

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

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Designating a Class of Employees  
Battelle Laboratories King Avenue Facilities  
Columbus, Ohio



## I. Designation

I, Kathleen Sebelius, Secretary of the Department 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.

[Signature on File]

March 6, 2013

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Kathleen Sebelius

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Date

## II. Employee Class Definition

All Atomic Weapons Employees who worked at the King Avenue facility owned by Battelle Laboratories in Columbus, Ohio, during the period from April 16, 1943, through June 30, 1956, 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.

NIOSH determined that there is insufficient information to estimate the radiation doses that the class received with sufficient accuracy under the two abovementioned situations. 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 February 4, 2013.

## IV. Designation Findings

### Infeasibility of Estimating Radiation Doses with Sufficient Accuracy

The Secretary designates the class of employees covered by this report based upon the findings summarized below.

- The principal sources of internal radiation exposures for members of the current proposed class at Battelle's King Avenue facility included exposures to uranium and thorium, including the progeny of these radionuclides, used in laboratory-scale and pilot-plant-scale research activities.
- NIOSH has identified limited uranium personnel internal monitoring data for select individuals for the years 1955-1956. Additionally, no thorium bioassay records have been located, nor has any other information been identified regarding personnel monitoring for thorium exposures for the time period from April 16, 1943, through June 30, 1956. Additionally, NIOSH does not have any indication that a routine bioassay monitoring program existed at the Battelle Laboratories during the time period from April 16, 1943, through June 1956.
- NIOSH has determined that it does not have sufficient biological monitoring data, air monitoring information, or process and radiological source information to allow it to appropriately characterize radioactive material intakes during Battelle Laboratories King Avenue operations. Consequently, NIOSH finds that it is not feasible to estimate doses with sufficient accuracy for internal exposures for the proposed class of employees during the period from April 16, 1943, through June 30, 1956.
- The principal sources of external radiation for members of the evaluated class included exposures to beta, gamma, and neutron radiation emitted from a variety of research and development studies, as well as pilot-plant-scale metallurgical and mineral extraction activities using various ores and oil shales. Creation and encapsulation of Sr-90 and Co-60 sources were also performed in the radiochemistry laboratories.
- NIOSH does not have access to sufficient personnel monitoring, workplace monitoring, or source term data to estimate potential unmonitored external exposures to uranium, thorium, and their progeny during a period of AWE operations from April 16, 1943, through February 13, 1951.
- However, NIOSH has access to external monitoring data records that provide external exposure information starting from February 14, 1951. Therefore, NIOSH has determined that it may be feasible to reconstruct external doses during the period from February 14, 1951, through June 30, 1956.
- NIOSH determined that it is not applicable to reconstruct occupational medical dose for Battelle Laboratories King Avenue workers because medical x-ray procedures were performed at an off-site, non-EEOICPA-covered facility.
- NIOSH has documented that it cannot complete the dose reconstructions related to this petition with sufficient accuracy for the employees who worked at the Battelle Laboratories - King Avenue facility in Columbus, Ohio, from April 16, 1943, through June 30, 1956. The basis of this finding demonstrates that NIOSH does not have access to sufficient information to estimate either the maximum radiation dose incurred by any member of the class or to estimate such radiation doses more precisely than a maximum dose estimate for that period.

- 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 the Battelle Laboratories King Avenue facility during the period from April 16, 1943, through June 30, 1956, but who do not qualify for inclusion in the SEC, may be performed using these data as appropriate.
- 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.
- The Board concurred with NIOSH's recommendation to add the proposed class of workers to the SEC.

### 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 workday 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-workday 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.