Fact Sheet: Revision of Federal Human Health Criteria Applicable to Washington

Summary
EPA has issued a final rule that revises certain federal human health criteria applicable to Washington’s waters and has taken concurrent action under Clean Water Act section 303(c) on certain human health criteria submitted to EPA by Washington. The combination of EPA’s final rule and EPA’s action on the state’s submittal ensures that criteria are set at levels that will adequately protect Washington fish consumers from exposure to toxic pollutants.

Background
Clean Water Act (CWA) section 101(a)(2) establishes the national goal that water quality should provide for the protection and propagation of fish, shellfish, and wildlife, and recreation in and on the water. To protect people from cancer and non-cancer effects from pollutants in drinking water and fish and shellfish, states must establish human health criteria for their waters that are designated for such uses. EPA periodically publishes ambient water quality criteria recommendations under CWA section 304(a) for states to consider adopting into their water quality standards to protect these uses.

CWA section 303(c)(2)(B) requires states to adopt numeric water quality criteria for all priority toxic pollutants for which EPA has published CWA section 304(a) criteria recommendations. In 1992, EPA promulgated the National Toxics Rule (NTR) at 40 CFR 131.36, establishing chemical-specific numeric criteria for 14 states and territories, including Washington, that were not in compliance with CWA section 303(c)(2)(B). Until issuance of this final revised rule, the federal human health criteria in the NTR remained applicable to Washington’s waters.

EPA derived the human health criteria in the NTR based on available national data at the time, which indicated that people ate, on average, 6.5 grams per day (g/day) of fish. The best available data now demonstrate that fish consumers in Washington, including tribes with treaty-protected rights, consume much more fish than 6.5 g/day.

Therefore, to protect fish consumers in Washington from the adverse effects of toxic pollutants, EPA has revised certain federal human health criteria applicable to Washington, and taken action on certain human health criteria submitted to EPA by Washington.

Criteria Applicable to Washington Waters
In accordance with the requirements of CWA section 303(c)(2)(B), EPA has finalized 144 new and revised Washington-specific human health criteria for priority toxic pollutants, to apply to waters under Washington’s jurisdiction, and has approved 45 new human health criteria submitted by Washington.

Given the scientific uncertainty upon which the proposed human health criteria for arsenic, dioxin, and thallium were based, EPA has withdrawn its proposal of revised criteria for these three pollutants.
at this time and leaves the corresponding existing criteria from the NTR in effect for CWA purposes.

**How EPA Derived the Final Federal Criteria**

EPA derives human health criteria for carcinogenic effects using the following inputs: cancer slope factor, cancer risk level, body weight, drinking water intake rate, fish consumption rate (FCR), and a bioaccumulation factor (or factors). For non-carcinogenic and nonlinear carcinogenic effects, EPA uses a reference dose in place of a cancer slope factor and cancer risk level, as well as a relative source contribution (RSC), which is intended to ensure that an individual’s total exposure from all sources does not exceed the criteria.

To derive Washington-specific criteria, EPA used the same cancer slope factors, cancer risk level, body weight, drinking water intake rate, bioaccumulation factors, and reference doses that the Agency used in developing its CWA section 304(a) recommended human health criteria. To protect fish consumers in Washington, including tribes with treaty-protected rights, EPA derived the criteria using a FCR of 175 g/day. This rate accounts for local data, reflects input from tribes in Washington, and protects fish consumers downstream in Oregon, where the state has also used a FCR of 175 g/day to derive its human health criteria. EPA made adjustments to the RSCs as proposed, since the FCR of 175 g/day already includes marine fish that are anadromous (e.g., salmon), and therefore the RSCs do not also need to account for those marine fish. EPA therefore adjusted the final RSC to 0.5 for each criterion based on a proposed RSC between 0.2 and 0.5. EPA did not adjust the RSCs for pollutants that already have national recommended RSC values greater than or equal to 0.5.

**Fish Consumption and Tribal Reserved Rights**

When setting criteria to protect human health in Washington, EPA considered the requirements in the CWA and EPA’s regulations at 40 CFR 131, as well as other applicable laws, including federal treaties. In Washington, many tribes hold reserved rights to take fish for subsistence, ceremonial, religious, and commercial purposes, including treaty-reserved rights to fish at all usual and accustomed fishing grounds and stations in waters under state jurisdiction. A majority of waters under Washington’s jurisdiction are covered by these reserved rights. EPA’s final rule considers the tribal population exercising their reserved fishing rights in Washington as the target population for the purposes of deriving protective criteria that allow the tribes to harvest and consume fish consistent with their reserved rights.

**How EPA’s Final Rule Relates to the State of Washington’s Submittal of Human Health Criteria and Implementation Tools to EPA**

On August 1, 2016, Washington submitted revised human health criteria to EPA that take into account more recent regional and local fish consumption data, and some updates to the toxicity and exposure parameters used to calculate human health criteria. Concurrent with the final rule, EPA has taken action to approve in part, and disapprove in part, the human health criteria submitted by Washington. In the federal rule, EPA is not finalizing criteria for those state-adopted criteria that EPA approved and is withdrawing Washington from the NTR for those approved state-adopted criteria. Together, EPA’s final rule and EPA’s action on the state’s submittal ensures that criteria are set at levels that will adequately protect fish consumers in Washington from exposure to toxic pollutants.

**Where can I find more information?**

Contact Erica Fleisig at (202) 566-1057, fleisig.ERICA@epa.gov or Matthew Szelag at (907) 271-1208, szelag.matthew@epa.gov. To access the final rule, federal register notice, and supporting documents, visit EPA’s Water Quality Standards website at:

https://www.epa.gov/wqs-tech/water-quality-standards-regulations-washington#fed