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 Nuclear Reservation
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.

MAY 3 0 2008

Date

Michael O. Leavitt

II. Employee Class Definition

All employees of the Department of Energy (DOE), its predecessor agencies, and DOE contractors or subcontractors who worked from:

1. September 1, 1946 through December 31, 1961 in the 300 area; or

2. January 1, 1949 through December 31, 1968 in the 200 areas (East and West)

at the Hanford Nuclear Reservation in Richland, Washington, 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 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 May 2, 2008.

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) There were processes at Hanford that involved separating americium from plutonium. Experiments to separate americium-241 from aged plutonium solutions were carried out as early as 1949. Prior to January 1, 1969, based on the lack of available information showing that there was a routine americium bioassay program in place, or information detailing the type of analysis of levels of detection, NIOSH finds that the internal americium-241 dose cannot be reconstructed with sufficient accuracy for the areas where americium activity cannot be associated with measured plutonium activity.

(2) NIOSH research indicates that americium isolation activities took place in the Isolation Building (231-Z), the Waste Treatment Facility (242-Z), and the Plutonium Finishing Plant (234-5Z). NIOSH has insufficient information detailing worker movement between buildings of the 200 Area.

(3) As early as October 1945, Hanford performed experimental work and testing with thorium (called "myrnalloy" at the time). Available thorium-specific workplace and air monitoring data were also found to be inadequate to support sufficiently accurate dose reconstruction prior to 1962.

(4) NIOSH research indicates that insufficiently-monitored operations with isolated thorium took place in Buildings 313, 306, 3706, and the 3722 Shop. NIOSH has insufficient information detailing worker movement between buildings of the 300 Area.

(5) For the workers in the designated class, NIOSH found that the available monitoring records, process descriptions, and source term data are not sufficient to reconstruct radiation dose.

(6) 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.

(7) The Board concurred with the NIOSH evaluation and recommended the proposed class for addition to the SEC.

(8) Although NIOSH found that it is not possible to completely reconstruct radiation doses for these employees, NIOSH can reconstruct some internal dose, all external dose, and occupational medical dose. Therefore, individuals with non-presumptive cancers may be considered for partial dose reconstructions.

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-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.