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
Spencer Chemical Company/Jayhawk Works
Pittsburg, Kansas
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.

AUG 15 2008

Date

Michael O. Leavitt

II. Employee Class Definition

All Atomic Weapons Employer (AWE) employees who worked at Spencer Chemical Company/Jayhawk Works near Pittsburg, Kansas, from January 1, 1956 through December 31, 1961 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 July 17, 2008.

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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) Principal sources of internal radiation doses for members of the proposed class included exposures to uranium and thorium. Internal exposures could have resulted from inhalation and ingestion of dust generated by the thorium and uranium operations or contaminated dust that was re-suspended by foot traffic.

(2) No internal personnel monitoring data or area monitoring data are available. No source term information has been identified to permit characterizing and evaluating thorium operations, and limited data exist for uranium operations.

(3) Based on the lack of information on thorium exposures, NIOSH has determined that the thorium internal dose cannot be reconstructed. Therefore, NIOSH has concluded that it cannot bound internal thorium dose. NIOSH can reconstruct internal uranium dose using site and process information and data from surrogate sites that performed similar uranium processes.

(4) Although the potential for external radiation dose from thorium compounds existed, NIOSH does not know the extent of the activities that were performed with thorium compounds, the work processes, or the exposure conditions. NIOSH has not found information to adequately characterize the thorium operations. The supporting documentation available to NIOSH states that external monitoring was performed during the operational period. However, NIOSH has not located any individual external monitoring data or employee dosimetry records despite exhaustive research efforts. NIOSH is unable to bound external dose from thorium activities based upon the information to which it has access. NIOSH is able to reconstruct external uranium dose using source term and process information from the Spencer Chemical Company/Jayhawk Works and data from surrogate sites that performed similar uranium processes.

(5) 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.

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

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(7) Although NIOSH found that it is not possible to completely reconstruct radiation doses for these employees, NIOSH can reconstruct internal and external uranium 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


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

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supplementary report to Congress providing the expanded employee class definition and the criteria and findings on which the decision was based.

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