

Addressing Unregulated Contaminants Establishing a Maximum Contaminant Level (MCL) and a State Advisory Level (SAL)

The Board may adopt an MCL or a SAL for a drinking water contaminant.

RCW 43.20.050(2)(a)(ii): *In order to protect public health, the state board of health shall adopt rules for group A public water systems, as defined in RCW 70.119A.020, necessary to assure safe and reliable public drinking water and to protect the public health. Such rules shall establish requirements regarding drinking water quality standards, monitoring requirements, and laboratory certification requirements.*

Issue	State Maximum Contaminant Level (MCL)	State Advisory Level (SAL)
Definition	WAC 246-290-010: <i>The maximum permissible level of a contaminant in water the purveyor delivers to any public water system user, measured at the locations identified under WAC 246-290-310, Table 5.</i>	WAC 246-290-010: <i>A level established by the Department and state Board of health for a contaminant without an existing MCL. The SAL represents a level that when exceeded, indicates the need for further assessment to determine if the chemical is an actual or potential threat to human health.</i>
History and Background	<p>The Department has been delegated by EPA primary enforcement responsibility, or primacy, to carry out the federal Safe Drinking Water Act. A condition of primacy is timely adoption of new and revised MCLs promulgated by EPA. The Board has always adopted federal rules to maintain state drinking water primacy.</p> <p>The Board has never set a state MCL. The Board has relied solely on EPA to establish MCLs and associated requirements such as monitoring, follow-up actions to achieve compliance with the water quality standard, recordkeeping, reporting, and public notification.</p>	<p>SALs are selected among unregulated contaminants. Following an established process, the Board approved Department recommendations for establishing SALs between the mid 1980's and early 1990's. Washington currently has six Board-approved SALs for drinking water contaminants. Six contaminants with an established SAL have since been assigned a federal MCL, thus removing them from our SAL list. In each case, the federal MCL was established at a higher concentration than the SAL.</p> <p>Sixty-six unregulated contaminants are part of the routine monitoring performed by most Washington public water systems. These unregulated contaminants are included in various standard analytical methods and can be processed by labs with little or no additional cost.</p>

Establishment Process	<p>The MCL establishment process is in statute and to a lesser extent in rule.</p> <p><u>RCW 70.142.010:</u> <i>The Board shall consider the best available scientific information in establishing the standards. The Board may review and revise the standards. State and local standards for chemical contaminants may be more strict than the federal standards. If adequate data to support setting of a standard is available, the state Board of health shall <u>adopt by rule a maximum contaminant level</u> for water provided to consumers' taps. Standards set for contaminants known to be toxic shall consider both short-term and chronic toxicity. Standards set for contaminants known to be carcinogenic shall be consistent with risk levels established by the state Board of health.</i></p> <p><u>RCW 70.142.020:</u> <i>The state Board of health shall conduct public hearings and establish by rule monitoring requirements for chemical contaminants in public water supplies. Results of tests conducted pursuant to such requirements shall be submitted to the Department of health and to the local health Department. The state Board of health may review and revise monitoring requirements for chemical contaminants.</i></p> <p><u>WAC 246-290-310(8):</u> <i>(a) The state Board of health shall determine maximum contaminant levels for any additional substances.</i></p>	<p>The SAL establishment process is not in statute or in rule. It exists in an informal document. There is no clear reference in rule to the document's procedural statements.</p> <p><u>WAC 246-290-310(8)(b):</u> SALs shall be:</p> <p>(i) <i>MCLs that have been promulgated by EPA but which have not yet been adopted by the state Board of health; or</i></p> <p>(ii) <i>State Board of health adopted levels for substances recommended by the Department and not having an EPA-established MCL. A listing of these may be found in the Department document titled Procedures and References for the Determination of State Advisory Levels for Drinking Water Contaminants, dated June 1996, that has been approved by the state Board of health and is available.</i></p> <p>[Correction: The 1996 document does not include a list of SALs].</p> <p>The 1996 <i>Procedures</i> document states DOH will evaluate health effects of chemicals that don't already have a federally-established MCL, using the most up-to-date toxicological data. In establishing a SAL for a non-carcinogenic contaminant, the level in drinking water can't result in exposure above EPA's reference dose for the most vulnerable population. For a carcinogen, the level in drinking water can't result in more than one extra cancer per 100,000 population.</p>
Requirements Imposed	<p>Chapter 246-290 WAC requires monitoring, follow-up actions to achieve compliance with the MCL, recordkeeping and reporting, and public notification.</p> <p>When necessary, the Department uses its authority to require a water system to take action to achieve compliance with a MCL. Such actions may include installing treatment; abandoning, replacing, or modifying the source of supply; or changing operational practices.</p>	<p><u>WAC 246-290-300(1):</u> (General authority for monitoring) <i>On the basis of public health concerns the Department may require the purveyor to monitor for additional substances.</i></p> <p><u>WAC 246-290-310(8):</u> (General authority for requiring remedial measures): <i>Purveyors may be directed by the Department to comply with a SAL.</i></p> <p>The Department has never required a water system to install treatment to comply with a SAL. The Department has required water utilities to issue timely public notification that</p>

	<p>Setting a state MCL without these same requirements would hinder the Department’s ability to effectively enforce the MCL.</p> <p>Establishing a MCL also requires establishing monitoring requirements.</p>	<p>includes contaminant-specific health effects information, steps consumers should take to protect their health, and a description of remediation steps the water system will take.</p> <p>WAC 246-290-71006: (Specific authority for public notification): <i>The purveyor shall provide consumer information to the water system users within twenty-one days of receipt of confirmation sample results when the Department determines that a substance not included in this chapter is confirmed at a level greater than a SAL.</i></p>
Advantages	<p>EPA has a clear framework by which it determines an MCL and associated requirements. The EPA framework, while rigorous and time-consuming, offers a ready-made process that has withstood scientific and legal scrutiny.</p> <p>Alternately, the less rigorous and demanding criteria and process laid out in chapter 70.142 RCW is available to the Board when considering a state MCL.</p> <p>Washington’s Model Toxics Control Act explicitly states that state MCLs are applicable to groundwater cleanup actions.</p>	<p>Under past practice, establishing a SAL was an informal and relatively quick process:</p> <ul style="list-style-type: none"> • No rule-making was conducted. • No economic analysis was needed. • No special effort was taken to collect occurrence data for candidate SALs. Unregulated contaminants that became SALs had prior occurrence data collected via routine drinking water organic chemical compliance monitoring. <p>There is broad authority and flexibility granted to the Department to establish monitoring requirements and to pursue compliance with a SAL.</p> <p>The current process is designed to meet an unexpected need to protect the public from an emerging contaminant and is not intended to be generally applicable to all public water systems.</p>
Disadvantages	<p>The federal MCL establishment process may be too difficult or too lengthy to be feasible.</p> <p>The statutory requirements in chapter 70.142 RCW and within the boundaries set by the APA may not be rigorous enough to fully assess the public cost of compliance with a MCL against the public benefit of ensuring Washington’s drinking water systems comply with the MCL.</p> <p>There is no case law or history of public acceptance of a state MCL. In order to be successful, the public water systems and</p>	<p>SAL implementing authority provides the opportunity but not the obligation to establish a SAL or take action when a SAL is exceeded, resulting in inconsistent outcomes.</p> <p>There is no criteria to trigger establishing a SAL, resulting in inconsistent application of the SAL authority.</p> <p>The SAL establishment process requires Department toxicology resources. Depending on the candidate SAL, the resource commitment may be substantial.</p>

	<p>consumers must have full confidence in the MCL-setting process and outcome, especially if Washington is establishing an enforceable standard that EPA has not.</p> <p>The cost and effort in establishing a MCL will be voided if EPA subsequently establishes a MCL for the same contaminant at a lower level; and may be called into question if EPA establishes a MCL at a higher level.</p> <p>On April 13, 2018, 25 U.S. Senators signed a letter to Administrator Scott Pruitt requesting EPA expeditiously establish a MCL for PFAS.</p>	<p>Whenever a SAL is exceeded the process calls for a health consultation with Department toxicologists to determine appropriate follow-up action. Consultations can be time-consuming and result in variable outcomes depending on the impacted community, contaminant concentration, and consulting toxicologist.</p> <p>Without a sufficiently detailed economic analysis it is unlikely the Board can fully assess the public cost of compliance with a SAL against the public benefit of ensuring Washington’s drinking water systems comply with the SAL.</p> <p>The public and water systems are not aware of proposed SALs or how SAL requirements apply to their water system because SALs do not go through a public rule-making process, are not listed in rule, the list in the 1996 Procedures document is out-of-date and not easily accessible, and the requirements for corrective action are inherently unpredictable since they depend on a case-by-case assessment.</p> <p>Washington’s Model Toxics Control Act does not specifically mention SALs as applicable to groundwater cleanup, so it is uncertain whether a SAL could withstand a legal challenge when used as a groundwater cleanup standard.</p>
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