



ADVISORY BOARD ON RADIATION AND WORKER HEALTH  
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July 2, 2007

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The Honorable Michael O. Leavitt  
Secretary of Health and Human Services  
Department of Health and Human Services  
200 Independence Avenue, S.W.  
Washington, DC 20201

Dear Mr. Secretary:

The Advisory Board on Radiation and Worker Health (The Board) has evaluated SEC Petition-0030 concerning workers at the Rocky Flats facility in Denver, under the statutory requirements established by EEOICPA and incorporated into 42 CFR Sec. 83.13 and 42 CFR Sec. 83.14. The Board respectfully recommends Special Exposure Cohort (SEC) status be accorded to all employees of the DOE, its predecessor agencies, or DOE contractors or subcontractors who were monitored or should have been monitored for neutron exposures while working at the Rocky Flats facility in Denver, Colorado for a number of work days aggregating at least 250 work days during the period from January 1, 1959 through December 31, 1966, or in combination with work days within the parameters established for one or more other classes of employees in the SEC. The Board finds that although there are insufficient data available to reconstruct neutron dose with sufficient accuracy for all members of the class during this time period, the Board believes that NIOSH may be able to reconstruct other components of the internal and external dose, and therefore individuals with non-presumptive cancers may be considered for partial dose reconstructions.

This recommendation is based on the following factors:

- It is not clear, based on the review of the data, that the most exposed jobs were monitored for all years. This is supported by statements made by NIOSH's primary site expert regarding the implementation of the NTA film program. During this time period it is unclear whether the approach proposed would be bounding for all workers within the class.

- Reading the neutron badges in the pre-1963 period involved significant errors due to technical limitation of the reading protocol (i.e., only a small area of the badge was read).
- No independent validation of the NDRP re-read badges was conducted during the project or during NIOSH's site profile development.

The Advisory Board is in agreement with NIOSH's evaluation report with regard to the ability to reconstruct radiation doses for the period from 1967 through 2005 and for all radiation doses other than neutron doses from 1952 through 1966. Through the review process of the Rocky Flats petition (SEC-0030) NIOSH has made several important modifications to the dose reconstruction approach, and the Board notes that NIOSH has committed to re-evaluation of all affected cases in a timely manner. The primary changes of concern include but are not limited to:

- NIOSH will use a modified approach for assessing internal doses due to "Super S" plutonium for all affected cases
- NIOSH will use a modified internal dose co-worker approach of using the 95<sup>th</sup> percentile values of the electronic data in estimating worker dose via the co-worker internal dose model for all affected cases.
- NIOSH will use a modified internal dose co-worker approach for D & D workers by using the 95<sup>th</sup> percentile values of the electronic data in estimating worker dose via the co-worker internal dose model for all relevant radionuclides for all affected cases.
- NIOSH will use a modified approach for re-assessing neutron doses for the time period from January 1, 1967 through December 1970 for all affected cases.

The Board strongly recommends that the re-evaluations described above be completed in a timely manner.

Enclosed is supporting documentation from the Advisory Board Meeting held in Denver (Lakewood), Colorado on June 11-12, 2007 and other meetings where this special exposure cohort class was discussed. If any of these items are unavailable at this time, they will follow shortly.

Sincerely,



Paul L. Ziemer, Ph.D  
Chairman

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