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STATE OF WASHINGTON
DEPARTMENT OF FISH AND WILDLIFE

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March 6, 2001

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EDMC

Keith Klein
U.S. Department of Energy
Richland Operations Office
P.O. Box 550
Richland, WA 99352

Dear Mr. Klein:

Subject: Request for Allocation of Funds for Chromium Studies

The fall chinook salmon (*Oncorhynchus tshawytscha*) is a natural resource of extreme interest and importance to the public and to many governments, agencies and organizations at the Hanford Site; including the Hanford Natural Resource Trustee Council (Council) and the Washington Department of Fish and Wildlife (WDFW). We believe your agency shares this view and is interested in ensuring remedial actions are protective of aquatic organisms inhabiting the Hanford Reach of the Columbia River.

In early 1998, the Council developed a proposal (funded by U.S. Department of Energy (USDOE), with technical assistance provided by U.S. Fish and Wildlife Service (USFWS)) to evaluate the potential effects of hexavalent chromium on fall chinook salmon. The proposal identified three phases of research.

Phase 1 (i.e. chromium toxicity lab study) was completed by USFWS and U.S. Geological Services (USGS) using certified disease free fish and experimental water simulating Columbia River and pore water conditions. This phase also included an avoidance test that was completed last year.

Phase 2, initiated in the fall of 1999, was to evaluate potential chromium effects on fall chinook early-life stage, fish health, and behavioral avoidance using site water. The early life stage study was conducted by Pacific Northwest National Laboratory at their laboratory in the 300 Area. Study methodology for Phase 2 called for the use of fall chinook salmon originating from the Hanford Reach, Columbia River water, and chromium-contaminated ground water from the site. The experiment ended last year and fish tissue samples were collected to determine affects to specific biological endpoints. These tissue samples await analysis because of inadequate budget for the study.

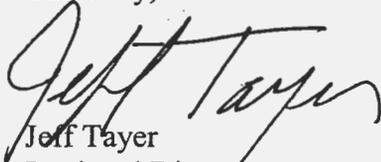
Keith Klein
March 6, 2001
Page 2

Phase 3 includes experiments using wild fall chinook salmon for early life stage and behavior studies, as well as a resident fish (e.g. sculpin) study. We believe it is important to evaluate more than one species for potential adverse affects of hazardous substances originating from Hanford ground water plumes because species may vary in sensitivity.

The work outlined above is scientifically sound and is worthy of completion. The Council is near the midpoint of the scope of work, but is unable to finish the remainder without additional funds. Work that remains includes an analysis of tissue samples from Phase 2 early life stage experiments (estimated to cost \$45,000), avoidance and fish health, and the Phase 3 studies. We are unable to provide a cost estimate for the Phase 2 avoidance and fish health, and Phase 3 work. USDOE should request a cost estimate for this work from USFWS through an Interagency Agreement. We believe that USDOE, as lead trustee, has a fiduciary responsibility to gather and analyze these data, and we strongly encourage you to do so.

Thank you for taking the time to consider our request. If you have any questions, please contact Jay McConnaughey of my staff at (509) 736-3095.

Sincerely,



Jeff Tayer
Regional Director

JT:JM

cc:

Hanford Natural Resource Trustee Council

Tom O'Brien, Chair

Administrative Record

D. Sherwood, EPA

M. Wilson, Ecology

L. Goldstein, Ecology

T. Clausing

D. Mudd

✓ 100 Area Administrative Record

bcc:

J. McConnaughey

L. Vigue