



MEMO

DATE: January 17, 2014
TO: R.W. Field, PhD and R.A. Lemen, PhD
CC: John Stiver, CHP, Project Manager; John Mauro, PhD, CHP; Doug Farver, CHP; Rose Gogliotti; Nicole Briggs; Dose Reconstruction Subcommittee; Ted Katz
FROM: U. Hans Behling, PhD, MPH
SUBJECT: Westinghouse Nuclear Fuels Division Dose Reconstruction Case from 18th set

On January 9, 2014, SC&A conducted its one-on-one conference call with Drs. Field and Lemen. One of the dose reconstruction (DR) cases reviewed concerned an energy employee (EE) who worked at the Westinghouse Nuclear Fuels Division (WNFD) during the time when the Westinghouse facility received shipments of nuclear materials that included plutonium from the West Valley facility.

For guidance in the reconstruction of dose, NIOSH employed a document titled, *Dose Reconstruction Methodology for Westinghouse Nuclear Fuels Division, Cheswick, PA*, which was issued on June 8, 2012.

As part of the one-on-one discussion of the audit for this case, SC&A identified the following issues/findings related to said WNFD document:

- This document was **not** referenced in NIOSH's DR Report.
- This document has **not** been acknowledged/identified to SC&A for use in DR. (Correspondingly, this document has not been formally reviewed for use in DR.)
- As part of SC&A's audit of this case, SC&A's limited review of this document identified concerns regarding cited activity ratios defined for 12%, 10-year-old fuel grade plutonium.

On the assumption that cited activity ratios may be in error and may have affected other DRs, both Board members requested SC&A to identify the number of potential DRs that may have been based on data/guidance contained in the WNFD document.

SC&A's review of the NOCTS database identified the following:

- To date, a total of **98** WNFD cases have been completed.
- Of the 98 completed cases, completion of 19 cases post-date the document's issue date of June 8, 2012, and may, therefore, reflect guidance cited in said document.
- The balance of 79 WNFD cases was completed prior to June 8, 2012. Without further investigation, it is uncertain what guidance documents (if any) were used in behalf of the 79 DRs.