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

Hanford Engineer Works
Richland, Washington
I. Designation

I, Michael O. Leavitt, Secretary of Health and Human Services (Secretary), 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.

SEP 12 2007

Date

Michael O. Leavitt

II. Employee Class Definition

Employees of the Department of Energy (DOE), its predecessor agencies, or DOE contractors or subcontractors who were monitored or should have been monitored for internal radiological exposures while working at the Hanford Engineer Works in: the 300 Area fuel fabrication and research facilities from October 1, 1943, through August 31, 1946; the 200 Area plutonium separation facilities from November 1, 1944 through August 31, 1946; or the 100 B, D, and F reactor areas from September 1, 1944, through August 31, 1946; for a number of work days aggregating at least 250 work days 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 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.

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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 15, 2007.

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.

(1) People working at the Hanford Engineer Works during this time period worked in nuclear weapons development and testing and other technical and scientific research involving exposures to many different radionuclides.

(2) There are no bioassay or in-situ monitoring data from the onset of Hanford operations in 1943 through August 1946 that would allow direct reconstruction of an individual's internal dose.

(3) NIOSH has not identified documentation describing air monitoring devices (particularly for reactor and separation operations), sampling techniques, sample measurement and analytical methods, or information regarding air monitoring locations and their relationship to potentially-exposed individuals.

(4) Pursuant to 42 C.F.R. § 83.13(c)(1), NIOSH determined that there is insufficient information either 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, or to estimate the radiation doses of members of the class more precisely than a maximum dose estimate. The Board concurred with the NIOSH-recommended proposed class for addition to the SEC.

(5) Although NIOSH found that it is not possible to completely reconstruct radiation doses for these employees, NIOSH determined that it is possible to reconstruct components of the internal dose (other than plutonium and fission products). There is sufficient process information to apply existing dose reconstruction techniques to bound internal doses associated with the uranium fuel fabrication work. Therefore, while NIOSH cannot completely reconstruct internal dose, it can perform partial dose reconstructions for non-presumptive cancers using the internal dose associated with the uranium fuel fabrication work. It is also possible to reconstruct all external dose except for neutron dose, which is still being evaluated. Therefore, individuals with non-presumptive cancers may be considered for partial dose reconstructions.

Health Endangerment

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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 the finding of NIOSH 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


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.