

Mound

Special Exposure Cohort

Petition Evaluation Report

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Petition Overview

- This is an 83.14 petition that was submitted by an EEOICPA claimant whose dose reconstruction could not be completed by NIOSH due lack of sufficient dosimetry-related information
- NIOSH's determination that it is unable to complete a dose reconstruction for an EEOICPA claimant is a qualified basis for submitting an SEC petition pursuant to 42 C.F.R. § 83.9(b)
- Claimant was employed at the Mound Laboratory during the period when tritium logbook data are unavailable
- Petition received on August 15, 2010

Petition Overview—cont.

- SEC class previously established under SEC-00171
 - Basis for class was inability to reconstruct radon exposure in the R and SW buildings (the Mound tritium complex) from March 1, 1959 through March 5, 1980
- Class definition for SEC-00171 based on the tritium monitoring status of the worker
 - Workers in the Mound tritium complex were monitored for tritium

Petition Overview—cont.

- Mound tritium urinalysis logbooks are used by DOL to confirm tritium monitoring status
- NIOSH discovered that there are gaps in the collection of tritium logbooks
- Gaps include:
 - September 1, 1972 through December 31, 1972
 - January 1, 1975 through December 31, 1976

Feasibility Determination

- During the time periods where there are gaps in the tritium logbooks, NIOSH cannot determine which workers entered the Mound tritium complex
- The default assumption during these years is that all workers were potentially exposed to radon in tritium complex
- NIOSH has determined that there is insufficient information to estimate an upper bound radon exposure to these workers under plausible circumstances

Health Endangerment

- The evidence reviewed in this evaluation indicates that some workers in the class may have accumulated chronic radiation exposures through intakes of radionuclides and direct exposure to radioactive materials.
- Consequently, NIOSH is specifying that health may have been endangered for those workers covered by this evaluation who were employed for a number of work days aggregating at least 250 work days within the parameters established for this class or in combination with work days within the parameters established for one or more other classes of employees in the SEC.

Proposed Class

All employees of the Department of Energy, its predecessor agencies, and their contractors and subcontractors who worked at the Mound Plant in Miamisburg, Ohio, from September 1, 1972 through December 31, 1972, or from January 1, 1975 through December 31, 1976, 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.

Recommendation

- For the period from September 1, 1972 through December 31, 1972, or from January 1, 1975 through December 31, 1976, NIOSH finds that it cannot reconstruct doses for members of the proposed class with sufficient accuracy.

Class	Feasibility	Health Endangerment
September 1, 1972 – December 31, 1972 or January 1, 1975 through December 31, 1976	No	Yes