

HHS Designation of Additional Members of the  
Special Exposure Cohort  
under the  
Energy Employees Occupational Illness Compensation Program Act of 2000

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Designating a Class of Employees

Hooker Electrochemical Corporation

Niagara Falls, New York



## I. Designation

I, Sylvia M. Burwell, Secretary of the Department 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.

September 22, 2015  
Date

[Signature on File]  
Sylvia M. Burwell

## II. Employee Class Definition

All Atomic Weapons Employees who worked at the Hooker Electrochemical Corporation in Niagara Falls, New York, during the operational period from July 1, 1944, through December 31, 1948, 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 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 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 the National Institute for Occupational Safety and Health (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 initially evaluated the petition for the time period covering the operational period from January 1, 1943, through December 31, 1948, and the residual period from January 1, 1949, to December 31, 1976, and concluded that there were sufficient data to perform individual dose reconstructions for the operational period from January 1, 1943, through December 31, 1948, and the residual period from January 1, 1949, to December 31, 1976. This determination was adopted by the Secretary on February 2, 2012, but was subsequently challenged by the petitioner. In the fall of 2012, a panel of three HHS personnel (Panel), independent of NIOSH, was appointed to conduct an administrative review. The Office of the Assistant Secretary for Health (OASH) administered this Panel on behalf of the Secretary.

Based on its review of the administrative record for this petition, the Panel concluded that NIOSH does not have sufficient information to estimate with sufficient accuracy the radiation dose of those members of the class who worked at Hooker Electrochemical during the operational period. In a final report dated September 10, 2014, the Panel, pursuant to 42 C.F.R. § 83.18, recommended that the Secretary partially revise the previous determination to deny SEC status to this class of Hooker Electrochemical Corporation employees. In a memorandum to OASH dated March 27, 2015, the Director of NIOSH agreed to provide a new designation to the Secretary that comports with the Panel's recommendation as set out in their final report, and which encompasses only radiological workers.

#### 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.

- Although the operational period at the Hooker Electrochemical Corporation was from January 1, 1943, through December 31, 1948, only non-radiological chemicals were produced during the period January 1, 1943, through June 30, 1944.
- NIOSH determined that the principal source of internal radiation exposures for members of the proposed class is alpha particles from the uranium in the contaminated slag, which was present at Hooker Electrochemical from July 1, 1944, through December 31, 1948. The modes of exposure were likely inhalation and ingestion.
- NIOSH was unable to obtain monitoring or surveying data for potential internal exposure, like bioassay or air sampling results, from workers at Hooker Electrochemical. The Panel, after reviewing the administrative record in this case, determined that it is not appropriate to use air sampling results obtained from other uranium processing facilities during the years 1948 to 1957 for estimating exposures due to contaminated slag handling at Hooker Electrochemical for the operational period from January 1, 1943, through December 31, 1948, because of the different exposure conditions. NIOSH, therefore, does not have sufficient personnel monitoring, workplace monitoring, or source term data to estimate with sufficient accuracy internal exposures to Hooker Electrochemical workers before 1949.
- NIOSH previously determined, and the Panel agreed, that internal dose could be reconstructed during the facility's residual contamination period from January 1, 1949, through December 31, 1976.
- The principal sources of external radiation exposure for members of the proposed class included gamma and beta radiation associated with handling of uranium-contaminated slag. External doses incurred during the operational and residual contamination periods from July 1, 1944, through December 31, 1976, will be reconstructed using the method described in NIOSH's *Technical Basis Document for the Hooker Electrochemical Company*.
- Additionally, occupational X-rays, such as pre-employment chest X-rays received as a condition of employment during the time period from January 1, 1943, through December 31, 1948, will be

reconstructed using methods described in ORAUT-OTIB-0006, *Dose Reconstruction from Occupationally Related X-Ray Procedures*.

- Although it is not possible to reconstruct internal radiation dose for the proposed class, NIOSH intends to use any monitoring data that may become available for an individual claim (and that can be interpreted using existing NIOSH dose reconstruction processes or procedures). Therefore, dose reconstructions for individuals employed at Hooker Electrochemical from July 1, 1944, through December 31, 1948, but who do not qualify for inclusion in the SEC, may be performed using these data as appropriate.
- Based on the foregoing, 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.

### 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 has determined, and OASH concurs, 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 has 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 has determined, and OASH concurs, that members of the class were not 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 health of the class may have been endangered and the class is defined in accordance with 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. §§ 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.). 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. § 83.18(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.