



DEPARTMENT OF HEALTH & HUMAN SERVICES

Memorandum

To: Pinellas Plant Working Group

From: Peter Darnell, DCAS Health Physicist
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Subject: Response to SC&A's Issues Matrix Comments

Date: January 25, 2016

The following update responds to SC&A's recent comments on the closure status of the Pinellas Site Profile Issues Matrix, which were received on January 6, 2016. The issues matrix consists of 11 primary and 8 secondary issues. NIOSH and SC&A concur that primary issues 1, 3, 4, and 7 to 11 and all secondary issues have been previously closed by the Pinellas WG. Issue 2, related to the reconstruction of doses from insoluble metal tritides, and has been addressed via a NIOSH white paper that was delivered to the WG in December 2015. In their issues matrix comments, SC&A raised questions regarding the closure of primary issues 5 and 6.

While both NIOSH and SC&A concur that issue 3 is closed, at the request of SC&A, NIOSH recently provided a copy of a 2009 white paper on the potential for plutonium exposure at Pinellas. This paper was provided via e-mail to SC&A and the work group on January 4, 2016. Also, to facilitate discussion, NIOSH is providing an electronic summary of changes to the Pinellas technical basis document that were completed in 2011.

Issue 5 - Problems with personnel dosimetry.

In the January 2016 SC&A response, this issue was listed as "In abeyance" at 6/11/2009 WG meeting and discussed again at 11/19/2012 meeting.

SC&A Comment

Remaining open sub-issue was the basis for the LOD of 10 mrem for the post-1974 period in Table 6-9 of TBD-6 instead of SC&A-recommended 20 mrem (see Attachment 2 of "SC&A Pinellas Plant Work Group Update November 19, 2012, Teleconference meeting" for a description of Issue 5 as it stood prior to the November 19, 2012, meeting. That document is available on the DCAS website.)

Post-1974 sub-issue discussed on pp. 44–50 of the 11/19/2012 transcript, p. 50: NIOSH (Brian Gleckler) was going to look into the basis for an LOD of 10 mrem instead of SC&A-recommended 20 mrem. On 12/7/2015, I asked Joe Zlotnicki (SC&A, former VP of Landauer) through email to respond. He indicated that 10 mrem is probably acceptable for 30–250 keV photons, but is concerned that the gamma spectrum from an RTG source would be hardened. SC&A is still looking into this and will be prepared to discuss at the February 2016 WG meeting.

NIOSH response

SRDB Reference 15848 contains 1598 pages of Landauer dosimetry records for Pinellas Plant workers for the years of 1974–1980. Based on the back sides of the dosimetry reports, the LODs for the Landauer dosimeters in Table 6-9 of ORAUT-TKBS-0029-6 are based on the “minimum quantity measurable” and “minimum reportable quantity” values provided by Landauer. For legible examples of the back sides of those reports, see page 1547 (1974), page 798 (1975), page 1155 (1978), and page 90 (1980) of SRDB Reference 15848. In addition, a 4th Quarter 1996 Landauer dosimetry report indicates that the LODs didn’t change for the Landauer dosimeters through 1996 (see page 4 of SRDB Reference 52256).

Issue 6 – The decontamination and decommission (D&D) era of Pinellas operations is not sufficiently addressed.

In the January 2016 SC&A response, this issue was open at the 11/19/2012 WG meeting.

SC&A Comment

The SME from January 2012 interviews indicated that all the contract employees were monitored by Pinellas RadSafe, before, during and after the D&D operations. Issue remained open pending NIOSH receipt of confirmatory D&D monitoring records from Albuquerque (11/19/2012 transcript, pp. 53–54).

NIOSH response

NIOSH previously conducted searches for Pinellas dosimetry records at Sandia National Laboratories (SNL and the Albuquerque records center), the Atlanta records center, Morgantown and Grand Junction legacy management. In addition to the SRDB references discussed above, comprehensive dosimetry records for Pinellas workers are available in SRDB references 13167, 12157, 15183 and 15185. Historical records in SRDB reference 13208 and multiple references of dosimetric data through the 1980s and 1990s, which includes the D&D period.

- 2035 SRDB references were captured at the Atlanta federal records center (the FRC, Legacy Management)
- 3 SRDB references were captured at the ORAU COCA
- 41 SRDB references were captured at the Denver FRC
- 25 SRDB references were captured at the DOE Albuquerque office
- 895 SRDB references were captured at the DOE Morgantown legacy management
- 2 SRDB references were captured at DOE OSTI
- 541 SRDB references were captured at the DOL

- 22 SRDB references were captured at Hanford and INL
- 524 SRDB references were captured off the internet (Google, interlibrary loan, NRC, etc.)
- 300 SRDB references were captured at the Kansas City Plant (KCP) and FRC
- 771 SRDB references were captured from other sources (NIOSH, LANL, SAIC, etc.)

NIOSH has captured 5161 references (with the addition of the recent report from NASA provided by SC&A and the KCP document transfer records) in the SRDB. This represents an exhaustive search for Pinellas records and includes records searches at Albuquerque. Because the Pinellas Plant closed, its records were transmitted to SNL and KCP (the KCP tracked its document transfers by the cubic foot SRDB 150455).

NIOSH has conducted records searches at each of these facilities. NIOSH concurs with SC&A that D&D personnel were monitored by Pinellas radiation safety. However, since the Pinellas Plant conducted D&D primarily with existing site personnel and there is an approved coworker exposure model, NIOSH has no plans to duplicate completed records searches. However, NIOSH has requested a finding aid from DOE Legacy Management for their Pinellas holdings to verify we have captured all needed documents.

This finding aid should represent Pinellas holdings that were previously stored at multiple locations (e.g, Grand Junction Office, DOE Headquarters, and DOE Albuquerque) but are now centralized with DOE Legacy Management in Morgantown, WV. Additionally, NIOSH has requested a finding aid for the Pinellas holdings stored at Sandia National Laboratory, Albuquerque. Both finding aids will be provided to the WG upon receipt by NIOSH.

Sincerely,

[Signature on File]

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