

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

Pantex Plant
Amarillo, Texas



I. Designation

I, Kathleen Sebelius, Secretary of Health and Human Services, 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.

December 21, 2011
Date

[Signature on File]
Kathleen Sebelius

II. Employee Class Definition

All employees of the Department of Energy, its predecessor agencies, and their contractors and subcontractors who worked at the Pantex Plant in Amarillo, Texas, during the period from January 1, 1958 through December 31, 1983, 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 included in the SEC.

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 November 21, 2011.

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.

- NIOSH determined that members of this class may have received internal radiation exposures from uranium, tritium, plutonium, thorium and radon.
- The Board and the NIOSH Director have determined that reconstruction of uranium intakes is not feasible for all Pantex workers. Reconstruction of thorium intakes is also not feasible, since NIOSH's proposed method for estimating those intakes depended on the reconstruction of uranium intakes.
- Reconstruction of doses from radon is feasible based on workplace measurement. Plutonium and thorium intakes will be reconstructed for individuals who have results for those radionuclides. Tritium doses will be reconstructed based on tritium bioassay results from monitored workers.
- NIOSH finds that it lacks sufficient personnel or area monitoring data, source term data, and operational information to support reconstructing internal dose with sufficient accuracy from January 1, 1958 through December 31, 1983 at the Pantex Plant in Amarillo, Texas.
- The principal sources of external radiation doses for members of the evaluated class were plutonium, uranium, and thorium components in weapons systems, radiation-producing machines used in non-destructive examination of components, and medical x-ray examinations.
- The Board and NIOSH determined that these doses can be reconstructed with sufficient accuracy based on dosimeter measurements, workplace measurements in order to estimate early neutron doses, and complex-wide approaches for reconstructing medical x-ray exposures.
- The Board and the NIOSH Director have determined that NIOSH lacks sufficient information, which includes specific biological monitoring data, air monitoring information, process and radiological source information, and surrogate data from similar operations at other sites that would allow it to estimate the potential internal and external radiological exposures for workers at the Pantex Plant in Amarillo, Texas for the period from January 1, 1958 through December 31, 1983.
- The Board and the NIOSH Director have determined that NIOSH cannot complete the dose reconstructions related to this petition with sufficient accuracy for the employees who worked at the Pantex Plant in Amarillo, Texas for the period from January 1, 1958 through December 31, 1983. The basis of this finding demonstrates that NIOSH does not have access to sufficient information to estimate either the maximum radiation dose incurred

by any member of the class or to estimate such radiation doses more precisely than a maximum dose estimate for that period.

- Although NIOSH found that it is not possible to completely reconstruct radiation doses for employees who worked at the Pantex Plant in Amarillo, Texas for the period from January 1, 1958 through December 31, 1983, NIOSH intends to use any reliable internal and external monitoring data, including uranium bioassay data, that may be available for an individual claim during this period (and that can be interpreted using existing NIOSH dose reconstruction processes or procedures). Dose reconstructions for individuals employed at the Pantex Plant in Amarillo, Texas for the period from January 1, 1958 through December 31, 1983, but who do not qualify for inclusion in the SEC, may be performed using these data as appropriate.
- 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.
- The Board recommended the proposed class for addition to the SEC and the NIOSH Director concurred with the Board's recommendation.

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), the NIOSH Director 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), the NIOSH Director 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) The Board and the NIOSH Director 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 NIOSH Director concurred with the Board's finding that the health of the class may have been endangered and defined the class according to the 250-work day 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/(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/(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.