WASHINGTON STATE BOARD OF HEALTH AND WASHINGTON STATE DEPARTMENT OF HEALTH

Significant Legislative Rule Analysis

WAC 246-290-315 and 246-290-71006
a Rule Concerning Per- and Polyfluoroalkyl Substances (PFAS) in Drinking Water

October 2025





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A brief description of the proposed rule including the current situation/rule, followed by the history of the issue and why the proposed rule is needed.

The State Board of Health (board) in collaboration with the Department of Health (department) is proposing amending drinking water testing and reporting requirements. Amendments will align the state per- and polyfluoroalkyl substances (PFAS) testing and reporting requirements in WAC 246-290-315 and 246-290-71006 with new federal regulations established in April 2024. Rule changes include updating the contaminant type classifications and updating the method of exceedance detection.

More than 6.2 million¹ Washington residents get their drinking water from Group A public water systems (Group A water systems). In Washington state, the <u>State Board of Health (board)</u> regulates Group A water systems under <u>Revised Code of Washington (RCW) 43.20.050</u>.

Under <u>RCW 70A.125.080</u>, the <u>Washington State Department of Health (department)</u> is directed to administer a Group A drinking water program with at least the elements necessary to assume primary enforcement responsibility of the federal Safe Drinking Water Act (SDWA).

The department administers the Group A drinking water program and regulates Group A water systems through a formal agreement with the U.S. Environmental Protection Agency (EPA) known as "primacy."

The department and the board work closely on rulemaking for drinking water., The department provides expertise and resources for implementation, and makes recommendations to the board; heand the board has the authority to adopt the proposed changes into rule.

In 2017, the board accepted a petition for rulemaking to set drinking water standards for perand polyfluoroalkyl substances (PFAS) in chapter 246-290 WAC. PFAS are chemicals that have been used in industry and consumer products such as carpeting, apparel, upholstery, food paper wrappings, fire-fighting foams, and metal plating worldwide since the 1950s.

PFAS are odorless and tasteless, therefore, contaminant levels can only be assessed through water sampling and analytical testing Recent studies² have linked PFAS exposure to widespread health effects, including reproductive effects such as decreased fertility or increased high blood pressure in pregnant women, developmental effects or delays in children, low birth weight, accelerated puberty, bone variations, behavioral changes, and depressed immune system function, including reduced vaccine response., Initial testing and then testing every three years thereafter across Washington state of Group A systems help the department identify impacted drinking water supplies and notify customers of those systems,

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¹ Group A Public Water Supplies - PFAS Rulemaking | Washington State Department of Health

² Our Current Understanding of the Human Health and Environmental Risks of PFAS | US EPA

as well as other nearby private and Group B wells that they may want to test³. This testing protocol starts the process of finding and mitigating local sources.

In April 2024, the federal government published the first National Public Drinking Water Regulation (NPDWR) for PFAS. The U.S. Environmental Protection Agency (EPA) provided all states with six legal Maximum Contaminant Levels (MCLs) for PFAS in public drinking water. An MCL is the maximum level of a contaminant allowable in a public water supply as defined by the Safe Drinking Water Act (42 U.S.C. § 300g-1), codified in 40 CFR Part 141, which sets the maximum legally permissible concentration of a contaminant in public water systems. Under the federal regulation, public water systems have five years from April 2024 to come into compliance with the National Public Drinking Water Regulations for PFAS by testing for PFAS and ensuring all water sources are below the MCLs. Under the federal regulation, beginning in April 2029 systems exceeding a PFAS MCL will be in violation of federal law and must notify the public and take action to reduce PFAS values to levels at or below the MCL.

This change in federal standard directly affects Washington's rules by triggering the provision in WAC 246-290-315(8) under board authority stating that upon federal adoption of an MCL, the federal MCL will supersede a SAL or a less stringent state MCL, and the associated requirement. This proposed rule change addresses the discrepancy between the public notification requirements of the state level SAL compared to the April 2024 NPDWR.

As a result, Washington benefits from current state level health protections whereas the federal standards, though legally binding once effective, delay implementation until 2029. As a result, while states have until April 2029 to become compliant with the new MCLs, the 30 day public notification requirement is not effective. This creates a regulatory gap: if testing conducted before April 2029 identifies PFAS concentrations above the federal MCLs, public water systems would not be obligated under federal law to notify consumers, even though Washington's state action level requirements already mandate notification within 30 days.

The board, in collaboration with the department, is proposing to align PFAS testing and reporting requirements in WAC 246-290-315 and 246-290-71006 with the new federal regulation. Because the EPA evaluated the most current scientific data to develop PFAS MCLs, these represent the best approach for health protective standards. The proposed changes update Washington rule to align PFAS SAL values with the EPA MCL values to provide optimal protection from PFAS in the state's public drinking water. The proposed changes also maintain state efforts to ensure Group A systems continue state required testing for PFAS, make reporting requirements clearer, and ease confusion about which set of health-based standards apply until the federal regulation becomes effective in April 2029.

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³ A Group B water system is a public water system that does not meet the definition of a Group A water system. (See Table 1 under WAC 246-290-020 and chapter 246-291 WAC for further explanation of a Group B water system.) Group B water systems are regulated by local health jurisdictions under a joint plan of responsibility.

Significant Analysis Requirement

As defined in RCW 34.05.328, the entirety of this rulemaking in WAC 246-290-315 and 246-290-71006 requires significant analysis because the proposed changes adopt substantive provisions of law pursuant to delegated legislative authority, the violation of which subjects a violator of such rule to a penalty or sanction; establishes, alters, or revokes any qualification or standard for the issuance, suspension, or revocation of a license or permit; and makes significant amendments to a regulatory program.

Goals and objectives of the statute that the rule implements.

The goal of RCW 43.20.050 is to protect public health by ensuring that people in Washington have access to safe and reliable drinking water. To achieve this, statute directs the board to adopt comprehensive rules for Group A public water systems that address system design and construction, water quality standards and monitoring, management and reporting, planning and emergency preparedness, operation and maintenance, and standards for inadequate systems and bottled water sources. RCW 70A.130.010 reinforces this goal by requiring the board to establish health-based drinking water standards for chemical contaminants, using the best available science and considering both short-term and long-term health risks. Together, these statutes ensure the board has authority to implement rules that safeguard drinking water quality and reliability beyond minimum federal requirements when necessary.

The proposed rules meet these goals and objectives to ensure they are aligned with federal rule and protect Group A water system customers from unsafe levels of chemical contaminants.

Explanation of why the rule is needed to achieve the goals and objectives of the statute, including alternatives to rulemaking and consequences of not adopting the proposed rule.

The EPA published <u>new standards</u> for PFAS on June 25, 2024 that are more stringent than the state action levels currently in rule. This rulemaking aligns the current state action levels with the new federal standards by adopting updated MCL values as SALs. The EPA found that levels of PFAS above those in the current state rule pose risks to public health, however, the more stringent requirement does not become effective until 2029. Because Washington already has state action levels in place, the state already has a system for testing for PFAS and notifying customers when levels may pose risks to public health. By aligning the current state action levels with the new federal standards earlier than the 2029 requirement, the board ensures systems can maintain customer notification requirements and adhere to health protective standards based on current scientific understanding of risks posed by these contaminants.

The board is adjusting its SALs so that customers with PFAS detections above these new levels are notified of the exceedance and can act to protect themselves. The proposed rule also ensures that the current protections remain in effect until the federal standards become effective.

An alternative to this rulemaking is to wait until the effective dates outlined in the new federal standards. Ultimately, the rule will have to be at least as stringent as the federal regulations for the department to maintain primacy. However, without the permanent adoption of the emergency rule, the current protections would go away until 2029. In addition, customers that receive water with PFAS levels above the new standards, but below the current SALs, would not be notified. Because we now know these levels may pose risks to public health, it is important to notify customers.

Analysis of the probable costs and benefits (both qualitative and quantitative) of the proposed rule being implemented, including the determination that the probable benefits are greater than the probable costs.

To gather information on the costs and benefits of the proposed rule changes, the board and the department collaborated to draft a cost survey that was distributed to Group A water operators (Group A water systems, investor owned utilities (IOUs), and satellite management agencies (SMAs)) in Washington State. This survey was distributed via email which included a SurveyMonkey link. The survey was open from July 28th to August 8th.

Through the survey, the board asked Group A water operators to estimate the anticipated costs of several new requirements in the proposed rule. The respondents represent very small (less than 100 service connections) to very large (over 100,000 service connections) Group A water systems and represent all parts of Washington state. Table 1 shows the number of Group A water systems that responded (n=25) and the number of service connections served.

SA Table 1: Respondents by number of Service Connections⁴

Number of cost survey	Number of Service Connections
respondents	Served
15	Less than 100
5	100-999
2	1,000-4,999
0	5,000-9,999
3	10,000-100,000
0	Over 100,000

The number of respondents that provided cost estimates are identified in the section-by-section analysis below. In cases where treatment was mentioned, the board and department removed responses deemed as outside the scope of the rule. The costs estimated from Group A water systems (n=6) are discussed in the relevant sectional analyses below.

Sectional Analysis

WAC 246-290-315 State action levels (SALs) and state maximum contaminant levels (MCLs).

Description: The proposed rule makes changes to subsection (4) to align with the adopted federal rules published by the EPA for PFAS on April 10, 2024. Specifically, the proposed rule makes changes to align the rule with federal PFAS testing and reporting requirements. Because the EPA evaluated the most current scientific data to develop PFAS MCLs, these

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⁴ Three respondents did not identify their business or operation name and therefore are not included in this table. WASHINGTON STATE DEPARTMENT OF HEALTH

represent the best approach for health protective standards. If a water system's testing levels exceed the SAL, they must notify their customers, which is further outlined in 246-290-71006. This does not impact all Group A water systems, only those who are at the current SAL and must begin testing to align with the EPA's testing requirements. The proposed rule does not change monitoring or treatment requirements.

The proposed rule also makes several changes to Table 9, which lists contaminants with a SAL. It removes **Perfluorobutanesulfonic acid** (**PFBS**) as an individual contaminant and instead adds a Hazard Index metric, which is a tool used to assess the potential additive health risks from multiple PFAS chemicals. The hazard index accounts for PFBS in the water supply. It also adds **Hexafluoropropylene oxide dimer acid** (HFPO-DA), an additional contaminant for which the EPA adopted an MCL. The proposed rule changes the SAL values in Table 9 to the federal MCL values and adds values for HFPO-DA and the Hazard Index.

The proposed rule also changes the method to establish exceedance of a SAL value from a confirmed detection to a running annual average (RAA). Confirmed detection is when a contaminant is detected in an initial sample and detected again in a follow-up confirmation sample. Confirmed detection is best used for acute contaminants where a single exceedance can pose an immediate health risk. RAA is a method that uses the average of all sample results for the most recent four quarters for a specific contaminant. This change aligns with the regulations adopted by the EPA.

Cost(s): The board and department anticipate there will be costs for testing Group A water systems that have PFAS levels above the current SALs. The proposed rule changes the SALs to align with the federal MCLs from 10 ng/L to 4.0 ng/L for certain contaminants. There will be water systems that now exceed the SAL. Based on this, the board and department anticipate increased testing which increases costs incurred.

The cost⁵ of sampling tests for PFAS can range from \$286.72 to to \$694.56⁶ which includes the cost for field blanks to be shipped with a sample when there is a detection. The average cost for a sampling test that does not require a field blank to be shipped with the sample is \$344.79.

The tables below show the costs to test for the contaminants listed in the proposed rule subsection (4). It is important to note, multiple survey respondents included the cost of water treatment when listing increased cost for changing the SAL for the contaminants listed. Those costs are outside the scope of this rulemaking and not included in the costs calculated below, as treatment is not required until the federal rule takes effect in 2029. Costs were cleaned and analyzed using Microsoft Excel. In cases where treatment was mentioned, the board and department removed responses deemed as outside the scope of the rule.

SA Table 2: Estimated One-Time or Initial Cost to Test PFAS Contaminants

Contaminant or Group			
of Contaminants	Mean Cost (\$)	High Cost (\$)	Low Cost (\$) ⁷
PFOA	1,650	5,0008	500
PFOS	1,200	2,400	0
PFHxS	0	0	No Response
PFNA	0	0	No Response
HFPO-DA	0	0	No Response
Hazard Index PFAS			
(HFPO-DA, PFBS,	0	0	No Response
PFHxS, and PFNA) ⁹			

SA Table 3: Estimated Annual Recurrent Costs to Test PFAS Contaminants

Contaminant or Group			
of Contaminants	Mean Cost (\$)	High Cost (\$)	Low Cost (\$) ¹⁰
PFOA	2,320	5,000	500
PFOS	2,550	2,700	2,400
PFHxS	1,350	2,700	No Response
PFNA	0	0	No Response
HFPO-DA	0	0	No Response
Hazard Index PFAS			
(HFPO-DA, PFBS,	1,350	2,700	No Response
PFHxS, and PFNA) ¹¹			

Benefit(s):

Changing the SALs to align with the federal MCLs aligns the PFAS testing and reporting requirements with the new federal regulation determined by the EPA. The EPA has already

⁷ No response reflects that no respondents provided a cost estimate for the contaminant in both tables.

⁸ One respondent indicated a one-time or initial cost of \$20,000 for major filtration costs that is not included in the cost breakdown. Efforts were made to reach out to the respondent to further clarify costs, but no response was received. However, since this rule does not require filtration, the board and department did not attribute the cost to the rule requirement.

⁹ The PFAS Mixture Hazard Index (HI) is the sum of component hazard quotients (HQs), which are calculated by dividing the measured component PFAS concentration in water by the relevant health-based water concentration when expressed in the same units (shown in ng/l for simplification). The HBWC for PFHxS is 10 ng/l; the HBWC for PFNA is 10 ng/l; and the HBWC for PFBS is 2000 ng/l.

¹⁰ No response reflects that no respondents provided a cost estimate for the contaminant in both tables.

¹¹ Ibid.

evaluated the most current scientific data to develop PFAS MCLs, and the proposed changes to the SALs represent the best approach for health protective standards. By updating the PFAS SAL values to the EPA MCL values, the department will be able to continue testing to provide optimal protection from PFAS in the state's public drinking water. Switching the method to determine exceedance of SALs from confirmed detection to RAA allows water systems to measure long-term exposure to contaminants instead of acute health risks and continue to align with federal standards, easing the burden for water systems operators when those standards take effect.

The rule must be at least as stringent as the federal regulations for the department to maintain primacy. The board has already adopted four emergency rules, and amending the rule language will keep current state protections in place and adopt the MCL values as SALs to provide advanced protection to those customers most at risk until the federal regulations take effect in 2029. The proposed rule will protect public health.

Description: The proposed rule amends subsection (8) to state that when a federal MCL takes effect, the federal MCL will supersede a SAL or a less stringent state MCL. Under the current rule language, this would occur upon federal adoption of an MCL.

Cost(s): The board and department do not anticipate any additional costs for establishing that when a federal MCL takes effect, it will supersede a SAL or a less stringent MCL.

Benefit(s): The benefit of the board amending subsection (8) such that the criteria would apply on the effective date of an MCL as set in the federal standard, not the adoption date, is that vital public health protections for drinking water safety will be maintained. The EPA published new federal standards for PFAs on April 10, 2024; these new standards include MCLs. This triggers the provision in WAC 246-290-315(8). The new federal standards, however, have delayed effective dates that impact public health protections that are currently in place for Washington. The board has already adopted four emergency rules, and amending the rule language will permanently align the rule with the previous emergency provisions. It also fixes language to keep current testing, monitoring, and notification in place until the federal MCLs take effect in 2029.

Description: The proposed rule adds new language, in subsection (9), to clarify that when a state MCL takes effect, it will supersede a SAL.

Cost(s): The board and department do not anticipate any additional costs for a state MCL superseding a SAL when it takes effect as it clarifies language on already established state requirements.

Benefit(s): The benefit of adding the new language is that it reduces previous confusion regarding state requirements. The language provides clarification on what happens after adopting a state MCL.

Description: The proposed rule adds new language in subsection (10) to state that when a federal or state MCL takes effect for a contaminant that has a SAL, public water systems that are not subject to the MCL have to continue to comply with the SAL requirements.

Cost(s): The board and department do not anticipate any additional cost for adding new language in subsection (10) as it clarifies that when a federal or state MCL takes effect for a contaminant that has a SAL, public water systems that are not subject to the MCL must continue to comply with the SAL requirements.

Benefit(s): The benefit of adding the new language in subsection (10) is that it provides clarity to water systems that do not fall under the purview of federal regulations. Since not all water systems are subject to federal MCLs, the new language ensures water systems exempt from federal regulations are required to continue to comply with the SAL requirements to maintain public health protections for all Group A public water system customers in Washington.

WAC 246-290-71006 Public notice for contaminants with a SAL and other unregulated contaminants.

Description: This section requires the purveyor to provide public notice to consumers following the detection of contaminants in a water system with a SAL. Eventually, the EPA standards will include a 30-day public notification of detections above the MCLs. The proposed rule updates the PFAS contaminants in Table 17 to align with the changes made by the EPA and reflected in Table 9 in WAC 246-290-315.

The proposed rule also changes the method to establish exceedance of a SAL value from a confirmed detection to a running annual average (RAA). Confirmed detection is when a contaminant is detected in an initial sample and detected again in a follow-up confirmation sample. Confirmed detection is best used for acute contaminants where a single exceedance can pose an immediate health risk. RAA is a method that uses the average of all sample results for the most recent four quarters for a specific contaminant. The delivery methods per the proposed amendments ensure every consumer is notified via direct delivery and additional methods reasonably calculated to reach all consumers.

Cost(s): If a Group A water systems falls between 10 ng/L and 4 ng/L, operators will be required by the proposed rule to conduct public notification for customers.

Table 4 shows the estimated costs for quarterly public notification from a previous analysis done in 2021, with estimates adjusted for inflation to 2025.

SA Table 4: Estimated Costs for Public Notifications 12

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¹² Costs were adjusted from 2021\$ to 2025\$ using the U.S. Bureau of Labor Statistics Inflation Calculator on September 2, 2025 and then rounded up to next whole dollar. CPI Inflation Calculator.

Quarterly Public Notification	2,903	57,565	18
Annual Public Notification ¹³	11,611	230,257	35

Group A water systems must continue providing quarterly public notification as long as they continue to exceed a SAL. Although there are fixed costs included (such as developing required messaging) the variable cost of providing notices to all system users results in variable costs by size of system (e.g., larger costs for the larger systems and smaller costs for the smaller systems (based on the number of connections). Due to the inclusion of fixed costs (that were not separated from the estimate), it is likely that the annual public notification calculated in Table 3 is an overestimate.

Benefit(s): This notification empowers communities with information that is essential to their health and well being. This is especially important for women who are pregnant or who may be breastfeeding, allowing them to make timely, informed decisions about their health and the health of their families.

Most importantly, it aligns with federal rulemaking action on PFAS MCLs reporting and monitoring, in order to maintain vital public health protections for drinking water safety.

Determination

Probable Benefits greater than Probable Costs

It was determined by the board and department that the probable benefits are greater than the probable costs of testing and monitoring.

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¹³ Annual costs were calculated by multiplying quarterly notification by 4 and then inflating to 2025\$. WASHINGTON STATE DEPARTMENT OF HEALTH

List of alternative versions of the rule that were considered including the reason why the proposed rule is the least burdensome alternative for those that are required to comply and that will achieve the goals and objectives of the proposed rule.

The requirements proposed in this rulemaking will be required in 2029 by the EPA, whether or not this rulemaking is adopted. The board and department considered not adjusting the state action levels, and only amending the rule to maintain the current protections until the federal effective date. Ultimately, the board decided to rely on the current systems in place. Because SALs for PFAS already exist, water systems operators are already testing the water and are aware of public notification requirements. Were this not the case, it may have made more sense to wait until the federal effective date in 2029, and incorporate the federal requirements by reference. Since these systems do exist in Washington today, and since they provide a benefit to public health today, it is important to retain protection from potential harms from PFAS by adjusting PFAS notification levels to align with current scientific understanding as determined by the EPA, and by lowering the threshold at which they would have to notify customers of PFAS detection.

Another option was to adopt state MCLs with the new contaminant levels, instead of adjusting the SALs. This would be more burdensome to water systems operators because MCL exceedances require systems to treat for the contaminant. This is not a system that currently exists for these contaminants, and would require time and resources for water systems to set up. This is also going to be a requirement in 2029 according to the federal regulations, and adopting SALs instead of MCLs allows operators time to establish the necessary systems and processes for treatment.

Determination that the rule does not require those to whom it applies to take an action that violates requirements of another federal or state law.

The rule does not require those to whom it applies to take an action that violates requirements of federal or state law.

Determination that the rule does not impose more stringent performance requirements on private entities than on public entities unless required to do so by federal or state law.

The rule will not impose more stringent performance requirements on private entities than on public entities. The proposed changes in this rule apply equally to all Group A community and Non-Transient Non-Community (NTNC) water systems without regard to ownership, whether it is publicly or privately owned.

Determination if the rule differs from any federal regulation or statute applicable to the same activity or subject matter and, if so, determine that the difference is justified by an explicit state statute or by substantial evidence that the difference is necessary.

The proposed rule differs from the federal statute applicable as the board is looking to align the SALs already adopted with current science to ensure timely public notification and continue the state's ability to require monitoring and notification for systems beyond the federal requirements. The board has the authority to adopt rules addressing contamination in public water systems in RCW 70A.125.010.

Demonstration that the rule has been coordinated, to the maximum extent practicable, with other federal, state, and local laws applicable to the same activity or subject matter.

This rule has been coordinated to the maximum extent practicable with other federal, state, and local laws, as evidenced by the extensive engagement with federal, state, and local partners.

The Model Toxics Control Act (MTCA), chapter 173-340 WAC, enforced by the Department of Ecology refers to chapter 246-290 WAC to define a maximum contaminant level and maximum contaminant level goal. We met with Department of Ecology representatives to discuss the rulemaking and ensure that the proposed changes within this and related rulemakings would align with MTCA and wouldn't create conflicts. Since MTCA references the rule, the proposed changes ensure consistency.

The board also held an informal comment period from May 29, 2025 to June 11, 2025 in which comments with suggestions on clarifying language into Table 9 in WAC 246-290-315 and Table 17 in WAC 246-290-71006 were incorporated. A cost survey was distributed to Group A water systems in August 2025, and all feedback from these engagements were incorporated into the proposed rule changes.