TECHNICAL MEMORANDUM | COMMENT

Date: December 4, 2012
From: Peter Strauss, Tri-Valley CAREs' TAG technical advisor
Subject: Site 300 Superfund Baseline Ecological Risk Assessment for the Building 812 Area, "Exposure Parameters for the Deer Mouse and Rock Wren at Lawrence Livermore National Laboratory Site 300"

I have reviewed the three documents that the Dept. of Energy National Nuclear Securty Administration sent us today regarding the Building 812 ecological risk assessment. Two of them are by Tina Carlsen, who has written similar reviews on Site 300 ecological risk and receptors as you know. They are well documented.

There is also a third set of comments that are DOE NNSA/LLNL responses to agency comments on "Exposure Parameters for the Deer Mouse and Rock Wren at Lawrence Livermore National Laboratory Site 300" submitted by Livermore Lab in October. In it, the Lab considers the Deer Mouse and the Rock Wren to be representative species. They responded to a comment that the agencies had agreed to this in the draft workplan. So, below, I am copying you part of a CA Dept. of Toxics Substances Control memo by J. Michael Eichelberger, staff Toxicologist to Jacinto Soto, August 3, 2011, which was forwarded to LLNL on September 1, 2011. In general, it points out that the red-legged frog is present at the site, and that the American Woodcock is the most sensitive species followed by the short-tailed shrew.

"… the Lab settled on the deer mouse and rock wren. The toxicity reference value (TRV) for the rock wren (or any avian species, could not be derived because of limited data. They used a TRV 10 times higher than the mammalian TRV, "consistent with the evidence that avian species are not sensitive species with respect to uranium exposure." No analysis seems to have been done for invertebrates. So in effect, the eco-cleanup level is going to be driven by the deer mouse. That is " the weight of evidence of the toxicological data on uranium suggest a value of 1 mg of uranium/kg of body weight/day would be protective of mammalian wildlife in general, and deer mice in particular (as the vast majority of data come from mice and rats)."

It seems like the red-legged frog got lost and I recommend that we ask why.

Peter Strauss
PM Strauss & Associates
317 Rutledge St.
San Francisco, CA 94110
415-647-4404
petestrauss1@comcast.net