

U.S. Department of Health and Human Services Determination Concerning a
Petition to Add Members to the Special Exposure Cohort
under the
Energy Employees Occupational Illness Compensation Program Act of 2000

Determination Concerning a Petition for Certain Employees from
Blockson Chemical Company
Joliet, Illinois



I. Determination

I, Sylvia M. Burwell, Secretary of Health and Human Services (Secretary) (HHS), 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.

December 21, 2016
Date

[Signature on File]
Sylvia M. Burwell

II. Employee Class Definition

All employees who worked in any area at the Blockson Chemical Co. site in Joliet, Illinois, during the period from July 1, 1960, through December 31, 1991.

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 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.

In a letter received by the Secretary on October 24, 2016, the Board, pursuant to 42 U.S.C. § 7384q, agreed with the following NIOSH findings, effectively advising the Secretary that radiation doses can be reconstructed with sufficient accuracy for certain employees at the Blockson Chemical Company site (Blockson) in accordance with provisions of EEOICPA and the SEC final rule.

IV. Determination Findings

HHS Special Exposure Cohort Determination:
Blockson Chemical Company, Joliet, Illinois [SEC 00225]

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 has determined that the principal sources of internal radiation doses for the proposed class was from exposures to particulate uranium and thorium (and their progeny) through inhalation or ingestion of surface or airborne contamination and exposures to radon emitted from the radium-bearing phosphogypsum stacks.
- NIOSH has determined that it is feasible to reconstruct internal radiation doses from re-suspended residual Atomic Energy Commission (AEC)-related uranium and thorium and their progeny using Blockson employee bioassay data and site workplace contamination survey data.
- Additionally, NIOSH has determined that it is feasible to reconstruct internal doses from residual, AEC-related radon using a comparison of Blockson emanation (flux) measurements to radon emanation and concentration measurements taken at a similar phosphate production facility.
- Therefore, NIOSH has determined that it is feasible to reconstruct internal radiation doses during the petitioned period from July 1, 1960, through December 31, 1991.
- NIOSH has determined that the principal sources of external radiation doses for the proposed class included exposures to surfaces contaminated with natural uranium and thorium (and their progeny) and submersion in re-suspended surface contamination.
- NIOSH has determined that it is feasible to reconstruct external radiation doses using site radiological survey data and site source-term information.
- NIOSH finds that it is not applicable to reconstruct occupational medical doses for Blockson during the period under evaluation. Because there was no AEC work during the residual contamination period, any medical X-rays taken by workers and the resulting radiation doses workers received during that time would not be covered occupational exposures.
- NIOSH determined that it has access to sufficient information to either (1) estimate the maximum external and internal radiation dose for every type of cancer for which radiation doses are reconstructed that could have been incurred under plausible circumstances by any workers at Blockson during the period from period from July 1, 1960, through December 31, 1991; or (2) estimate the external and internal radiation doses to any workers at Blockson during the period from July 1, 1960, through December 31, 1991, more precisely than a maximum dose estimate.

- The Board concurred with NIOSH's determination that dose reconstruction is feasible for the class of Blockson workers covered by Petition 00225 for the period from period from July 1, 1960, through December 31, 1991, and therefore should not be added to the SEC.

Health Endangerment

Because the Secretary established that it is feasible to estimate with sufficient accuracy the radiation doses encountered by Blockson 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 Department of Energy 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 will transmit a new report to Congress providing the designation and the criteria and findings on which the decision was based.