U.S. Department of Health and Human Services 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

Area IV Santa Susan Field Laboratory

Ventura County, California
I. Designation

I, Sylvia M. Burwell, Secretary of the U.S. Department of Health and Human Services (HHS), 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.

January 6, 2017
[Signature on File]
Sylvia M. Burwell

II. Employee Class Definition

All employees of the Department of Energy, its predecessor agencies, and their contractors and subcontractors who worked in any area at Area IV of the Santa Susana Field Laboratory in Ventura County, California, from January 1, 1965, through December 31, 1988, 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 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.

NIOSH determined that there is insufficient information to estimate the radiation dose of individual members of the class with sufficient accuracy under the two abovementioned
situations. 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 December 12, 2016.

IV. Designation Findings

Infeasibility of Estimating Radiation Doses with Sufficient Accuracy

The Secretary designates the class of employees covered by this report based upon the findings summarized below.

- NIOSH has identified that principal sources of internal radiation exposures for members of the proposed class included exposures from inhalation and ingestion exposures to plutonium, uranium, mixed fission products, thorium (including associated progeny), and americium during the processing operations.

- NIOSH determined that there are insufficient internal dosimetry data, air monitoring data, or radiological source term data available to bound intakes of thorium (including associated progeny) and americium for the period from January 1, 1965, through December 31, 1988. Although there are limited monitoring data that may be applied for these radionuclides during the period, the data do not represent all operations at Area IV.

- NIOSH determined that the principal sources of external radiation exposures for members of the proposed class included exposures to beta particles, gamma photons, and neutrons.

- NIOSH finds that it is feasible to reconstruct external doses for Area IV workers using available individual dosimetry records and area monitoring surveys for reconstructing external doses for Area IV workers.

- NIOSH finds that it is feasible to reconstruct occupational medical dose for Area IV workers using information and methods in *Dose Reconstruction from Occupationally Related Diagnostic X-Ray Procedures* (ORAUT-OTIB-0006) and the Area IV site profile documents.

- The Board concurred with the NIOSH finding that it could not reconstruct internal radiation exposures for the proposed class of workers for the period from January 1, 1965, through December 31, 1988.

- 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.
• Although NIOSH found that it is not possible to completely reconstruct internal radiation doses for the period from January 1, 1965, through December 31, 1988, NIOSH intends to use any internal and external monitoring data that may become available for an individual claim (and that can be interpreted using existing NIOSH dose-reconstruction processes or procedures). Dose reconstructions for individuals employed at Area IV Santa Susana Field Laboratory during the period from January 1, 1965, through December 31, 1988, but who do not qualify for inclusion in the SEC, may be performed using these data as appropriate.

• The Board concurred with NIOSH’s recommendation to add the proposed class of workers to the SEC.

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