



ADVISORY BOARD ON RADIATION AND WORKER HEALTH

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August 8, 2024

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The Honorable Xavier Becerra
Secretary
Department of Health and Human Services
200 Independence Avenue, S.W.
Washington, D.C. 20201

Dear Mr. Secretary:

The Advisory Board on Radiation and Worker Health (the Board) has evaluated Special Exposure Cohort (SEC) Petition 00236 concerning workers at the Metals and Controls Corp. (M&C) in Attleboro, MA, under the statutory requirements established by the Energy Employees Occupational Illness Compensation Program Act of 2000 and incorporated into 42 C.F.R. § 83.13.

The Board respectfully recommends SEC status be accorded to:

“All Atomic Weapons Employees who worked at Metals and Controls Corp. in Attleboro, MA, from January 1, 1968, through September 21, 1995, for a number of work days aggregating at least 250 work days, occurring either solely under this employment or in combination with work days within the parameters established for one or more other classes of employees included in the Special Exposure Cohort.”

This recommendation is based on the following factors:

- M&C is an Atomic Weapons Employee (AWE) covered facility from January 1, 1968, through March 21, 1997. M&C employees may have been exposed to radioactive contamination resulting from previous AWE facility weapons related work.
- M&C workers were engaged in construction and maintenance activities that involved exposure to residual low-level contamination related to prior nuclear weapons production and related operations involving uranium and thorium.
- The scope and degree of intrusive work activities by construction and maintenance workers during the residual period included pipe cleanouts, underground utility replacement and maintenance, and subsurface construction activities. M&C workers may have been in close proximity and exposed to contaminated dust and aerosols, while working within poorly ventilated spaces such as ditches and pits, without respiratory protection, radiological controls, monitoring, and safety oversight.

- NIOSH regards the pre-decontamination and decommissioning (D&D) activities by M&C workers at the end of the residual period to be similar to their construction and maintenance activities during the preceding 27 years of the residual period.
- The Board believes that uncertainties about the source terms, the conditions and processes during that earlier period, and the impact those activities may have had on resulting dose levels, suggests that the NIOSH dose reconstruction methods may not account for all worker exposure scenarios and circumstances during that earlier residual period.
- These uncertainties relate to M&C maintenance worker exposure to 1) interior drainpipe surface contamination (scale) and sediment during pipe cutting and replacement, whose source terms may have been influenced by regular discharges of what a worker described as a coagulant oil in 1968-1981; and 2) internal contamination of repurposed AWE-era machinery and equipment being serviced.
- No radiation monitoring of M&C construction and maintenance workers was conducted during the residual period. The Board finds that other facility process monitoring, and source term information available is not sufficient to estimate internal uranium and thorium radiation exposures for necessary to conduct individual dose reconstructions at M & C during the period of January 1, 1968, through September 21, 1995.
- The Board's review of available M&C data found that NIOSH lacked sufficient information, which includes internal radiation exposures to residual uranium and thorium, for members of the proposed class who may have been exposed from January 1, 1968, through September 21, 1995.
- Therefore, the Board finds there to be insufficient information to enable NIOSH to estimate with sufficient accuracy radiation dose the proposed class may have been exposed to during the time period in question.
- NIOSH has determined that available information is sufficient for use in dose reconstruction of external doses in accordance with existing NIOSH methods and procedures.
The Board concurs with this determination.
- The Board determined that health may have been endangered for the workers exposed to radiation during the time period in question.
- Based on these considerations and the discussion at the April 17, 2024, Zoom Board meeting, the Board recommends that this class be added to the SEC.

Enclosed is the documentation from the Board meeting where this SEC class was discussed. The documentation includes copies of the petition, the NIOSH review thereof, and related materials. If any of these items are unavailable at this time, they will follow shortly.

Sincerely,

[Signature on File]

Henry Anderson, MD, Chair
Advisory Board on Radiation and Worker Health

Enclosure