

**ROCKY FLATS PLANT
SPECIAL EXPOSURE COHORT (SEC)
PETITION 00192
EVALUATION REPORT REVIEW**

**Mark Griffon, Chair, RFP Work Group
Joe Fitzgerald, SC&A Team**

**Advisory Board on Radiation and Worker Health
Denver, Colorado
October 16-17, 2013**

Background

- SEC – 00192 Evaluation Report issued on September 5, 2012
- Board determined that additional review required, including classified interviews and document reviews
- Work Group chair and SC&A participated in classified interviews and records review in November 2012
- NIOSH then performed additional interviews and data capture (e.g., LANL)
- Focus was on issues identified for estimating doses from tritium, neptunium, U-233 (with thorium strikes)
- Additional concerns raised by petitioner regarding alleged laboratory data falsification and other thorium exposures also pursued

Tritium White Paper

- Tritium White Paper issued on June 25, 2013
- Presents dose estimation approach for pre-1973, 1973, and post-1973; discussed at Sept 12, 2013, work group meeting
- SC&A identified potential calculational issues for 1973 and post-1973 period.
- SC&A questioned retrospective use of 1974 Battelle container contamination event to bound all pre-1973 tritium exposures; however, NIOSH finds no evidence that it would not bound
- Agreement that tritium releases were very small and resulting doses in mrem range

U-233/Thorium Strikes

- Initial NIOSH review found U-233 activities for mid-1960s through 1982, with multiple thorium strikes at least through 1970s
- SC&A participated with NIOSH in classified document reviews and interviews to confirm U-233 activities, scope, dates
- NIOSH established U-233 inventories at RFP until 1983, except for contaminated waste subject to later disposal
- NIOSH determined no internal monitoring at RFP was specific for U-233, U-232, or Th-228 for 1964-1983 period
- NIOSH briefed work group at Sept 12, 2013 meeting

Neptunium

- Initial NIOSH review found RFP was key fabricator and processor of Np-239 in oxide, metal, and metal alloy forms
- SC&A participated in classified interviews and record reviews to ascertain Np operational scope, source terms, dates
- NIOSH found no monitoring records specific to Np-237; inability to distinguish workers with potential exposure
- NIOSH concluded potential Np exposures for 1962-1983, with inventories onsite through 1988 (possible residual period)
- NIOSH briefed work group at Sept 12, 2013 meeting

Data Falsification/Data Invalidation

- NIOSH White Paper issued on June 25, 2013; concern by petitioners is over “crossover” implications of FBI findings of environmental monitoring discrepancies for worker bioassay program.
- SC&A participated with two interviews with former RFP workers with knowledge of bioassay program at time of 1989 FBI raid.
- SC&A reviewed key records including 1994 Grand Jury report and RFP pre- and post-FBI raid bioassay procedures.
- SC&A seeking three of four “Special Assessment Team” volumes that may be relevant to issue.
- Overall issue remains open pending completion of SC&A’s review and final reporting to the work group.