

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
Downey Facility
Los Angeles County, California



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.

July 13, 2010
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 Downey Facility in Los Angeles County, California from January 1, 1948 through December 31, 1955, 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.

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 June 16, 2010.

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.

- Principal sources of both internal and external radiation doses for members of the NIOSH-proposed class included exposures to fission products, and transuranic radionuclides associated with reactor, accelerator, and laboratory operations. These sources of exposure were also present at Area IV of the Santa Susana Field Laboratory (SSFL-Area IV) and the Canoga Avenue Facility after Downey Facility operations were transferred to the two sites in 1955. Downey, SSFL-Area IV, and Canoga were related facilities operated by North American Aviation.
- NIOSH previously determined in its evaluations of petitions SEC-00093 and SEC-00156 that some SSFL-Area IV workers could have received intakes of radioactive materials that went unmonitored from the beginning of the covered period for SSFL-Area IV operations in 1955 through the end of 1964. NIOSH similarly determined in its evaluation of petition SEC-00151 that the Canoga Avenue Facility also lacked an adequate routine bioassay monitoring program during its entire period of operations from 1955 through 1960. For both sites, limitations in the available data did not allow NIOSH to estimate radiation doses with sufficient accuracy. NIOSH therefore recommended SEC classes for SSFL-Area IV workers to include the time period from January 1, 1955 through December 31, 1964, and for Canoga Avenue Facility workers for the period from January 1, 1955 through December 31, 1960.
- NIOSH has determined that the Downey Facility was the predecessor site for the nuclear operations and health physics practices of North American Aviation that were subsequently moved to Canoga and SSFL in 1955. This move resulted in a continuation of the Downey health physics practices. NIOSH has observed this continuation in the radiological records reviewed during its evaluations of petitions SEC-00093, SEC-00151, and SEC-00156 for the SSFL-Area IV and Canoga Avenue facilities.
- NIOSH has determined that limitations in the available Downey Facility data are consistent with the data limitations found for the SSFL-Area IV and Canoga Avenue facilities, and such limitations preclude NIOSH from estimating Downey Facility radiation doses with sufficient accuracy.
- NIOSH finds that it is not feasible to estimate, with sufficient accuracy, internal exposures to fission products and other radionuclides and resulting doses for the proposed class of employees at the Downey Facility. NIOSH found no evidence of an adequate bioassay monitoring program during DOE operational years at the Downey Facility (1948 through 1955). This NIOSH finding is consistent with the dose reconstruction infeasibility findings beginning in 1955 for the SSFL-Area IV and Canoga Avenue facilities.

Therefore NIOSH does not have access to sufficient personnel monitoring, workplace monitoring, or source term data to estimate potential internal exposures to fission products and other radionuclides at the Downey Facility during the period from January 1, 1948 through December 31, 1955.

- 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, 1948 through December 31, 1955, NIOSH intends to use any internal or 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 the Downey Facility during the period from January 1, 1948 through December 31, 1955, but who do not qualify for inclusion in the SEC, may be performed using these data as appropriate.
- NIOSH finds that reconstruction of medical dose is likely to be feasible by using claimant-favorable assumptions in the Technical Information Bulletin, *Dose Reconstruction from Occupationally Related Diagnostic X-Ray Procedures* (ORAUT-OTIB-0006).
- The Board concurred with the NIOSH evaluation and recommended the proposed class for addition 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 (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 NIOSH'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.