

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

Designating a Class of Employees from

Y-12 Plant
Oak Ridge, Tennessee

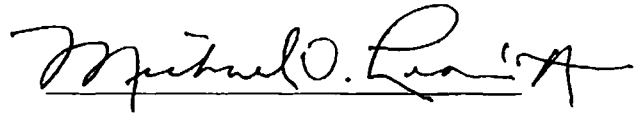


HHS Special Exposure Cohort Designation:
Y-12 Plant, Oak Ridge, Tennessee

I. Designation

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

Date: AUG 25 2005



Michael O. Leavitt

II. Employee Class Definitions

Department of Energy (DOE) employees or DOE contractor or subcontractor employees who worked in uranium enrichment operations or other radiological activities at the Y-12 facility in Oak Ridge, Tennessee from March 1943 through December 1947 and who were employed for a number of work days aggregating at least 250 work days, either solely under this employment or in combination with work days within the parameters (excluding aggregate work day requirements) established for other classes of employees included in the SEC

III. Designation Criteria and Recommendations

Pursuant to 42 U.S.C. § 7384q, the Secretary has determined for the class defined in Section II of this report, upon recommendation of the Advisory Board on Radiation and Worker Health ("the Board"), 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, 42 C.F.R. § 83.13(c)(1), states that it is feasible to estimate the radiation dose that the class received with sufficient accuracy under two situations. First, the rule states that radiation doses can 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 can 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. 42 C.F.R. § 83.3(c)(1)(i).

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 dated July 26, 2005 and received on July 29, 2005.

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 upon the findings summarized below.

- (1) As governed by 42 C.F.R. § 83.13(c)(1), NIOSH determined that it lacks access to sufficient information to either 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 with sufficient accuracy.
- (2) NIOSH found that employees involved in the calutron uranium enrichment process were exposed to levels of airborne uranium products that cannot be determined because of the absence of bioassay data for the time period and the lack of air sampling sufficient to develop maximum exposure scenarios.
- (3) NIOSH is unable to estimate such doses based on source term and process information for lack of documentation on the varying levels of enrichment of the source materials and on the production rate of the operations, and because the manual recycling and cleaning activities are unique and not comparable to any operations for which NIOSH has access to adequate monitoring data.
- (4) There is not sufficient information for individual dose reconstruction on other radiological activities during this time period, including the development of beneficial radiological isotopes, development and testing of a neutron monitor, maintenance and use of a large Radium 226 sealed source, and thorium extraction. However, NIOSH has determined that it is possible to estimate the exposure that resulted from occupational medical x-rays, but lacking other information, NIOSH can not rely on the x-ray doses alone to complete sufficiently accurate dose reconstructions for this class.

Health Endangerment

The Secretary established the health endangerment determination for the class of employees covered by this report upon the findings summarized below.

- (1) As governed by 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 found that the primary radiation exposure hazard to employees resulted from episodic inhalations of radionuclides that cumulatively resulted in chronic exposures. The NIOSH evaluation report documents substantial exposures from this hazard. Additionally, employees in the class involved in other radiological activities, separate from the calutron enrichment process, may have incurred substantial external, as well as internal, radiation exposures.

(3) 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, such as a nuclear criticality incident, as defined under 42 C.F.R. § 83.13(c)(3)(i).

(4) The Board concurred with the finding of NIOSH that the health of the class may have been endangered and further concurred with NIOSH in this respect by defining the class according to the 250 work day employment requirement specified under 42 C.F.R. § 83.13(c)(3)(ii).

V. Effect and Effective Date of Designations

The Secretary submits this report on designations 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. § 83.16(b). 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 criterion and findings on which the decision was based.