



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

1200 Sixth Avenue, Suite 900
Seattle, WA 98101-3140

OFFICE OF
WATER AND WATERSHEDS

January 24, 2014

Don Essig
Idaho Department of Environmental Quality
1410 N. Hilton
Boise, Idaho 83706

RE: EPA comments on Idaho's Discussion Paper #2 General Population versus Targeted Subpopulations

Dear Don:

EPA appreciates the opportunity to provide comments on the discussion paper that the Idaho Department of Environmental Quality (DEQ) provided at its December 10, 2013 negotiated rulemaking meeting. This discussion paper considers some of the issues regarding a general population fish consumption survey versus a fish consumption survey focused on fish consuming populations in Idaho.

EPA maintains that general population fish consumption rate information, including upper percentile general population fish consumption rate estimates, may not adequately characterize high fish consumers in Idaho. Therefore, EPA encourages DEQ to ensure that its data collection efforts provide an accurate characterization of high fish consumers in Idaho. This information is critical to DEQ's efforts to consider what would be required to protect high fish consumers, such as recreational anglers and tribes, as well as the general population.

Our detailed comments are provided in the attachment and include input from both EPA Region 10 and EPA Headquarters. We are available if you would like to discuss our comments further, and we look forward to continued work with DEQ on this effort. Please contact Lon Kissinger (206-553-2115) or myself (206-553-1834) if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lisa Macchio".

Lisa Macchio
Water Quality Standards Coordinator

Enclosure

EPA comments on Idaho's Discussion Paper #2 General Population versus Targeted Subpopulations, 1/23/14

The attached comments include observations by EPA Region 10 and Headquarters Staff.

EPA believes that fundamentally, fish consumption rate (FCR) data on the general population and targeted subpopulations must be jointly available in order to make informed decisions about how standards to protect the general population will protect higher fish consumers.

EPA Region 10 believes that it is important that high fish consuming populations receive adequate protection.

Idaho appears to have separated consideration of FCRs based on consumers and non-consumers vs. consumer only from consideration of using general vs. targeted subpopulation FCRs. These issues are, however, intertwined, and difficult to separate. For example, conclusions about whether or not particular general population FCRs will protect high consumers may be altered depending on whether general population FCRs are based on consumers and non-consumers vs. consumers only.

The consideration of the protectiveness of general population standards for high fish consuming populations seems to rely solely on consideration of relative cancer risks. This analysis needs to consider relative hazards posed by chemicals with a non-cancer toxic endpoint in addition to relative cancer risks.

Specific Comments

P1, Introduction, 2nd ¶: How has Idaho designed a survey to answer questions about different populations within the general population?

P1, Who Are High Consumers?, 1st ¶: Clearly some information exists on differences in consumption for different groups within the general population. Recreational anglers, Native Americans, and some ethnic groups have been shown to have higher rates of fish consumption in many surveys, and it makes sense to target these groups to characterize high fish consumption.

P2, Who are High Consumers?, 2nd ¶: The statement that there are no studies of fish consumption for the general population, recreational anglers, or tribal surveys for "any other state" is incorrect and should be struck (SEE Chapter 10 of EPA's 2011 Exposure Factors Handbook, <http://www.epa.gov/ncea/efh/pdfs/efh-chapter10.pdf>)

It should be noted that the CRITFC survey, though not explicitly conducted for the State of Idaho, does include the Nez Perce Tribe, which does have a presence in the State of Idaho.

P3, What Do We Already Know About Groups in Idaho that may Eat more Fish than Others?, final ¶ of section: Use of an upper percentile of the general population to protect members of high fish consuming populations is an option that should be informed by knowledge of the consumption rates of relevant high fish consuming populations.

P4, Identifying the Desired Population Statistic, final sentence: In addition to the average, other statistics, for example upper percentiles, may be appropriate.

P4, General Population Distribution, 1st ¶: There are also issues here associated with including non-consumers in the data vs. consumers only.

P4, General Population Distribution, 1st ¶: Again, the protectiveness of a general population fish consumption rate for a higher consuming population should be determined using data. The use of the 99th percentile of the general population may only be appropriate for the distribution derived using the CSFII data.

P4, General Population Distribution, 2nd ¶: This section should also discuss differential levels of protection for chemicals with a non-cancer toxic endpoint. EPA guidance offers a range of statistics that may be used to characterize FCRs for high fish consuming populations.

P4, Advantages and Disadvantages of Using a General Population Distribution, 1st ¶: Again, the issue of consumer only vs. all survey respondents should be addressed.

P4, Advantages and Disadvantages of Using a General Population Distribution, 2nd ¶: Should also mention non-cancer

General comment: Should expand on the need for both general population and high consuming populations.

P6, How Has EPA Handled High Consumers in Developing Fish Consumption Rates: Use of an upper percentile of the general population to protect members of high fish consuming populations is an option that should be informed by knowledge of the consumption rates of relevant high fish consuming populations. In particular, the decision that a general population FCR of 142.5 g/day was protective of tribal populations with higher FCRs was based on the fact that the value of 142.5 g/day was similar to the average FCR obtained for several tribal populations.

P6, Recommendations, 1st ¶: It's not possible to select high fish consumers immediately, as that would require you already have the data you would hope to collect with a survey. Rather, one must identify other characteristics that have been shown to be associated with groups having high fish consumption.