

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

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Designating a Class of Employees from  
Uranium Division of Mallinckrodt Chemical Works,  
Destrehan Street Facility,  
St. Louis, Missouri



## 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 (“the SEC”), as authorized under the Energy Employees Occupational Illness Compensation Program Act of 2000 (“EEOICPA”), 42 U.S.C. § 7384q.

Date:

APR 11 2005



Michael O. Leavitt

## II. Employee Class Definition

Employees of the Department of Energy (DOE) or DOE contractors or subcontractors employed by the Uranium Division of Mallinckrodt Chemical Works, Destrehan Street Facility, during the period from 1942 through 1948 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. The Rule states first, 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. § 83.13(c)(1)(i).

The Advisory Board on Radiation and Worker Health (“the Board”), pursuant to 42 U.S.C. § 7384q, and as governed by 42 C.F.R. § 83.13(c), advised the Secretary to designate the class as an addition to the SEC in a letter dated March 11, 2005, and received on March 14, 2005.

The Director of the National Institute for Occupational Safety and Health (“NIOSH”), pursuant to 42 C.F.R. § 83.16(a), proposed designating the class as an addition to the SEC in a Memorandum to the Secretary dated March 14, 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) NIOSH established in its reports SEC 00012-1 and SEC 00012-2, as governed by 42 C.F.R. § 83.13(c)(1), 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.

(2) For the period from 1942 through 1945, NIOSH found the sum of information available is insufficient to document or estimate the maximum air concentrations of radionuclide dusts and radon gas that were generated and hence could have been inhaled and/or ingested by members of the class employed during this time period, resulting in internal radiation doses. On this basis, NIOSH cannot either estimate the maximum internal 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 this class, or estimate the internal radiation doses of members of this class more precisely than a maximum dose estimate received by any member of the class employed during this time period, and hence cannot conduct complete dose reconstructions for these individuals.

(3) For the period from 1946 through 1948, NIOSH found the limited workplace and worker monitoring data and the information on radiological sources and processes to be insufficient to estimate the maximum internal 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 this class, or to estimate the internal radiation doses of members of this class more precisely than a maximum dose estimate received by any member of the class employed during this time period. This insufficiency of the monitoring data was based on a combination of three factors: (a) documentation showing that some of the data are technically unreliable; (b) documents that raise serious questions concerning the integrity of the recording,

management, and reporting of monitoring data at Mallinckrodt; and, (c) the lack of sufficient information or data to reasonably validate dose estimates in light of the established concerns regarding monitoring data integrity.

(4) For the period from 1942 through 1948, the Board found limited but inadequate radiation monitoring and monitoring records.

### Health Endangerment

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

(1) NIOSH established in its reports SEC 00012-1 and SEC 00012-2, as governed by 42 C.F.R. § 83.13(c)(3), 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 members of the class received episodic exposures to radionuclide dusts and radon gas that could have cumulatively resulted in chronic, potentially substantial exposures to radiation.

(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 Designation

The Secretary submits this report on a designation of an 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). If, on the basis of such a review, the Secretary were to decide 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.