u> "Confirmation" means ((an additional sample is ana- lyzed from the same location where a detection has occurred to confirm the detection. The original sample and the confirmation sample are collected and analyzed within a reasonable period of time, generally not to exceed two weeks. Confirmation occurs when the confirmation sample analysis result falls within plus or minus thirty percent of the original sample result)) to demonstrate that the results of a sample accurately represents the original sample result by analyzing another sample from the same location within a reasonable given period of time. This confirmation analysis is in addition to any analytical method confirmation requirements.
- (((7))) (10) "Contaminant" means a substance present in drinking water that may adversely affect the health of the consumer or the aesthetic quality of the water. It is measured using an analytical method for compliance purposes under chapters 246-290 and 246-291 WAC.
- (11) "Contracted lab" means a certified lab that receives a drinking water sample from another certified lab for analysis.
- $((\frac{8}{(8)}))$ (12) "Contracting lab" means a certified lab that sends a drinking water sample to another certified lab to be analyzed.
 - $((\frac{9}{(9)}))$ (13) "CU" means color unit.
- (14) "Department" means the Washington state department of health or health officer as identified in a joint plan of responsibility under WAC 246-290-030(1).
- $((\frac{10}{10}))$ (15) "Ecology" means the Washington state department of ecology.
- (((11))) <u>(16)</u> "EPA" means the United States Environmental Protection Agency.
- $((\frac{12}{12}))$ "Estimated concentration" means the level of the ((analyte)) contaminant reported to the department is above a lab's MDL, but below the lab's MRL.
 - $((\frac{13}{13}))$ <u>(18)</u> "GWR" means groundwater rule.

- $((\frac{(14)}{(19)}))$ "Lab" or "certified lab" means an environmental lab accredited under chapter 173-50 WAC for one or more drinking water ((analytes)) contaminants and meets the requirements of this chapter.
- ((((15)))) (20) "Maximum contaminant level (MCL)" means the maximum permissible level of a contaminant in water that a public water system delivers to consumers. MCLs are established in chapters 246-290 and 246-291 WAC.
- $((\frac{(16)}{(16)}))$ <u>(21)</u> "Minimum detectable activity (MDA)" means the smallest activity or concentration of radioactive material in a sample that will yield a net count (above sample background) that can be detected with $((\frac{\text{ninety-five}}{}))$ percent probability.
- $((\frac{17}{17}))$ (22) "Minimum detection level (MDL)" means the minimum measured concentration of a substance that can be reported with ((ninety-nine)) 99 percent confidence that the measured concentration is distinguishable from the method blank results.
- $((\frac{18}{18}))$ (23) "Method reporting limit (MRL)" means the lowest concentration of a standard used for calibration.
 - (((19))) <u>(24) "MFL" means microfibers per liter.</u>
 - (25) "mg/L" means milligrams per liter (1 mg/L = 1 ppm).
 - (26) "MPN" means most probable number.
 - (27) "ng/L" means nanograms per liter (1 ng/L = 1 ppt).
 (28) "NTU" means nephelometric turbidity units.

 - (29) "pCi/L" means picocuries per liter.
 - (30) "ppb" means parts per billion (1 ppb = 1 $\mu q/L$).
 - (31) "ppm" means parts per million (1 ppm = 1 mg/L).
 - (32) "ppt" means parts per trillion (1 ppt = 1 ng/L).
- (33) "Proficiency testing (PT)" means the evaluation of sample analysis results, the true values of which are known to the supplier of the samples, but unknown to the lab conducting the analysis. PT samples are provided by a source external to the certified lab.
- $((\frac{(20)}{(20)}))$ (34) "Public water system" is defined $(\frac{(and referenced)}{(and referenced)})$ under WAC 246-290-020 and 246-291-010.
- (((21))) <u>(35)</u> "Quality control (QC)" means a set of measures used during an analytical method to ensure that the process is within specified control parameters.
- $((\frac{(22)}{(22)}))$ (36) "State action level (SAL)" means the concentration of a contaminant or group of contaminants, without an MCL, established to protect public health in accordance with WAC 246-290-315 and which, if exceeded, triggers actions a purveyor takes in accordance with WAC 246-290-320.
- (37) "State detection reporting limit (SDRL)" means the minimum reportable detection of ((an analyte)) a contaminant as established in Tables $((\frac{1}{2}))$ $\underline{3}$ through $((\frac{4}{2}))$ $\underline{7}$ of this chapter.
- (38) "Tentatively identified compound (TIC)" means compounds detected in samples that are not target compounds, internal standards, system monitoring compounds or surrogates.

[Statutory Authority: RCW 43.20.050 and 70.119A.080. WSR 18-09-048, § 246-390-010, filed 4/13/18, effective 5/14/18. Statutory Authority: RCW 43.20.050. WSR 92-15-152 (Order 290B), § 246-390-010, filed 7/22/92, effective 8/22/92.]

AMENDATORY SECTION (Amending WSR 18-09-048, filed 4/13/18, effective 5/14/18)

- WAC 246-390-055 Reporting contracted analytical results. (1) A contracting lab that contracts with another lab shall:
- $((\frac{1}{1}))$ (a) Verify that the contracted lab is $((\frac{a}{1}))$ currently certified ((lab)) in Washington to analyze samples for the contaminant;
- $((\frac{(2)}{(2)}))$ (b) Notify the public water system that a sample will be contracted to another lab at the time the contracting lab confirms that the sample will be contracted out to another lab;
- (c) Confirm that the contracted lab receives the sample within ((fourteen)) 14 calendar days of the contracting lab receiving the sample, but not to exceed ((an analyte)) a contaminant holding time if the holding time is less than ((fourteen)) 14 calendar days;
- (((3))) (d) Provide the following information to the contracted
- $((\frac{a}{a}))$ <u>(i)</u> The public water system's department assigned water system identification number;
 - $((\frac{b}{b}))$ (ii) The name of the public water system;

 - $((\frac{(+)}{(+)}))$ (iii) The date the sample was collected; $(\frac{(+)}{(+)})$ (iv) The location where the sample was collected;
- $((\frac{(e)}{(v)}))$ The public water system's department assigned source identification number;
 - $((\frac{f}{f}))$ <u>(vi)</u> The purpose for the sample;
 - $((\frac{g}{}))$ (vii) The sample composition; and
 - $((\frac{h}{h}))$ (viii) The sample type;
- (e) Identify, on the final analytical results to the public water system, which sample results were contracted to another lab and clearly identify the lab.
- (((4) The contracted lab shall)) (2) A contracted lab that receives a sample from a contracting lab shall:
- (a) Submit to the department a copy of the analytical results following the requirements under WAC 246-390-065 and 246-390-075;
- $((\frac{5)}{1})$ The contracted lab shall)) (b) Submit a copy of the analytical results to the contracting lab in the format and time frame per the contract terms established between the contracting lab and the contracted lab.

[Statutory Authority: RCW 43.20.050 and 70.119A.080. WSR 18-09-048, § 246-390-055, filed 4/13/18, effective 5/14/18.

AMENDATORY SECTION (Amending WSR 18-09-048, filed 4/13/18, effective 5/14/18)

- WAC 246-390-065 Notification requirements. (1) In addition to the data reporting requirements under WAC 246-390-075, a lab shall notify the department and the public water system ((for:
- (a) (i) Routine, repeat, GWR, triggered source water monitoring, and assessment source water monitoring results, as required under chapter 246-290 WAC, that are E. coli bacteria present.
- (ii) Notification occurs with no less than three attempts to contact the department and the public water system by telephone, facsimile, or email as soon as possible after sample results have been determined, but no later than the close of business.

- (b) (i) Routine, repeat, GWR, triggered source water monitoring, and assessment source water monitoring results that are total coliform bacteria present.
- (ii) Notification occurs with one attempt to contact the department and the public water system by telephone (voice mail is acceptable), facsimile, or email as soon as possible after sample results have been determined, but no later than the close of business on the next business day. For labs that operate seven days per week or observe regular holidays; weekends and holidays are not considered "business days" for the purposes of this subsection.
- (c) Routine or confirmation sample results for nitrate or nitrite that exceed the MCL under chapters 246-290 and 246-291 WAC; or
- (d) (i) 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.
- (ii) For (c) and (d) of this subsection, notification occurs with one attempt to contact the department and public water system by telephone, facsimile, or email as soon as possible after sample results have been verified by quality control staff, but no later than the close of business.
- (2)) in accordance with Table 1 of this section for the following exceedances:

Table 1 - Notification Requirements for Routine Compliance Samples

| Sample type | <u>Exceeds</u> | ¹ Required Notification | Required Number of Attempts to Contact the Department |
|---|--|---|---|
| Routine, repeat, triggered, and assessment water coliform samples | Total coliform positive and <i>E. coli</i> positive | Close of business same day | <u>3</u> |
| Routine, repeat, triggered, and assessment water coliform samples | Total coliform positive and <i>E. coli</i> negative | Close of business ² next business day | 1 |
| Routine or confirmation samples for nitrate or nitrite | MCL under chapters 246-290 and 246-291 WAC | Close of business same day | 3 |
| Routine or confirmation sample results for other inorganic, organic, or radiological contaminant sample results | 4 times the state or federal MCL under chapters 246-290 and 246-291 WAC | Close of business same day | 1 |

(2) For routine or confirmation sample results for contaminants that exceed the SAL or state MCL under WAC 246-290-315 and classified as Tier 1, Tier 2 bioaccumulative, or Tier 2 nonbioaccumulative under WAC 246-290-71006 Table 17, a lab shall notify the department as indicated in Table 2 of this section:

Table 2 - Notification Requirements for Contaminants with a SAL or State MCL

| <u>Tier Number</u> | Bioaccumulative (Y/N) | Exceeds | ¹ Required Notification | Required Number of Attempts to Contact the Department |
|--------------------|--------------------------|------------------------------------|---|---|
| Tier 1 | <u>Either</u> | SAL or state MCL | Close of business same day | <u>3</u> |
| Tier 2 | <u>Y</u> | 4 times SAL or state <u>MCL</u> | Close of business same day | <u>3</u> |
| Tier 2 | Y | SAL or state MCL | Close of business ² next business day | 1 |

| <u>Tier Number</u> | Bioaccumulative (Y/N) | Exceeds | ¹ Required Notification | Required Number of Attempts to Contact the Department |
|--------------------|--------------------------|----------------------|------------------------------------|---|
| <u>Tier 2</u> | <u>N</u> | 4 times SAL or state | Close of business same | <u>1</u> |
| | | <u>MCL</u> | <u>day</u> | |

- Notification may occur by telephone, facsimile, or email. If close of business is after 5 p.m. PST, contact the department's after-hours telephone number.

 For labs that operate seven days per week or observe regular holidays; weekends and holidays are not considered business days for the purposes of this
 - <u>(3)</u> A lab shall:
- (a) Document all notification attempts required under subsections (1) and (2) of this section by recording the following information in a paper or electronic logbook:
 - (i) Date;
 - (ii) Time;
 - (iii) Sample number;
- (iv) Public water system name and department-assigned identification number;
- (v) The contact person and telephone number, facsimile number, or email address for the public water system;
- (vi) The contact person and telephone number, facsimile number, or email address of the department; and
 - (vii) The initials of the lab person that made the attempt.
- (b) Make the logbook available to the department upon request; and
- (c) Retain the logbook for a minimum of two years after the last entry date.

[Statutory Authority: RCW 43.20.050 and 70.119A.080. WSR 18-09-048, § 246-390-065, filed 4/13/18, effective 5/14/18.]

AMENDATORY SECTION (Amending WSR 18-09-048, filed 4/13/18, effective 5/14/18)

- WAC 246-390-075 Reporting. (1) A lab shall report analytical results to the department and the public water system.
- (2) ((Effective December 1, 2018,)) A lab submitting paper reports shall complete and submit to the department data reports following the procedures and templates in the department's Laboratory Reporting Guidance, Publication DOH 331-530, ((March 2018)) January 2022.
- (3) A lab submitting electronic reports shall complete and submit to the department data reports following the procedures in the department's Electronic Reporting Guidance, Publication 331-289, ((March 2018)) January 2022.
- (4) Labs shall submit reports to the public water system in the format and time frame that was agreed upon when executing the service agreement between the laboratory and the public water system.
- (5) Labs shall submit reports of acute contaminant results within ((ten)) 10 business days after receiving the sample.
- (6) Labs shall submit reports of chronic contaminants within ((forty-five business)) 30 calendar days after receiving the sample.
 - (7) Analytical results must be complete, legible, and accurate.
- (8) A lab shall report numerical results consistent with the accuracy of the EPA-approved methods and any associated lab instruments, glassware, or tools.

- (9) A lab shall report numerical results out to, but not exceed, one decimal place past the SDRL in cases where the last definitely known digit exceeds one decimal place past the SDRL as follows:

 (a) If the SDRL is 1.1 and the result, out to the last definitely
- known digit is 1.132, then the value reported to the department is 1.13;
- (b) If the digit 6, 7, 8, or 9 is dropped, increase the preceding digit by one unit;
- (c) If the digit 0, 1, 2, 3, or 4 is dropped, do not alter the preceding digit; or
- (d) If the digit 5 is dropped, round off the preceding digit to the nearest even number. For example, 2.25 becomes 2.2, and 2.35 be-
- (10) A lab shall include the following data qualifiers adjacent to the results that are affected:
- (a) "B" This data qualifier is used when the target ((analyte)) contaminant is detected in the method blank above the lab's establish-
- ed MRL or SDRL, whichever is lower;
 (b) "J" This data qualifier is used when the result is an estimated concentration per subsections (13) ((and)), (14), and (17) of this section;
- (c) "NDDS" This data qualifier is used when the ((analyte)) contaminant is not detected in duplicate sample; or
- (d) "U" This data qualifier is used when the radiochemistry ((analyte)) contaminant is not detected at or above the lab's established MDA.
- (11) A lab shall notate on the report to the public water system and the department when any analysis is completed using a provisional accreditation.
- (12) At the department's request, a lab shall submit the following information:
 - (a) The method specific QC for any given analytical report.
- (b) The most recent MDL procedures performed for any given ((analyte)) contaminant.
- (c) The most recent PT study performed for any given ((analyte)) contaminant.
- (13) The SDRLs for organic chemical ((analytes)) contaminants are established in Table ($(\frac{1}{2})$) 3 of this section. All contaminants in Table 3 are considered chronic contaminants.
- (a) Labs shall attach to the ((lab report)) analytical result a copy of the method specific QC results for any organic chemical detection that is reported to the department which is at or above the SDRLs listed in Table $((\frac{1}{2}))$ 3 of this section except for:
 - (i) Chloroform $(0\overline{0}27)$;
 - (ii) Bromodichloromethane (0028);
 - (iii) Dibromochloromethane (0029);
 - (iv) Bromoform (0030);
 - (v) Monochloroacetic Acid (0411);
 - (vi) Dichloroacetic Acid (0412);
 - (vii) Trichloroacetic Acid (0413);
 - (viii) Monobromoacetic Acid (0414);
 - (ix) Monobromoacetic Acid (0415); and
 - (x) Total Organic Carbon (0421).
- (b) A lab shall report organic chemical ((analyte)) contaminant results when the lab's established MRL is greater than the SDRL as:
- (i) "Nondetect" or "ND" when a lab's result is less than the SDRL and MRL;

- (ii) An estimated concentration, notated with a "J" data qualifier when a result is equal to or greater than the SDRL, but less than the lab's established MRL;
- (iii) A number when a result is equal to or greater than the lab's established MRL.
- (c) A lab shall report organic chemical ((analyte)) contaminant results when the lab's established MRL is less than the SDRL as:
 (i) "Nondetect" or "ND" when a lab's result is less than the
- lab's established MRL;
- (ii) "Nondetect" or "ND" when a lab's result is less than the ((lab's)) established SDRL; or
- (iii) A number when a result is equal to or greater than the SDRL.
- (d) A lab shall report organic chemical ((analyte)) contaminant results when their established MRL is equal to the SDRL as:
- (i) "Nondetect" or "ND" when a lab's result is less than the SDRL and MRL; or
- (ii) A number when a result is equal to or greater than the SDRL and the lab's established MRL.

Table ((1)) 3 - Organic ((Chemicals)) Contaminants

| ((Analyte)) <u>Contaminant</u> Name | ((Analyte)) <u>Contaminant</u> Number | Units | SDRL |
|--|---|-------|-------|
| 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 |
| 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 | 0.005 |
| 2,4 D | 0037 | μg/L | 0.1 |
| 2,4 DB | 0135 | μg/L | 1 |
| 2,4,5 T | 0136 | μg/L | 0.4 |
| 2,4,5 TP (Silvex) | 0038 | μg/L | 0.2 |
| 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 |

| ((Analyte)) <u>Contaminant</u> Name | ((Analyte)) <u>Contaminant</u> Number | Units | SDRL |
|--|---|--------------|------|
| Acenaphthylene | 0244 | μg/L | 0.2 |
| Acifluorfen | 0223 | μg/L | 2 |
| Alachlor | 0117 | μg/L | 0.2 |
| Aldicarb | 0142 | μg/L | 0.5 |
| Aldicarb Sulfone | 0143 | μg/L | 0.8 |
| Aldicarb Sulfoxide | 0144 | μg/L | 0.5 |
| Aldrin | 0118 | μg/L | 0.1 |
| Anthracene | 0246 | μg/L | 0.2 |
| 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 |
| Atrazine | 0119 | μg/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 | 0.02 |
| Benzo (b) fluoroanthene | 0248 | μg/L | 0.2 |
| Benzo (k) fluoranthene | 0250 | μg/L | 0.2 |
| Benzyl Butyl Phthalate | 0258 | μg/L | 1.0 |
| Bromacil | 0179 | μg/L | 0.1 |
| Bromobenzene | 0078 | <u>μg/L</u> | 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 | 0.1 |
| Carbaryl | 0145 | μg/L | 2 |
| Carbofuran | 0146 | μg/L | 0.9 |
| Carbon Tetrachloride | 0048 | μg/L | 0.5 |
| Chlordane (total) | 0122 | μg/L | 0.2 |
| Chlorobenzene | 0071 | μg/L | 0.5 |
| Chloroethane | 0055 | μg/L | 0.5 |
| Chloroform | 0027 | μg/L | 0.5 |
| Chloromethane | 0053 | μg/L | 0.5 |
| Chrysene | 0251 | μg/L | 0.2 |
| Cis- 1,2 Dichloroethylene | 0060 | μg/L | 0.5 |
| Cis- 1,3 Dichloropropene | 0065 | μg/L | 0.5 |
| Dalapon | 0137 | μg/L | 1 |
| DBCP | 0103 | μg/L μg/L | 0.02 |
| DBCP (screening) | 0428 | μg/L μg/L | 0.02 |
| DCPA Acid Metabolites | 0225 | μg/L μg/L | 0.1 |

| ((Analyte)) <u>Contaminant</u> Name | ((Analyte)) <u>Contaminant</u> Number | Units | SDRL |
|--|---|---------------------|-------------------------|
| Di (2-Ethylhexyl) Adipate | 0124 | μg/L | 0.6 |
| Di (2-Ethylhexyl) Phthalate | 0125 | μg/L | 0.6 |
| Dibromoacetic Acid | 0415 | μg/L | 1 |
| Dibromochloromethane | 0029 | μg/L | 0.5 |
| Dibromomethane | 0064 | μg/L | 0.5 |
| Dicamba | 0138 | μg/L | 0.2 |
| Dichloroacetic Acid | 0412 | μg/L | 1 |
| 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 | 0.2 |
| Diquat | 0150 | μg/L | 0.4 |
| EDB | 0102 | μg/L | 0.01 |
| EDB (screening) | 0427 | μg/L | 0.5 |
| Endothal | 0151 | μg/L | 9 |
| Endrin | 0033 | μg/L | 0.01 |
| EPTC | 0208 | μg/L | 0.1 |
| Ethylbenzene | 0073 | μg/L | 0.5 |
| ((Fluoranthene | 0253 | <u>μg/L</u> | 0.2)) |
| Fluorene | 0254 | μg/L | 0.2 |
| Glyphosate | 0152 | μg/L | 6 |
| HAA(5) | 0416 | μg/L | ((<u>*</u>)) <u>+</u> |
| Heptachlor | 0126 | μg/L | 0.04 |
| Heptachlor Epoxide | 0127 | μg/L | 0.02 |
| Hexachlorobenzene | 0128 | μg/L | 0.1 |
| Hexachlorobutadiene | 0097 | μg/L | 0.5 |
| Hexachlorocyclo pentadiene | 0129 | μg/L | 0.1 |
| Isopropylbenzene | 0087 | μg/L | 0.5 |
| Lindane (bhc - gamma) | 0034 | μg/L | 0.02 |
| M- dichlorobenzene | 0083 | μg/L | 0.5 |
| M/P Xylenes (MCL for total) | 0074 | μg/L | 0.5 |
| Methomyl | 0147 | μg/L | 4 |
| Methoxychlor | 0035 | μg/L | 0.1 |
| Methylene Chloride (Dichloromethane) | 0056 | μg/L | 0.5 |
| Metolachlor | 0130 | μg/L | 0.1 |
| Metribuzin | 0131 | μg/L | 0.1 |
| Molinate | 0218 | μg/L | 0.1 |
| Monobromoacetic Acid | 0414 | μg/L | 1 |
| Monochloroacetic Acid | 0411 | <u>μg/L</u> μg/L | 2 |
| Naphthalene | 0096 | <u>μg/L</u> μg/L | 0.5 |
| | 1 0070 | MB = | 1 0.5 |
| N-Butylbenzene | 0094 | μg/L | 0.5 |

| ((Analyte)) <u>Contaminant</u> Name | ((Analyte)) <u>Contaminant</u> Number | Units | SDRL |
|--|---|-------|----------------|
| O- Chlorotoluene | 0081 | μg/L | 0.5 |
| O- Xylene (MCL for total) | 0075 | μg/L | 0.5 |
| Oxamyl | 0148 | μg/L | 2 |
| P- Chlorotoluene | 0082 | μg/L | 0.5 |
| Paraquat | 0400 | μg/L | 0.8 |
| PCB (as Decachlorobiphenyl) | 0401 | μg/L | 0.1 |
| Pentachlorophenol | 0134 | μg/L | 0.04 |
| Phenanthrene | 0256 | μg/L | 0.2 |
| Picloram | 0140 | μg/L | 0.1 |
| P-Isopropyltoluene | 0093 | μg/L | 0.5 |
| Propachlor | 0132 | μg/L | 0.1 |
| Pyrene | 0257 | μg/L | 0.2 |
| Sec- Butylbenzene | 0092 | μg/L | 0.5 |
| Simazine | 0133 | μg/L | 0.07 |
| Styrene | 0076 | μg/L | 0.5 |
| Terbacil | 0190 | μg/L | 0.1 |
| Tert- Butylbenzene | 0090 | μg/L | 0.5 |
| Tetrachloroethylene | 0068 | μg/L | 0.5 |
| Toluene | 0066 | μg/L | 0.5 |
| Total organic carbon | 0421 | mg/L | 0.7 |
| Total Trihalomethane | 0031 | μg/L | ((*)) <u>+</u> |
| Total Xylenes | 0160 | μg/L | 0.5 |
| Toxaphene | 0036 | μg/L | 1 |
| Trans- 1,2 Dichloroethylene | 0057 | μg/L | 0.5 |
| Trans- 1,3 Dichloropropene | 0069 | μg/L | 0.5 |
| Trichloroacetic Acid | 0413 | μg/L | 1 |
| Trichloroethylene | 0051 | μg/L | 0.5 |
| Trichlorofluoromethane | 0085 | μg/L | 0.5 |
| Trifluralin | 0243 | μg/L | 0.1 |
| Vinyl Chloride | 0045 | μg/L | 0.5 |

((Key mg/L

= parts per million, or milligrams per liter

= nanograms per liter ng/L

μg/L = parts per billion, or micrograms per liter

=))+ Results are calculated values based on other analytical results.

(14) The SDRLs for inorganic chemical ((analytes)) contaminants are established in Table ($(\frac{2}{2})$) $\underline{4}$ of this section. All contaminants in Table 4 are considered chronic contaminants except annual, quarterly, or monthly nitrate analysis which is considered an acute contaminant. Labs shall report analytical results within 10 business days after receiving the nitrate sample. If nitrate analysis is part of a routine complete inorganic compound panel, then labs shall submit a report to the department within 30 calendar days after receiving the sample.

- (a) A lab shall report inorganic chemical ((analyte)) contaminant results when the lab's established MRL is greater than the SDRL as:
- (i) "Nondetect" or "ND" when a lab's result is less than the SDRL and MRL;

- (ii) An estimated concentration, notated with a "J" data qualifier, when a result is equal to or greater than the SDRL, but less than the lab's established MRL; or
- (iii) A number when a result is equal to or greater than the lab's established MRL.
- (b) A lab shall report inorganic chemical ((analyte)) contaminant results when the lab's established MRL is less than the SDRL as:

 (i) "Nondetect" or "ND" when a lab's result is less than the
- lab's established MRL;
- (ii) "Nondetect" or "ND" when a lab's result is less than the ((lab's)) <u>department's</u> established SDRL, <u>but greater than the lab's</u> established MRL; or
- (iii) A number when a result is equal to or greater than the SDRL.
- (c) A lab shall report inorganic chemical ((analyte)) contaminant results when the lab's established MRL is equal to the SDRL as:
- (i) "Nondetect" or "ND" when a lab's result is less than the SDRL and MRL; or
- (ii) A number when a result is equal to or greater than the SDRL and the lab's established MRL.

Table ((2)) 4 - Inorganic ((Chemicals)) Contaminants

| | ((Analyte)) | | |
|--|---------------------------|----------|------------------------------|
| ((Analyte)) <u>Contaminant</u> Name | <u>Contaminant</u> Number | Units | SDRL |
| Alkalinity-Lab | 0403 | mg/L | 5 |
| Antimony | 0112 | mg/L | 0.003 |
| Arsenic | 0004 | mg/L | 0.001 |
| Asbestos | 0115 | MFL | 0.20 |
| Barium | 0005 | mg/L | 0.1 |
| Beryllium | 0110 | mg/L | 0.0003 |
| Bromate | 0419 | mg/L | 0.005/0.001((*)) |
| Cadmium | 0006 | mg/L | 0.001 |
| Chloride | 0021 | mg/L | ((20)) <u>2</u> |
| Chlorite | 0418 | mg/L | 0.02 |
| Chromium | 0007 | mg/L | 0.007 |
| Color | 0018 | CU | 15 |
| Conductivity | 0016 | μmhos/cm | 70 |
| Copper | 0023 | mg/L | 0.02 |
| Cyanide | 0116 | mg/L | 0.05 |
| Fluoride | 0019 | mg/L | 0.2 |
| Hardness | 0015 | mg/L | 10 |
| Iron | 0008 | mg/L | 0.1 |
| Lead | 0009 | mg/L | 0.001 |
| Manganese | 0010 | mg/L | 0.01 |
| Mercury | 0011 | mg/L | 0.0002 |
| Nickel | 0111 | mg/L | 0.005 |
| Nitrate-n | 0020 | mg/L | 0.5 |
| Nitrite-n | 0114 | mg/L | 0.1 |
| Selenium | 0012 | mg/L | 0.002 |
| Silver | 0013 | mg/L | 0.1 |
| Sodium | 0014 | mg/L | 5 |
| | | | |

| ((Analyte)) <u>Contaminant</u> Name | ((Analyte)) <u>Contaminant</u> Number | Units | SDRL |
|--|---|-------|------------------------------|
| Sulfate | 0022 | mg/L | ((50)) <u>2</u> |
| TDS-total dissolved solids | 0026 | mg/L | 100 |
| Thallium | 0113 | mg/L | 0.001 |
| Total nitrate/nitrite | 0161 | mg/L | 0.5 |
| Turbidity | 0017 | NTU | 0.1 |
| Zinc | 0024 | mg/L | 0.2 |

((Key

ĈU = color units

MFL = million fibers per liter

= parts per million, or milligrams per liter mg/L

NŤU = nephelometric turbidity units umhos/cm = micromhos per centimeter

=))Labs that use EPA Methods 317.0, 326.0 or 321.8 must meet a 0.0010 mg/L SDRL for bromate.

- (15) The SDRLs for radiochemistry ((analytes)) contaminants are established in Table (($\frac{3}{2}$)) $\underline{5}$ of this section. All contaminants in Table 5 are considered chronic contaminants.
- (a) A lab's MDA must meet the established SDRL levels for the analysis to be considered for compliance purposes.
- (b) A lab shall report radiochemistry ((analyte)) contaminant results as:
- (i) A number and a "U" qualifier if the ((analyte)) contaminant was analyzed for, but not detected at or above the lab's established MDA; or
- (ii) A number when a result is equal to or greater than the lab's established MDA.

Table ((3)) 5 - Radiochemistry Contaminants

| ((Analyte)) <u>Contaminant</u> Name | ((Analyte)) <u>Contaminant</u> Number | Units | SDRL |
|--|---|-------|-------------------------|
| Cesium 134 | 0107 | pCi/L | 10.0 |
| Gross Alpha | 0165 | pCi/L | 3.0 |
| Gross Alpha (Minus Uranium) | 0041 | pCi/L | ((*)) <u>+</u> |
| Gross Beta | 0042 | pCi/L | 4.0 |
| Iodine 131 | 0108 | pCi/L | 1.0 |
| Radium 226 | 0039 | pCi/L | 1.0 |
| Radium 226 + 228 | 0040 | pCi/L | ((<u>*</u>)) <u>+</u> |
| Radium 228 | 0166 | pCi/L | 1.0 |
| Radon | 0109 | pCi/L | ((*)) <u>+</u> |
| Strontium 90 | 0044 | pCi/L | 2.0 |
| Tritium | 0043 | pCi/L | 1000 |
| Uranium | 0105 | μg/L | 1.0 |

((Key

pCi/L = picocuries per liter

= parts per billion, or micrograms per liter μg/L

- =))+ Results are calculated values based on other analytical results.
- (16) The units for microbiology ((analytes)) contaminants are established in Table ((4)) 6 of this section. All contaminants in Table 6 are considered acute contaminants.
- (a) Total coliform and E. coli results for routine and repeat samples in accordance with 40 C.F.R. 141 Subpart Y - Revised Total Coliform Rule, GWR triggered, and GWR assessment source sample results that are absent or present as follows:
 - (i) "Satisfactory" if no total coliforms are detected.

- (ii) "Unsatisfactory" if:
- (A) Total coliforms are detected; and
- (B) E. coli absent if E. coli is not detected; or
- (C) E. coli present if E. coli is detected.
- (b) A lab shall report routine filtered and unfiltered surface water microbiology ((analyte)) contaminant results as a number.
- (c) A lab shall report routine heterotrophic plate count results as a number.
- (d) A lab shall report results of investigative samples or samples collected for information only to the public water system for total coliforms, fecal coliforms, and *E. coli* as a number or, as absent or present. Investigative samples or samples collected for information only are not required to be reported to the department.

| Table | ((4)) | <u>6</u> - | Microbiology | <u>Contaminants</u> |
|-------|-------|------------|--------------|---------------------|
|-------|-------|------------|--------------|---------------------|

| ((Analyte)) Contaminant Name | ((Analyte)) <u>Contaminant</u> Number | Units |
|---------------------------------------|--|------------------|
| E. coli (numerical) | <u>0003</u> | <u>CFU/100mL</u> |
| E. coli (numerical) | <u>0003</u> | <u>MPN/100mL</u> |
| E. coli (absence/presence) | <u>0003</u> | <u>N/A</u> |
| Fecal Coliform (numerical) | <u>0002</u> | <u>CFU/100mL</u> |
| Fecal Coliform (numerical) | <u>0002</u> | <u>MPN/100mL</u> |
| Fecal Coliform (absence/presence) | <u>0002</u> | <u>N/A</u> |
| Heterotrophic Plate Count (numerical) | <u>0101</u> | <u>CFU/1mL</u> |
| Heterotrophic Plate Count (numerical) | <u>0101</u> | MPN/mL |
| Total Coliform (numerical) | 0001 | CFU/100mL |
| Total Coliform (numerical) | 0001 | MPN/100mL |
| Total Coliform (absence/presence) | 0001 | N/A |
| ((Fecal Coliform (numerical) | 0002 | CFU/100mL |
| Fecal Coliform (numerical) | 0002 | MPN/100mL |
| Fecal Coliform (absence/presence) | 0002 | N/A |
| E. coli (numerical) | 0003 | CFU/100mL |
| E. coli (numerical) | 0003 | MPN/100mL |
| E. coli (absence/presence) | 0003 | N/A |
| Heterotrophic Plate Count (numerical) | 0101 | CFU/1mL |

CFU/100mL = colony forming units per 100 milliliters of sample **CFU/1mL** = colony forming units per 1 milliliter of sample

MPN/100mL = most probable number per 100 milliliters of sample))

- (17) The SDRLs for per- and polyfluoroalkyl substances (PFAS) are established in Table 7 of this section. All contaminants in Table 7 are considered chronic contaminants.
- (a) A lab shall analyze PFAS samples using EPA method 537.1, or EPA method 533, or with written approval, other department-approved methods.
- (b) A lab shall report PFAS contaminant results when the lab's established MRL is greater than the SDRL as follows:
- (i) "Nondetect" or "ND" when a lab's result is less than the SDRL and MRL;
- (ii) An estimated concentration, notated with a "J" data qualifier when a result is equal to or greater than the SDRL, but less than the lab's established MRL; or
- (iii) A number when a result is equal to or greater than the lab's established MRL.

- (c) A lab shall report PFAS contaminant results when the lab's established MRL is less than the SDRL as follows:
- (i) "Nondetect" or "ND" when a lab's result is less than the lab's established MRL;
- (ii) "Nondetect" or "ND" when a lab's result is less than the established SDRL; or
- (iii) A number when a result is equal to or greater than the SDRL.
- (d) A lab shall report PFAS contaminant results when the lab's established MRL is equal to the SDRL as follows:
- (i) "Nondetect" or "ND" when a lab's result is less than the SDRL and MRL; or
- (ii) A number when a result is equal to or greater than the SDRL and the lab's established MRL.
- (e) A lab shall report to the department any tentatively identified compounds (TIC) that are detected while analyzing a PFAS sample if the approved method allows for TIC determinations to be made.
- (f) A lab shall attach to the analytical result a copy of the method-specific QC results for any TIC detections that are reported to the department.

Table 7 - Per- and Polyfluoroalkyl Contaminants

| Contaminant Name | Contaminant Number | <u>Units</u> | <u>SDRL</u> | ³ Required Contaminant List for EPA 537.1 | 4Required Contaminant List for EPA 533 |
|--|-----------------------|--------------|-------------|---|---|
| (11Cl-PF3OUdS) 11-Chloroeicosafluoro-3- oxaundecane-1-sulfonic acid | 448 | ng/L | 2 | Y | Y |
| (4:2FTS) 1H,1H, 2H, 2H-Perfluorohexane sulfonic acid | <u>450</u> | ng/L | <u>2</u> | <u>N</u> | Y |
| (6:2FTS) 1H,1H, 2H, 2H-Perfluorooctane sulfonic acid | <u>451</u> | ng/L | <u>2</u> | <u>N</u> | Y |
| (8:2FTS) 1H,1H, 2H, 2H-Perfluorodecane sulfonic acid | <u>452</u> | ng/L | <u>2</u> | <u>N</u> | <u>Y</u> |
| (9Cl-PF3ONS) 9-Chlorohexadecafluoro-3- oxanonane-1-sulfonic acid | <u>446</u> | ng/L | <u>2</u> | <u>Y</u> | <u>Y</u> |
| (ADONA) 4,8-Dioxa-3H-perfluorononanoic acid | 445 | ng/L | <u>2</u> | <u>Y</u> | <u>Y</u> |
| (HFPO-DA) Hexafluoropropylene oxide dimer acid | <u>447</u> | ng/L | <u>2</u> | <u>Y</u> | <u>Y</u> |
| (NEtFOSAA) N-ethyl perfluorooctanesulfonamidoacetic acid | <u>441</u> | ng/L | <u>3</u> | <u>Y</u> | <u>N</u> |
| (NFDHA) Nonafluoro-3,6-dioxaheptanoic acid | <u>453</u> | ng/L | <u>2</u> | <u>N</u> | <u>Y</u> |
| (NMeFOSAA) N-methyl perfluorooctanesulfonamidoacetic acid | 442 | ng/L | <u>3</u> | <u>Y</u> | N |
| (PFBA) Perfluorobutanoic acid | <u>454</u> | <u>ng/L</u> | <u>2</u> | <u>N</u> | <u>Y</u> |
| (PFBS) Perfluorobutanesulfonic acid | <u>429</u> | ng/L | <u>2</u> | <u>Y</u> | <u>Y</u> |
| (PFDA) Perfluorodecanoic acid | <u>436</u> | <u>ng/L</u> | <u>2</u> | <u>Y</u> | <u>Y</u> |
| (PFDoA) Perfluorododecanoic acid | <u>438</u> | <u>ng/L</u> | <u>2</u> | <u>Y</u> | <u>Y</u> |
| (PFEESA) Perfluoro(2-ethoxyethane)sulfonic acid | <u>460</u> | ng/L | <u>2</u> | <u>N</u> | <u>Y</u> |
| (PFHpA) Perfluoroheptanoic acid | <u>430</u> | <u>ng/L</u> | <u>2</u> | <u>Y</u> | <u>Y</u> |
| (PFHpS) Perfluoroheptanesulfonic acid | <u>455</u> | ng/L | <u>2</u> | <u>N</u> | <u>Y</u> |
| (PFHxA) Perfluorohexanoic acid | <u>435</u> | ng/L | <u>2</u> | <u>Y</u> | <u>Y</u> |
| (PFHxS) Perfluorohexanesulfonic acid | <u>431</u> | ng/L | <u>2</u> | <u>Y</u> | <u>Y</u> |
| (PFMBA) Perfluoro-4-methoxybutanoic acid | <u>456</u> | ng/L | <u>2</u> | <u>N</u> | <u>Y</u> |
| (PFMPA) Perfluoro-3-methoxypropanoic acid | <u>457</u> | <u>ng/L</u> | 2 | <u>N</u> | Y |

| Contaminant Name | Contaminant Number | <u>Units</u> | <u>SDRL</u> | 3Required Contaminant List for EPA 537.1 | 4Required Contaminant List for EPA 533 |
|---------------------------------------|-----------------------|--------------|-------------|---|---|
| (PFNA) Perfluorononanoic acid | 432 | ng/L | 2 | <u>Y</u> | <u>Y</u> |
| (PFOA) Perfluorooctanoic acid | <u>434</u> | ng/L | 2 | <u>Y</u> | <u>Y</u> |
| (PFOS) Perfluorooctanesulfonic acid | <u>433</u> | ng/L | 2 | <u>Y</u> | <u>Y</u> |
| (PFPeA) Perfluoropentanoic acid | <u>458</u> | ng/L | 2 | N | <u>Y</u> |
| (PFPeS) Perfluoropentanesulfonic acid | <u>459</u> | ng/L | 2 | <u>N</u> | <u>Y</u> |
| (PFTA) Perfluorotetradecanoic acid | <u>440</u> | ng/L | 2 | <u>Y</u> | <u>N</u> |
| (PFTrDA) Perfluorotridecanoic acid | 439 | ng/L | 2 | <u>Y</u> | <u>N</u> |
| (PFUnA) Perfluoroundecanoic acid | <u>437</u> | ng/L | 2 | <u>Y</u> | <u>Y</u> |

³ For a water system to qualify for a monitoring waiver these contaminants must be reported to the department if analyzing the sample using EPA method

[Statutory Authority: RCW 43.20.050 and 70.119A.080. WSR 18-09-048, § 246-390-075, filed 4/13/18, effective 5/14/18.]

AMENDATORY SECTION (Amending WSR 18-09-048, filed 4/13/18, effective 5/14/18)

- 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)) enforcement document directing appropriate corrective measures to return a lab to compliance with the requirements of this chapter prior to taking formal enforcement measures;
- (b) A formal enforcement process that includes, but is not limited to:
- (i) A notice ((of)) to correct violations ((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));
 - (ii) An order to correct violations; or
 - (iii) A formal compliance agreement.
- (2) If a lab fails to comply with ((a notice of correction as)) the terms and deadlines specified in one or more enforcement documents in subsection $(1)((\frac{d}{d}))$ of this section, the department may revoke or suspend a lab's drinking water certification in accordance with WAC 246-390-095.

[Statutory Authority: RCW 43.20.050 and 70.119A.080. WSR 18-09-048, § 246-390-085, filed 4/13/18, effective 5/14/18.]

⁴ For a water system to qualify for a monitoring waiver these contaminants must be reported to the department if analyzing the sample using EPA method 533.

AMENDATORY SECTION (Amending WSR 18-09-048, filed 4/13/18, effective 5/14/18)

- 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)) any formal enforcement actions specified in WAC 246-390-085(1).
- (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)) contaminants 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.

[Statutory Authority: RCW 43.20.050 and 70.119A.080. WSR 18-09-048, § 246-390-095, filed 4/13/18, effective 5/14/18.