

U.S. Department of Health and Human 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
Ames Laboratory
Ames, Iowa



I. Designation

I, Alex M. Azar II, Secretary of Health and Human Services (HHS), 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.

February 1, 2018
Date

[Signature on File]
Alex M. Azar II

II. Employee Class Definition

All employees of the Department of Energy, its predecessor agencies, and their contractors or subcontractors who worked in any area of the Ames Laboratory in Ames, Iowa, during the period from January 1, 1971, through December 31, 1989, 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 dose of individual members of the class with sufficient accuracy under the two abovementioned situations. The Board, pursuant to 42 U.S.C. § 7384q, advised the Acting Secretary to designate the class as an addition to the SEC in a letter received by the Acting Secretary on January 3, 2018.

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

- NIOSH determined that members of the evaluated class may have received internal radiation exposure from uranium and thorium and their decay products, in addition to fission and activation products, tritium, and other radionuclides from research activities.
- NIOSH has concluded, based on its assessment of the available employee monitoring data that there are insufficient dosimetry or air monitoring data available to estimate intakes from site research and developmental work with various radionuclides, and from remediation and decontamination work in various site buildings and grounds, for the proposed SEC class time period.
- Therefore, NIOSH lacks sufficient information to allow it to estimate the potential internal exposures with sufficient accuracy for the proposed class of workers.
- NIOSH determined that members of the evaluated class may have received external exposure to uranium and thorium and their decay products. In addition, workers at the Ames Laboratory Research Reactor had the potential for external gamma and neutron exposure.
- This NIOSH SEC evaluation responds to a petition based on the NIOSH determination that internal radiation exposures could not be reconstructed for a dose reconstruction claim referred to NIOSH by the Department of Labor. Therefore, the finding that it is not feasible to estimate internal radiation dose with sufficient accuracy is sufficient to support the designation of the evaluated class of Ames workers to the SEC. While the SEC Petition Evaluation Report does not further evaluate whether or not it is feasible to estimate external radiation doses, NIOSH intends to reconstruct external doses for those claims that do not qualify for inclusion in the SEC using methods that are currently available in the Ames site profile.
- Pursuant to 42 C.F.R. § 83.13(c)(1), NIOSH has concluded 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 more precisely than a maximum dose estimate for the any member of the class at Ames Laboratory for the time period from January 1, 1971, through December 31, 1989.
- Although NIOSH found that it is not possible to completely reconstruct internal radiation doses for the proposed class, NIOSH intends to use any internal 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 Ames Laboratory for the time period from January 1, 1971, through December 31, 1989, but who do not qualify for inclusion in the SEC, may be completed using these data as appropriate.

- The Board concurred with the NIOSH evaluation and recommended the proposed class for addition 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 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.