



CORPORATE HEADQUARTERS

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August 21, 2014

Ms. Paula Wilson
Idaho Department of Environmental Quality
1410 North Hilton
Boise, ID 83706

Dear Ms. Wilson:

The Idaho Department of Environmental Quality (DEQ) has released for public comment Discussion Paper #5 – Anadromous Fish, as a part of the rulemaking establishing a new fish consumption rate for use in deriving human health water quality criteria. The J.R. Simplot Company (Simplot) has the following comments on Discussion Paper #5.

The essence of establishing a “fish consumption rate” to use in calculating human health water quality criteria is the assumption that a regulatory body (such as DEQ) can set water quality requirements that influence contaminant levels in Idaho fish that might be consumed by state residents. Thus, there is a premise of a direct link between the water quality requirements and contaminants in Idaho fish, such that regulatory requirements can be set to ensure the protection of public health for residents consuming such fish and drinking Idaho water. Anadromous fish do not fit this paradigm.

Theoretically, the contaminant concentration in fish is a function of where and for how long the fish and a contaminant are collocated relative to one another. Anadromous fish spend a significant portion of their lifecycle in an estuary and marine environment. In one study, it was determined that 96% of the PCBs found in Duwamish River Chinook salmon were accumulated in their marine life history with a little contribution from freshwater.ⁱ Another study, in which an evaluation of sixteen (16) different exposure scenarios for anadromous fish (Pacific Chinook salmon) had results that suggested:ⁱⁱ

“...using water quality standards as waterbody target concentrations may yield only small (≤ 2 x) reductions in PCB levels (or of other ubiquitous legacy contaminants with similar PBT properties) in returning adult Fall

Comments on FCR Discussion Paper #5: Anadromous Fish

chinook salmon because the majority of the uptake likely occurs while adults are in marine waters beyond the state's jurisdiction."

This result has implications for Idaho's water quality standards especially since Idaho has no marine or estuary environments. The author of the exposure scenarios study (Hope 2012) then goes on to state:

"Including anadromous fish in the FCR used for developing water quality standards for protection of human health creates the expectation that implementation of this water quality standard will significantly reduce bioaccumulative contaminants (e.g., PCBs, PBDEs, dioxins/furans) in such fish."

The author concludes:

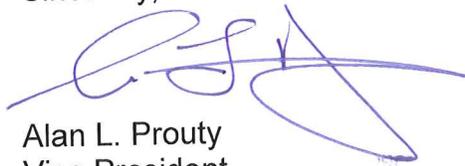
"...any physical disconnects between attainment of water quality standards and expected reductions in contaminant loads creates a situation with costs but few, if any, off-setting benefits. Such a cost-benefit disparity can frustrate those seeking the protection of water quality standards and those legally required to implement controls designed to attain it."

For these reasons, Simplot believes that anadromous fish should not be considered in the determination of Idaho's fish consumption rate.

These topics are discussed in more detail in comments submitted by Clearwater Paper Company and the Idaho Association of Commerce and Industry. Simplot endorses the comments from these two organizations.

Please contact me if you have any questions about these comments.

Sincerely,



Alan L. Prouty
Vice President
Sustainability and Regulatory Affairs

ⁱ O'Neill, S.M. and J.E. West. 2009. *Marine Distribution, Life History Traits, and the Accumulation of Polychlorinated Biphenyls in Chinook Salmon from Puget Sound, Washington*. Transactions of the American Fisheries Society 138:616-632.

ⁱⁱ Hope, B.K. 2012. *Acquisition of polychlorinated biphenyls (PCBs) by Pacific Chinook salmon: An exploration of various exposure scenarios*. Integrated Environmental Assessment and Management 8(3):553-562.