



THE SECRETARY OF HEALTH AND HUMAN SERVICES  
WASHINGTON, D.C. 20201

SEP 12 2007

The Honorable Richard Cheney  
President of the United States Senate  
Washington, D.C. 20510

Dear Mr. President:

Pursuant to the Energy Employees Occupational Illness Compensation Program Act of 2000 and 42 C.F.R. pt. 83, a petition was filed on behalf of workers from the Ames Laboratory in Ames, Iowa, to be added to the Special Exposure Cohort (SEC).

The Centers for Disease Control and Prevention's (CDC) National Institute for Occupational Safety and Health (NIOSH) evaluated the petition and presented its findings to the Advisory Board on Radiation and Worker Health (Board). The Board finished its consideration of the petition on July 18, 2007, and on August 15, 2007, I received the Board's recommendation concerning this petition. I have also received the deliberations, findings, and recommendations of the Director of NIOSH and the Director of CDC. I have designated the following class for addition to the SEC:

Sheet metal workers, physical plant maintenance and associated support staff (including all maintenance shop personnel), and supervisory staff who were monitored or should have been monitored for potential internal radiation exposures associated with the maintenance and renovation activities of the thorium production areas in Wilhelm Hall (a.k.a. the Metallurgy Building or "Old" Metallurgy Building) at the Ames Laboratory from January 1, 1955, through December 31, 1970, 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.

The criteria and findings upon which this designation is based are provided in the enclosed report.

Please call me if you have any further questions regarding this matter.

Sincerely,

Michael O. Leavitt

Enclosure



THE SECRETARY OF HEALTH AND HUMAN SERVICES  
WASHINGTON, D.C. 20201

SEP 12 2007

The Honorable Nancy Pelosi  
Speaker of the House of Representatives  
Washington, D.C. 20515

Dear Madam Speaker:

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Michael O. Leavitt

Enclosure

HHS Designation of Additional Members of the  
Special Exposure Cohort  
under the  
Energy Employees Occupational Illness Compensation Program Act of 2000

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Designating a Class of Employees from

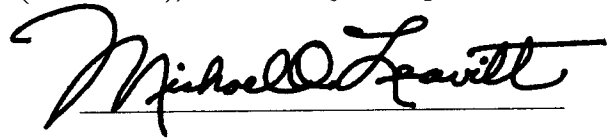
Ames Laboratory  
Ames, Iowa



## 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

Sheet metal workers, physical plant maintenance and associated support staff (including all maintenance shop personnel), and supervisory staff who were monitored or should have been monitored for potential internal radiation exposures associated with the maintenance and renovation activities of the thorium production areas in Wilhelm Hall (a.k.a. the Metallurgy Building or "Old" Metallurgy Building) at the Ames Laboratory from January 1, 1955, through December 31, 1970, 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.

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 on the findings summarized below.

- (1) NIOSH did not identify internal, external, or air data that was collected related to members of the proposed SEC class or their immediate work environments.
- (2) Operations involved with the renovation and remediation of thorium production areas of Wilhelm Hall would have resulted in alpha, beta, and gamma radiation exposures to workers in the proposed class. As time passed, photon exposure rates would also have increased with the in-growth of radium-228. Exposures could have resulted from a combination of workers being in close proximity to contamination and the resuspension of contaminated particles that had settled inside ventilation ducts, exhaust hoods, fans, and on building surfaces (e.g., ceiling tiles, walls) that the workers were renovating.
- (3) No internal monitoring data collected from members of the proposed SEC class or applicable for use in dose reconstruction for members of the proposed class have been identified. NIOSH has not located any air monitoring data (general process or breathing zone) that were collected during, or representative of, the work performed by the proposed class.
- (4) NIOSH concluded that internal, source, and air monitoring data are insufficient for estimating internal doses with sufficient accuracy for members of the proposed class. The Board concurred with the NIOSH evaluation and recommended the proposed class for addition to the SEC.
- (5) 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.
- (6) 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 thorium and its progeny) and all external 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 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

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. §§ 7384l(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. § 7384l(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.