

Overview of

EXTERNAL COWORKER DOSIMETRY DATA FOR THE HANFORD SITE (ORAUT-OTIB-0030, Rev. 00)

Workers at Department of Energy and Atomic Weapons Employer facilities have the potential to be exposed to radiation from a variety of sources. The Technical Information Bulletin (TIB) *External Coworker Dosimetry Data for the Hanford Site* (ORAUT-OTIB-0030) provides guidance on how to use site coworker data. This data taken, appropriately, from other workers with similar work history on the site, is used to assign doses to workers at the Hanford Site who have limited or no radiation monitoring data available.

SUMMARY OF FINDINGS RESULTING FROM THE TECHNICAL REVIEW

Review of the procedure by the technical contractor for the Advisory Board on Radiation and Worker Health (the Board) produced the two findings summarized below:

Finding #1: The procedure does not provide details concerning the data contained in Table 3, but makes reference to a different procedure, *Parameters for Processing Claims for Construction Workers*, ORAUT-OTIB-0052 instead. This could cause confusion or incorrect dose assignment for construction trade workers.

Finding #2: The document does not provide the data or references for obtaining the information needed in order to make corrections for electron (i.e., beta) radiation attenuation by clothing.

RESOLUTION OF FINDINGS

In response to the findings identified above, the National Institute for Occupational Safety and Health (NIOSH) did the following:

- (1) *Finding #1:* NIOSH stated that its staff is familiar with the hierarchy of Technical Information Bulletins and is trained regarding the provisions in ORAUT-OTIB-0052. The text of OTIB-0030 was properly clarified in the next revision (Rev. 0, PC-1).

Finding #2: NIOSH indicated that its staff is aware of the Technical Information Bulletins that are available to help with the analysis of claims. Regarding this specific issue, the NIOSH staff has been instructed to use another procedure, *Interpretation of Dosimetry Data for Assignment of Shallow Dose* (ORAUT-OTIB-0017), to assess situations involving low-energy beta radiation exposures.

All issues were resolved to the satisfaction of the Board.