



Idaho Association of
Commerce & Industry
The Voice of Business in Idaho®

April 23, 2014

Paula Wilson
Idaho Dept. of Environmental Quality
Attorney General's Office
1410 North Hilton
Boise, ID 83706

Dear Ms. Wilson:

At the April 2 rulemaking meeting on establishing a new fish consumption rate as a part of Idaho's water quality rules, DEQ asked for comments on the use of a probabilistic methodology (Monte Carlo) in establishing human health water quality standards. IACI supports the use of a probabilistic methodology in calculating water quality criteria for the following reasons:

Probabilistic Methodology is the Best Science. One of the conundrums of calculating human health water quality criteria is how to account for the differences among the population in fish consumption rates, water ingestion rates, body weight, etc. The probabilistic methodology allows an incorporation of all data for the different inputs that go into calculating human health water quality standards. By evaluating these types of differences among the population, the probabilistic methodology allows the calculation of risk across the entire population. Such a statistical method has been used for a number of years; EPA has published guidance on using Monte Carlo simulations for risk assessment associated with hazardous contaminants clean-ups. The State of Florida has used such a methodology for a portion of their recent work to determine human health water quality criteria. Such an approach is consistent with Idaho Code 39-107D, which requires the use of best available peer-reviewed science.

Probabilistic Methodology Avoids Compounded Conservatism. The traditional method of calculating human health water quality criteria is a deterministic approach with "one size fits all" inputs to the calculations. Such an approach leads to "compounded conservatism," where each inputted factor has a degree of conservatism included, and the use of several such factors drastically increases the "conservatism" in the calculated final number. The use of a probabilistic methodology will result in a more realistic "risk" based criteria calculation.

Probabilistic Methodology Facilitates a Transparent Determination of Criteria. The use of this methodology, especially for calculation inputs that have a considerable range (such as fish consumption rates, water ingestion rates, etc.) allows the public and stakeholders to see how the range of data affects calculated human health values. This will facilitate the public providing meaningful input to DEQ on risk management decisions the agency will be required to make in setting human health criteria. This method also better assists DEQ in fulfilling its obligations for setting standards for protecting human health as stated in Idaho Code 39-107D.

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IACI commends DEQ for looking at different tools to use in this rulemaking and requesting comments on this potential tool. We appreciate the opportunity to provide this input.

Sincerely,



Alex LaBeau
President

cc: Alan Prouty, Chair
IACI Environment Committee