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

Hanford Engineer Works

Richland, Washington

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.

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August 23, 2012
Date

[Signature on File]
Kathleen Sebelius

II. Employee Class Definition

All employees of the Department of Energy, its predecessor agencies, and their contractors and subcontractors who worked at the Hanford Engineer Works in Richland, Washington, from July 1, 1972, through December 31, 1983, 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 August 1, 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.

- NIOSH determined that the principal sources of internal radiation exposures for members of the current proposed class at Hanford included exposures to HEU, U-233, thorium, and neptunium in the 200 and 300 Areas.

- Consistent with the NIOSH, DOE, and DOL determinations associated with the evaluation of SEC-00152 in 2009, NIOSH has determined that the Hanford site-specific and claimant-specific data available for the time period under evaluation continue to be insufficient to allow NIOSH to characterize worker movements between the 200 and 300 Areas and other areas of Hanford during the period under evaluation. Furthermore, NIOSH has no indication that Hanford implemented routine or special bioassay programs sufficient to detect intakes of purified HEU, U-233, thorium, or neptunium until the end of the period under evaluation.

- NIOSH is unable to assess whether an energy employee, or class of employees, did or did not potentially enter specific areas of the Hanford site having the potential exposures to HEU, U-233, neptunium, and thorium during the period from July 1, 1972, through December 31, 1983. Therefore, NIOSH cannot define individual worker exposure scenarios based on the areas or specific work location during the evaluated period.

- NIOSH determined that it does not have sufficient source term information for the various site operations. Consequently, NIOSH finds that it is not feasible to estimate, with sufficient accuracy, internal exposures to HEU, U-233, thorium, or neptunium and resulting doses for the proposed class of employees during the period from July 1, 1972, through December 31, 1983.

- NIOSH determined that the principal sources of external radiation for members of the evaluated class included exposures to HEU, U-233, thorium, and neptunium in the 200 and 300 Areas during activities in support of defense-related research, development of product materials, maintenance and waste-handling operations, and facility decontamination and decommissioning efforts.

- Consistent with NIOSH's evaluation of SEC-00152 for the period from October 1, 1943, through June 30, 1972, available external monitoring data may be used in accordance with existing procedures on a case-by-case basis for the purpose of partial dose reconstructions.

- Also consistent with previous NIOSH determinations associated with the evaluations of SEC-00057 and SEC-00152, NIOSH has determined that adequate reconstruction of medical dose is likely to be feasible by using claimant-favorable assumptions in the technical information bulletin Dose Reconstruction from Occupational Medical X-Ray Procedures (ORAUT-OTIB-0006) and the Hanford site profile documents.

- NIOSH lacks access to sufficient information and documentation that would allow it to estimate with sufficient accuracy the potential internal radiological exposures to which the proposed class may have been subjected at the Hanford Engineer Works in Richland, Washington, from July 1, 1972, through December 31, 1983.

- NIOSH has documented that it cannot complete the dose reconstructions related to this petition with sufficient accuracy for the employees who worked at the Hanford Engineer Works in Richland, Washington, from July 1, 1972, through December 31, 1983. 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 Hanford Engineer Works during the period from July 1, 1972, through December 31, 1983, but who do not qualify for inclusion in the SEC, may be performed using these data as appropriate.

- NIOSH has determined that adequate reconstruction of medical dose is feasible for workers at the Hanford Engineer Works in Richland, Washington, from July 1, 1972, through December 31, 1983, by using claimant-favorable assumptions and available procedures.

- 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 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 (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. §§ 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.