

HHS Determination Concerning a Petition to Add Members to the
Special Exposure Cohort
under the
Energy Employees Occupational Illness Compensation Program Act of 2000

Determination Concerning a Petition for Employees from

Titanium Alloys Manufacturing

Niagara Falls, New York



I. Determination

I, Kathleen Sebelius, Secretary of Health and Human Services (Secretary), have determined that the employees defined in Section II of this report do not meet the statutory criteria for addition to the Special Exposure Cohort (SEC), as authorized under the Energy Employees Occupational Illness Compensation Program Act of 2000 (EEOICPA), 42 U.S.C. § 7384q.

August 23, 2012
Date

[Signature on File]
Kathleen Sebelius

II. Employee Class Definition

All employees who worked in any area or building at Titanium Alloys Manufacturing from January 1, 1955, through December 31, 1956.

III. Decision Criteria and Recommendations

Pursuant to 42 U.S.C. § 7384q, to designate a class for addition to the SEC, the Secretary must determine, upon recommendation of the Advisory Board on Radiation and Worker Health (Board), that

- (1) It is not feasible to estimate with sufficient accuracy the radiation dose that the class received; and
- (2) There is a reasonable likelihood that such radiation dose may have endangered the health of members of the class.

The SEC final rule states in 42 C.F.R. § 83.13(c)(1) that it is feasible in two situations to estimate the radiation dose that the class received with sufficient accuracy. First, the rule states that radiation doses may be estimated with sufficient accuracy if NIOSH has established that it has access to sufficient information to estimate the maximum radiation dose for every type of cancer for which radiation doses are reconstructed that could have been incurred under plausible circumstances by any member of the class. Alternatively, radiation doses may be estimated with sufficient accuracy if NIOSH has established that it has access to sufficient information to estimate the radiation doses of members of the class more precisely than a maximum dose estimate.

In a letter received by the Secretary on August 1, 2012, the Board, pursuant to 42 U.S.C. § 7384q, agreed with the following NIOSH findings, effectively advising the Secretary that radiation dose can be reconstructed with sufficient accuracy for certain Titanium Alloys Manufacturing (TAM) employees in accordance with provisions of EEOICPA and the SEC final rule.

IV. Determination Findings

Feasibility of Estimating Radiation Doses with Sufficient Accuracy

The Secretary established the feasibility determination for the class of employees covered by this report based upon the findings summarized below.

- The principal source of internal radiation doses for members of the evaluated class was inhalation and ingestion of uranium and uranium progeny contained in dusts and fumes associated with the furnace operations, and the principal source of external radiation doses was from exposure to beta and gamma radiation emanating from uranium-bearing materials.
- NIOSH has determined that uranium internal exposures during the operational period can be bounded using air concentration data measured during TAM's operational period from January 1, 1955, through December 31, 1956. NIOSH may choose to employ a more refined approach when reconstructing individual doses based on information associated with individual claims. NIOSH will use appropriate dose reconstruction methods, including best-estimate approaches that employ new details of site operations, if discovered, to complete individual dose reconstructions.
- NIOSH determined that although no external monitoring data are available for the TAM site, Table 6-1 of Battelle-TBD-6000, can be used to bound the photon dose during the operational period from January 1, 1955, through December 31, 1956.
- Although no specific information regarding occupational medical dose has been identified for TAM, the dose associated with medical X-ray exams, if required as a condition of employment, can be bounded by using the assumptions in the complex-wide Technical Information Bulletin, Dose Reconstruction from Occupationally Related Diagnostic X-Ray Procedures (ORAUT-OTIB-0006). NIOSH believes this methodology supports its ability to bound the occupational medical X-ray doses for the TAM.
- NIOSH concludes that by using source term quantities and exposure rate modeling from Battelle-TBD-6000, external dose reconstruction for personnel working during the operational period at TAM is feasible. Based on its assessment of these doses, NIOSH concludes that these methods provide reasonable approaches to conservatively bound external doses for all members of the class under evaluation. NIOSH may choose to employ a more refined approach when reconstructing individual doses based on information obtained during the evaluation of individual claims.
- NIOSH determined that it has access to sufficient site-specific information to either (1) estimate the maximum internal and external radiation dose for every type of cancer for which radiation doses are reconstructed that could have been incurred under plausible circumstances by any member of the evaluated class; or (2) estimate the internal and external radiation doses to members of the evaluated class more precisely than a maximum dose estimate.
- The Board concurred with the NIOSH findings.

Health Endangerment

Because the Secretary established that it is feasible to estimate with sufficient accuracy the radiation doses encountered by all employees who worked at TAM, from January 1, 1955, through December 31, 1956, a determination of health endangerment is not required.

V. Effect of the Determination

Members of the class of employees covered by this determination and their survivors continue to be eligible to submit claims for compensation under EEOICPA. As required for cancer claims covering other DOE and Atomic Weapons Employer employees (or Atomic Weapons Employees) not included in the SEC, qualified cancer claims under Part B of EEOICPA for members of this class will be adjudicated by the Department of Labor, in part on the basis of radiation dose reconstructions which will be conducted by NIOSH.

VI. Administrative Review of Determination

The determination provided in this report may be subject to an administrative review within HHS, pursuant to 42 C.F.R. § 83.18(a). On the basis of such a review, if the Secretary decides to designate the class of employees covered by this determination, in part or in whole, as an addition to the SEC, the Secretary would transmit a new report to Congress providing the designation and the criteria and findings on which the decision was based.