

HHS Designation of Additional Members of the
Special Exposure Cohort
under the
Energy Employees Occupational Illness Compensation Program Act of 2000

Designating a Class of Employees from
Ventron Corporation
Beverly, Massachusetts



I. Designation

I, Kathleen Sebelius, Secretary of Health and Human Services, designate the class of employees defined in Section II of this report 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.

October 12, 2012
Date

[Signature on File]
Kathleen Sebelius

II. Employee Class Definition

All Atomic Weapons Employees who worked for the Ventron Corporation at its facility in Beverly, Massachusetts, from November 1, 1942, through December 31, 1948, 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.

III. Designation Criteria and Recommendations

Pursuant to 42 U.S.C. § 7384q, for the class defined in Section II of this report, the Secretary has determined, and the Advisory Board on Radiation and Worker Health (Board) has recommended, 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.

The Board, pursuant to 42 U.S.C. § 7384q, advised the Secretary to designate the class as an addition to the SEC in a letter received by the Secretary on September 17, 2012.

IV. Designation 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.

- Principal sources of internal radiation for members of the proposed class included exposures to uranium contained in uranium oxides, uranium metal powder, uranium tetrafluoride, scrap uranium metal, thorium, and uranium progeny from ore-handling operations. The modes of exposure were inhalation and ingestion of uranium and its progeny during uranium metal fabrication and scrap recovery operations, including spontaneous uranium fires, as well as inhalation of thorium dusts.
- NIOSH has not located documentation indicating the existence of a routine internal personnel exposure monitoring program for the period under evaluation. The very limited internal monitoring and air sample data available to NIOSH are sparse and there is no evidence to indicate that these data are representative of the most highly-exposed workers at the Ventron facility, or that the available sample results are representative of all workers. Without additional personnel radiation monitoring data representing the period from 1942 through 1948, NIOSH does not have sufficient information to appropriately characterize intakes of radioactive material intakes during operations at the Ventron Corporation facility.
- Principal sources of external radiation for members of the proposed class included exposures to uranium during metal-handling operations, uranium progeny derived from naturally-occurring ores exhibiting a natural isotopic abundance, as well as thorium during commercial production of thoriated tungsten.
- NIOSH's research indicates personnel monitoring for external exposure to radiological materials was not performed for the period under evaluation. No records of any program for personnel external dose monitoring, or data that would be associated with such a program have been located.
- NIOSH has determined that adequate reconstruction of medical dose is feasible by using claimant-favorable assumptions and the technical information bulletin Dose Reconstruction from Occupational Medical X-Ray Procedures (ORAUT-OTIB-0006).
- NIOSH does not have access to sufficient personnel monitoring, workplace monitoring, or source term data to estimate internal and external exposures for Ventron workers during the periods of refining and smelting operations from November 1, 1942, through December 31, 1948.

- Pursuant to 42 C.F.R. § 83.13(c)(1), NIOSH determined that there is insufficient information to either: (1) 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; or (2) estimate the radiation doses of members of the class more precisely than a maximum dose estimate.
- Although NIOSH found that it is not possible to completely reconstruct radiation doses for the proposed class, NIOSH intends to use any internal and external monitoring data that may become available for an individual claim (and that can be interpreted using existing NIOSH dose reconstruction processes or procedures). Therefore, dose reconstructions for individuals employed at Ventron Corporation during the period from November 1, 1942, through December 31, 1948, but who do not qualify for inclusion in the SEC, may be performed using these data as appropriate.

Health Endangerment

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

- (1) Pursuant to 42 C.F.R. § 83.13(c)(3), NIOSH established that there is a reasonable likelihood that such radiation doses may have endangered the health of members of the class. Pursuant to 42 C.F.R. § 83.13(c)(3)(ii), NIOSH specified a minimum duration of employment to satisfy this health endangerment criterion as “having been 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 (excluding aggregate work day requirements) established for one or more other classes of employees in the Cohort.”
- (2) NIOSH did not identify any evidence from the petitioners or from other resources that would establish that the class was exposed to radiation during a discrete incident likely to have involved exceptionally high-level exposures, such as a nuclear criticality incident, as defined under 42 C.F.R. § 83.13(c)(3)(i).
- (3) The Board concurred with NIOSH’s finding that the health of the class may have been endangered and defined the class according to the 250-work day requirement specified under 42 C.F.R. § 83.13(c)(3)(ii).

V. Effect and Effective Date of Designation

The Secretary submits this report on the designation of one additional class to the SEC for review by Congress, pursuant to 42 U.S.C. §§ 7384l(14)(C)(ii) and 7384q(c)(2)(A), as amended by the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, Pub. L. No. 108-375 (codified as amended in scattered sections of 42 U.S.C.). Pursuant to 42 U.S.C. § 7384l(14)(C)(ii), as amended by the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, Pub. L. No. 108-375 (codified as amended in scattered sections of 42 U.S.C.), the designation in this report will become effective 30 days after the date of this report's submission to Congress "unless Congress otherwise provides."

VI. Administrative Review of Designation

The health endangerment determination of the designation 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 expand the class of employees covered by this designation, the Secretary would transmit a supplementary report to Congress providing the expanded employee class definition and the criteria and findings on which the decision was based.