



SEC-00109, Los Alamos National Laboratory (LANL) Status Update

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Advisory Board on Radiation and Worker Health (ABRWH) Work Group Meeting
July 25, 2019

Presentation

- Respond to SC&A's review of NIOSH's response to NC ID 484
- Go over path forward for addressing the potential effect on the co-worker model from workers not leaving bioassay samples as required
- Go over path forward and schedule for addressing dose reconstruction for mixed fission and activation products and other exotics

SC&A's Review of NIOSH's Response to NC ID 484

Conclusion

- SC&A disagrees with NIOSH's assessment that the amount of routine bioassay data available obviates the need to confirm its completeness in the face of NC ID 484 findings potential data gaps for bioassay enrollment and RWP job-specific bioassay participation.

Recommendation

- NIOSH follow up with LANL to ascertain whether the bioassay incompleteness identified in the limited sampling in 1999 reflects a broader incompleteness in LANL's bioassay database for 1996-2000

Interview LANL Radiological Control Staff

- NIOSH/SC&A interviewed radiological control staff members that were present at the time of the assessment to see if they had done further evaluation to determine the magnitude of people not leaving bioassay samples as required
 - There was nothing done at the time to determine the magnitude of individuals not leaving the required bioassay. They recognized issues with the HP checklist and decided to take corrective actions that would fix things going forward.

Proposed Path forward NC ID 484

- A similar situation occurred during the SRS evaluation. In order to resolve that issue, NIOSH agreed to develop a sampling plan and sample RWP's to determine compliance with bioassay requirements
 - NIOSH issued ORAUT-RPRT-0092, *Evaluation of Bioassay Data for Subcontracted Construction Trade Workers at the Savannah River Site*

Proposed Path forward NC ID 484 cont.

- NIOSH decided to first determine if it would be feasible to conduct the sampling at LANL during the 1996-2001 period
 - Are the RWPs available
 - Can we get the sign in sheets
 - Can we determine bioassay requirements
- At this time it appears the answer to the questions is yes

Proposed Path forward NC ID 484 cont.

- Therefore, we are proposing to move forward with the sampling plan effort consistent with how it was conducted at SRS
- Difficulties that will affect schedule
 - LANL does not have the electronic database like SRS
 - LANL does not have a great track record for releasing documents quickly
 - If LANL has any funding difficulties
 - NIOSH has already met with DOE to discuss funding and releasing documents

Proposed Path forward NC ID 484 cont.

Major Steps

- Review collected indexes of RWPS (8/23/2019)
- Develop sampling plan and get work group approval (9/30/2019)
- Implement plan (conduct data capture RWP's and Bioassay) (3/19/20)
- Develop sampling plan report (04/29/2020)
- Submit finalized sampling plan report to the work group (11/15/2020)
 - The anticipated completion dates in parentheses are based on LANL completing ADC reviews within 30 days.

Proposed Path Forward for Mixed Fission and Activation Products/Exotics

- After the work group meeting in November 2018, NIOSH/ORAUT had many discussions on a path forward for addressing MFAP/Exotics
- NIOSH approach
 - Identify radionuclides of concern
 - Determine air concentration required to get 100 mrem CEDE
 - Identify areas where the potential for exposure MFAP/Exotics
 - Capture air sample data from these areas
 - From those areas identify areas of greatest concern
 - Compare actual air concentrations to those required to get 100 mrem CEDE

Proposed Path Forward for Mixed Fission and Activation Products/Exotics cont.

- Schedule/Status
 - Data capture material control and source term information
 - Status – complete
 - Data capture surface contamination and airborne radioactivity surveys
 - Status – data has been captured and is in ADC review
 - Upload and review data
 - Status – waiting on data to be released

Proposed Path Forward for Mixed Fission and Activation Products/Exotics cont.

- Schedule/Status
 - Identify potential radionuclides of concern and determine 100 mrem CEDE airborne concentration
 - Status – Internal review
 - Compare airborne concentrations
 - Status/Schedule – estimated completion November 2019

Questions