

Status of Idaho National Laboratory Technical Basis Document

Peter A. Darnell, CHP, RRPT
NIOSH

Division of Compensation Analysis and Support

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Background

- **Technical Basis Document (TBD) last updated in 2010**
- **SC&A review of Idaho National Laboratory (INL) TBD found 38 issues**
- **23 issues have been closed**

March 2014 Work Group Meeting

- 10 issues closed during the June 2010 WG meeting (3, 7, 10, 11, 12, 13, 22, 25, 37, and 38)
- In March 2014 NIOSH and the Work Group agreed to close 13 issues (4, 8, 14, 17, 18, 20, 26, 29, 30, 32, 33, 35 and 36)
- NIOSH issued 5 white papers
- 9 NIOSH action items developed

NIOSH White Papers

- Investigation of:
 - Need for external dose correction factors for angular dependence and exposure geometry (Issue 19)
 - Potential for missed extremity dose (Issue 24)
 - Assessment of the routine airborne releases at INL (Issue 1)

NIOSH White Papers (cont.)

- Investigation of:
 - Hot Particles at INL (Issues 9 and 23)
 - Airborne releases associated with Aircraft Nuclear Propulsion Program (Issue 2)

NIOSH Activities

- **Between June 2010 and May 2014 NIOSH has completed 5 data capture efforts**
 - **A 6th data capture effort was completed in conjunction with the INL WG and SC&A in June 2014**
 - **36 interviews were conducted during the 6th site visit**

NIOSH Activities (cont.)

- **September 2014 site visit**
 - 3 interviews planned
 - Technical document reviews
 - RWMC and Chemical Plant actinide exposures

- **October 2014 site visit**
 - Interviews/document review in planning stages

NIOSH Action Items

- Issue Internal Dosimetry Coworker Model
- Describe why an External Dosimetry Coworker Model is not required
- Issue white paper: Investigation of the NTA Film Dosimeter Limits of Detection Being Used for INL Dose Reconstruction
- Photon Spectrum Split (Issue 21). Expand on energy group split rationale

NIOSH Action Items (cont.)

- **Hot Particles (Issues 9 & 23).** Investigate and report on whether hot particle incident reports found their way into claimant files
- **Take the lead in developing areas of interest and questions for possible worker interviews e.g., Unmonitored Neutron Exposures (Issue 34)**
- **Describe path forward to address the 7 remaining open items**

NIOSH Action Items (cont.)

- **High-Risk Jobs (Internal Exposure); Calibration of Internal Dosimetry Analytical and Monitoring Equipment (Issues 5 & 6)**
- **SL-1 Accident Dose (Issue 15)**
- **Completeness and Quality of INL Beta/Gamma Dosimetry and Record Keeping Programs (Issue 16)**

NIOSH Action Items (cont.)

- **Minimum Reporting Level, Beta-Gamma (Issue 27)**
- **Minimum Reporting Level; Neutron (Issue 28)**
- **Completeness and Quality of INL Neutron Dosimetry and Record Keeping Programs (Issue 31)**
- **High Risk Jobs – neutron exposures (Issue 34)**

Revision of Site Profiles

- Site Profiles will be updated once the issues identified by SC&A have been resolved and the coworker models are complete
- Program Evaluation Report (PER) will be completed, as necessary, after the site profiles are updated
- Based on the results of the PER, NIOSH will send a list of claims to DOL that will require rework
- Timeline