# U.S. Department of Health and Human Services 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

Argonne National Laboratory-West

Scoville, Idaho



### I. Designation

I, Sylvia M. Burwell, Secretary of the U.S. Department 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.

June 3, 2016[Signature on File]DateSylvia M. Burwell

# II. Employee Class Definition

All employees of the Department of Energy, its predecessor agencies, and their contractors and subcontractors who worked at the Argonne National Laboratory-West during the time period from April 10, 1951, through December 31, 1957, 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 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 the National Institute for Occupational Safety and Health (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 Secretary to designate the class as an addition to the SEC in a letter received by the Secretary on May 4, 2016.

## IV. Designation Findings

## <u>Infeasibility of Estimating Radiation Doses with Sufficient Accuracy</u>

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

- NIOSH has identified that principal sources of internal and external radiation dose for members of the evaluated ANL-W class working in the Experimental Breeder Reactor-I (EBR-I) and EBR-II Complexes included beta-gamma and neutron exposures to various isotopes of uranium, plutonium, thorium, and other actinides, as well as exotic radionuclides (produced from, or as a result of, reactor neutron irradiation) that include mixed fission and activation products (MFP/MAP), radioiodines, noble gases, and other radionuclides.
- NIOSH has determined that it lacks sufficient information, which includes biological and air monitoring information, or process and radiological source information that would allow it to estimate exposures from potential internal radiation dose during the period from April 10, 1951, through December 31, 1957.
- Similarly, NIOSH has determined that it lacks sufficient personnel- or area-monitoring data to support complete reconstruction of external personnel exposures for the period from April 10, 1951, through December 31, 1957.
- NIOSH finds that it is feasible to reconstruct occupational medical dose for ANL-W workers with sufficient accuracy.
- The Board concurred with the NIOSH finding that it could not reconstruct internal radiation exposures for the proposed class of workers for the period from April 10, 1951, through December 31, 1957.
- 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 the ANL-W during the time period from

April 10, 1951, and December 31, 1957, but who do not qualify for inclusion in the SEC, may be performed using these data as appropriate.

• 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 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. §§ 7384*l*(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. § 7384*l*(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.