



Fernald SEC Petition Review Summary of Progress

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Meeting of the Advisory Board on Radiation and Worker Health
Held in St. Louis, Missouri
May 24–26, 2011

Fernald Issues Resolution (November 2006–April 2011)

- SC&A Submits Site Profile Review – 11/10/2006
- SC&A Submits SEC PER Review – 07/02/2007
 - Six Principal SEC Issues Identified
- Ten Work Group Meetings (August 2007 – April 2011)
 - Numerous white paper exchanges and work group discussions
 - SC&A and NIOSH have each prepared over 20 white papers and supporting documents during this time
 - April 19, 2011 work group meeting
 - Three SEC issues remain
 - April 15, 2011: NIOSH submits ORAUT-RPRT-0052 “Feed Materials Production Center Internal Dose Topics” in response to work group action items
 - Compilation of previous position statements
 - April 17, 2011: NIOSH delivers response to SC&A second RU white paper

Progress on SEC Issues

Outstanding Issues as of April 19, 2011 work group meeting

■ Issue #1: Coworker Model for Uranium Internal Exposures

- November 2010: NIOSH to perform an analysis of construction worker (CW) vs. non-CW uranium bioassay data for ORAUT-OTIB-0078 and deliver a report to the Board
 - No report delivered as of April 19, 2011

■ Issue #3: Recycled Uranium (RU)

- 2 SC&A white papers (March 2009, February 2011)
- Topic of ongoing discussions since April 2009 (5 meetings)
- No progress until April 19, 2011 WG meeting
- Significant SEC issues remain
- SC&A: Preliminary response
 - No new SC&A actions authorized after April 19 meeting
- April 19 meeting: NIOSH indicates that 450 boxes of site-specific records have been discovered (contents unknown)

Progress on SEC Issues, Continued

Outstanding Issues as of April 19, 2011 work group meeting

- **Issue #6B: Reconstruction of internal exposures from inhalation of Th-232 from in-vivo (chest count) data (1968-1988)**
 - NIOSH white paper issued January 2008
 - Topic of work group discussions since January 2010 (4 meetings)
 - SC&A issues review of NIOSH white paper July 2010
 - NIOSH tasked to respond to SC&A review at November 2010 WG meeting
 - NIOSH submits two memos on January 19, 2011 in response to this SC&A review
 - Issue discussed in detail at April 2011 meeting
 - Issues remain regarding data integrity and completeness

Summary

- **5 Years and 10 work group discussions**
 - Timeliness
- **Two SEC Issues resolved (one with caveats)**
 - HIS-20 validation (Issue #2)
 - Th-232 DWE (address 'blunders,' use of un-weighted air data) (Issue 6A)
- **Two SEC → TBD (tractable)**
 - Raffinates: Th-230 with low Ra-226 (Issue #4)
 - K-65 silos: Rn-222 emissions and dispersion (Issue #5)
- **One response outstanding (likely TBD)**
 - U coworker model (construction worker subgroup) (Issue #1)
- **Little progress on two significant SEC issues prior to April 19, 2011 WG meeting**
 - Significant SEC issues remain
 - New data introduced → disposition?