SC&A Idaho National Laboratory (INL) Site Profile Update

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Background

- 2004: NIOSH first issued the six-volume TBD comprising the INL site profile
- September 2005: First SC&A review of site profile (Rev. 0)
- January 2006, December 2008 – SC&A delivers revised and supplemental reviews
- June 2009: INL Work Group held its first meeting
  - Combined the INL and ANL-W (SC&A 2007) reviews
- July 2009: SC&A produced a combined issues matrix containing 38 issues
- December 2009 through April 2011: NIOSH revised all its TBDs – current versions
- June 2011: Second INL Work Group meeting
  - 10 of the 38 issues were closed
- SC&A subsequently prepared an issue status and action item list (issues matrix) for the 38 issues, which was soon revised to include NIOSH comments

Background (Continued)

- July 2013 Advisory Board Meeting
  - NIOSH to prepare several white papers for collaborative issues resolution with SC&A
- February 2014: SC&A prepares issues matrix
  - *Idaho National Laboratory (INL) Site Profile Review Status Update, Revision 1*, February 24, 2014
    - 10 issues recommended for closure after "quick" review authorized by Work Group
    - 4 additional issues recommended for closure after further review
    - Issues 9 and 23 were combined ("hot particles")
    - March 2014 – NIOSH responses incorporated

Background (Concluded)

- March 25, 2014: Third INL Work Group meeting
  - Work Group discussed the 14 open issues with SC&A and closed 12
  - Thus, of the original 38 issues, 22 are closed and 16 remain open
  - Other Items
    - NIOSH to explain its contention that an external dosimetry coworker model is not required (NIOSH preparing an internal dosimetry coworker model)
    - NIOSH to issue a white paper, *"Investigation of the NTA Film Dosimeter Limits of Detection Being Used for INL Dose Reconstruction"*
    - The Work Group believes that there are gaps in the record that warrant further data capture and interviews; to that end
      - NIOSH and SC&A were tasked to plan and conduct worker interviews in June 2014
      - June 23–26: 34 interviews were conducted in parallel with data capture efforts

Current Status and Concerns

- Two Tiered Approach (conducted in parallel) now being applied to INL Site Profile Review
  - "Conventional" Site Profile Review Activities (business as usual)
    - Resolution of 16 open site profile issues, including white paper reviews
    - Note that white paper reviews may be informed by on-site field review

Current Status and Concerns (continued)

- Intensive On-Site Field Review (born of concerns voiced at 3/25/2014 Work Group meeting, driven by interview responses and data capture)
  - June 2014 interviews and data capture revealed a need for "vertical" assessment
  - Some issues of concern:
    - INL generally had a good dosimetry program, but there appear to be some "blind spots"
    - Transuranics
      - » Alpha monitoring may be lacking for some time periods at RWMC
      - » CPP – Plutonium plate-out in some cells at CPP with potential unmonitored alpha exposure upon reentry
    - Noble gases
      - » Kr-85 bottling program at CPP – only about half recovered
    - Concerns regarding the quality of health and safety programs for some categories of workers for some periods (e.g., firefighters)

Path Forward – On-Site Review

- Validating the vertical assessment
  - Collaborative data capture and follow-on interviews to be conducted September 8–12 , 2014
  - A second set of interviews led by SC&A to be scheduled for October 2014
  - Vertical lines of inquiry to be developed, as informed by June 2014 interviews and data capture

Path Forward – Conventional Review

- Continue resolution process for 16 open Site Profile issues
  - SC&A white paper reviews are in process, and will be finalized when on-site investigations are completed

Issue	TBD	White Paper Topic	Status
1	ORAUT-TKBS-0007-4 (Environmental)	Routine Airborne Releases	Received March 5, 2014
2	ORAUT-TKBS-0007-4 (Environmental)	Episodic Airborne Releases (Aircraft Nuclear Propulsion Issue)	Received September 3, 2013
9	ORAUT-TKBS-0007-5 (Internal)	Hot Particle Issue	Received March 19, 2014 (Issues 9 and 23 combined)
23	ORAUT-TKBS-0007-6 (External)	Hot Particle Issue	--
19	ORAUT-TKBS-0007-6 (External)	Angular Dependence	Received March 11, 2014
28	ORAUT-TKBS-0007-6 (External)	Investigation of the NTA Film Dosimeter Limits of Detection Being Used for INL Dose Reconstructions	Not yet received
34	ORAUT-TKBS-0007-6 (External)	High Risk Jobs (neutron exposure)	Received March 11, 2014

Questions?