

HHS Determination Concerning a Petition to Add Members to the  
Special Exposure Cohort  
under the  
Energy Employees Occupational Illness Compensation Program Act of 2000

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Determination Concerning a Petition for Employees from  
Hooker Electrochemical Corporation  
Niagara Falls, New York



## I. Determination

I, Kathleen Sebelius, Secretary of Health and Human Services (Secretary), have determined that the employees defined in Section II of this report do not meet the statutory criteria 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.

February 2, 2012  
Date

[Signature on file]  
Kathleen Sebelius

## II. Employee Class Definition

All employees who worked in any location at the Hooker Electrochemical Corporation during the operational period from January 1, 1943 through December 31, 1948, and during the residual period from January 1, 1949 to December 31, 1976.

## III. Decision Criteria and Recommendations

Pursuant to 42 U.S.C. § 7384q, to designate a class for addition to the SEC, the Secretary must determine, upon recommendation of the Advisory Board on Radiation and Worker Health (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 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.

In a letter received by the Secretary on January 4, 2012, the Board, pursuant to 42 U.S.C. § 7384q, agreed with the following NIOSH findings, effectively advising the Secretary that radiation dose can be reconstructed with sufficient accuracy for certain Hooker Electrochemical employees in accordance with provisions of EEOICPA and the SEC final rule.

## IV. Determination 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 principal sources of internal and external radiation exposure for members of the evaluated class were gamma and beta radiations associated with handling and working in proximity to uranium-bearing slag material (C-2 and C-2 concentrate).
- NIOSH found a significant amount of air sampling data relevant to the materials and processes used at the Hooker Electrochemical site. In addition, the method proposed for establishing a bounding dose for the operational periods in Battelle-TBD-6001 Appendix AA has been compared to available air monitoring data from related sites and has been found to be bounding in each case (based on the assessment of the dose using the appropriate dose reconstruction approaches and methodologies).
- NIOSH has access to sufficient information to estimate the maximum internal radiation dose that could have been incurred from exposure to uranium-bearing slag during the operational period. NIOSH has a significant amount of air sampling data relevant to the materials and processes used at the Hooker Electrochemical site. In addition, the method proposed for establishing a bounding dose for the operational periods in Battelle-TBD-6001 Appendix AA has been compared to available air monitoring data from related sites and has been found to be bounding in each case (based on the assessment of the dose using the appropriate dose reconstruction approaches and methodologies).
- NIOSH reviewed and assessed the available airborne radioactivity and source term data against the methodology provided in Battelle-TBD-6001 Appendix AA, and NIOSH believes that internal dose during both the operational and residual periods can be bounded using the methodology defined in Battelle-TBD-6001 Appendix AA.
- There are no available data on contamination levels or source term quantities left at the Hooker Electrochemical facility after the cessation of operations. A bounding assessment of external photon and beta dose is presented in Battelle-TBD-6001 Appendix AA, based on the assignment of dose from surface contamination present during scrap recovery operations, with no adjustment for cessation of processing activities. That is, the dose assigned is the same as would be from exposure to surface contamination at an operating scrap recovery facility.
- NIOSH reviewed and assessed the available source term and external monitoring data against the methodology provided in Battelle-TBD-6001 Appendix AA. NIOSH determined that the calculated external dose assigned in Battelle-TBD-6001 Appendix AA can be used to bound exposures at the Hooker Electrochemical site during the residual period. With the removal of the source material at the onset of the residual contamination period, the likely exposure scenario during the post-

operations period would be consistent with the scenario evaluated in Battelle-TBD-6001 Appendix AA.

- Although no specific information regarding occupational medical dose has been identified specific to Hooker Electrochemical Corporation, the dose associated with medical X-ray exams, if required as a condition of employment, can be assessed using the methodology defined in ORAUT-OTIB-0006. NIOSH believes that this methodology supports its ability to bound the occupational medical X-ray doses for the Hooker Electrochemical evaluated class.
- NIOSH determined that the reconstruction of internal and external doses is feasible for the operational period from January 1, 1943 through December 31, 1948, and for the residual period from January 1, 1949 to December 31, 1976.
- NIOSH determined that it has access to sufficient Hooker Electrochemical Corporation information to either (1) estimate the maximum internal and external 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 evaluated class; or (2) estimate the internal and external radiation doses to members of the evaluated class more precisely than a maximum dose estimate.
- The Board concurred with the NIOSH findings.

### Health Endangerment

Because the Secretary established that it is feasible to estimate with sufficient accuracy the radiation doses encountered by Hooker Electrochemical Corporation employees as specified in this class, a determination of health endangerment is not required.

## V. Effect of the Determination

Members of the class of employees covered by this determination and their survivors continue to be eligible to submit claims for compensation under EEOICPA. As required for cancer claims covering other DOE and Atomic Weapons Employer employees (or Atomic Weapons Employees) not included in the SEC, qualified cancer claims under Part B of EEOICPA for members of this class will be adjudicated by the Department of Labor, in part on the basis of radiation dose reconstructions which will be conducted by NIOSH.

## VI. Administrative Review of Determination

The determination 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 designate the class of employees covered by this determination, in part or in whole, as an addition to the SEC, the Secretary would transmit a new report to Congress providing the designation and the criteria and findings on which the decision was based.