

**1. Chapter 418.** An Act to Implement the Recommendations of the Department of Environmental Protection on Ambient Water Quality Criteria for Mercury.

EPA is approving Chapter 418, Section 3's enactment of 38 MRSA §420(1-B)(A), (C), (D), and (E). We are continuing to evaluate §420(1-B)(B) to determine whether it constitutes a revision of Maine's water quality standards; therefore we are not yet taking action with respect to this provision.

Subsection(1-B)(A) establishes the following ambient water quality criteria for mercury:

	Freshwater Acute	Freshwater Chronic	Saltwater Acute	Saltwater Chronic	Human Health
Total Mercury	1.7 ug/l	0.91 ug/l	2.1 ug/l	1.1 ug/l	0.2 mg/kg edible tissue

The aquatic life criteria expressed as total mercury are equivalent to EPA's current CWA §304(a) recommendations for dissolved mercury as contained in National Recommended Water Quality Criteria: 2002, EPA-822-R-02-047, November 2002 . Maine's aquatic life criteria are as protective as EPA's recommendations; however, EPA's 1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water, EPA-820-B-96-001, September 1996 contain a note that the freshwater mercury chronic criterion might not adequately protect rainbow trout, coho salmon, and bluegill. While EPA expects that water quality based control of mercury in Maine will typically be driven by the human health criterion, this caution concerning aquatic life protection should be considered if the chronic freshwater criterion is applied absent more stringent actions to meet the human health criterion.

EPA also believes that Maine's tissue based human health criterion is as protective as EPA's tissue based criterion recommendation of 0.3 mg/kg for methylmercury, published on January 8, 2001 (66 FR 1344-1359). Maine's value is one third lower than EPA's, and is expressed in terms of total mercury (while methylmercury and total mercury in tissue are essentially equivalent in upper trophic level fish, Maine's expression of its criterion as total mercury provides equal or greater protection).

Subsection(1-B) (C) provides for the establishment of site-specific bioaccumulation factors for mercury, which is consistent with EPA's allowance for modification of its §304(a) guidance to reflect site-specific conditions at 40 C.F.R. § 131.11(b)(1)(ii).

Subsection(1-B) (D) directs ME DEP to establish a statewide bioaccumulation factor (BAF) which is "protective of 95% of the waters of the state." In approving this provision, EPA understands this statement was meant to allow use of "either 1) the 95<sup>th</sup>