

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

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Determination Concerning a Petition for Certain Employees from  
Grand Junction Facilities  
Grand Junction, Colorado



## I. Determination

I, Alex M. Azar II, 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.

June 21, 2018

[Signature on File]

Date

Alex M. Azar II, Secretary

## II. Employee Class Definition

All employees who worked in any area of the Grand Junction Facilities in Grand Junction, Colorado, from January 1, 1986, through July 31, 2010.

## 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 dated October 25, 2017, 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 Grand Junction Facilities (GJF) 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:

- The principle sources of internal radiation exposure during the post-1985 period were exposure to alpha emitting radionuclides, including radon, from source materials handled at the site.
- NIOSH can estimate a bounding dose for GJF workers for the years 1986 through 1990, based on the regulatory limit for workplace airborne radioactivity. NIOSH obtained sufficient information about the site and sufficient air sampling and bioassay results to allow it to conclude that internal exposures during this time were bounded by exposure to the workplace limit on radioactive airborne concentration (called the maximum permissible concentration).
- NIOSH concluded it will use personal bioassay results to reconstruct doses for claims where personal bioassay data existed, and can bound doses using 10 percent of the workplace limit on radioactive airborne contamination (called the derived Air concentration at that time) for claims that did not have personal bioassay data for the years 1991 through July 31, 2010.
- The principle sources of external radiation exposure in the post-1985 period were photon and beta radiation from source material handled at the site. Neutron sources used by some workers at the site were also sources of exposure.
- NIOSH has access to a compilation of external radiation dosimetry data for 1960 and later that NIOSH obtained during its research into GJF. NIOSH can use that data to prepare a coworker model for external doses and can use that model, when needed, to reconstruct external radiation doses for the period January 1, 1986, through July 31, 2010.
- NIOSH has established that it has access to sufficient information to: (1) estimate the maximum radiation dose, for every type of cancer for which radiation doses are reconstructed, that could have been incurred in plausible circumstances by any member of the class; or (2) estimate radiation doses more precisely than an estimate of maximum dose. Information in available resources is sufficient to estimate the maximum internal and external potential exposure to members of the evaluated class under plausible circumstances during the specified period, January 1, 1986, through July 31, 2010.
- The Board concurred with NIOSH's determination that dose reconstruction is feasible for the evaluated class of GJF workers during the period from January 1, 1986, through July 31, 2010, 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 GJF 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.