# HHS 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 Employees from

Rocky Flats Plant Golden, Colorado



#### I. Determination

I, Michael O. Leavitt, 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.

AUG 0 6 2007

Date

Michael O. Leavitt

## II. Employee Class Definition

Department of Energy employees or its contractor or subcontractor employees at the Rocky Flats Plant in Golden, Colorado, who were exposed to radiation dose from 1967 through 2005 and who were exposed to any radiation dose other than neutron dose from 1952 through 1966.

## 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 July 5, 2007, 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 Rocky Flats Plant 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.

- (1) Monitoring records, process descriptions, and source term data available are sufficient to estimate radiation doses with sufficient accuracy for this class of employees. There are sufficient and credible external and internal dosimetry data and no evidence that would cast doubt on the integrity of the data for use in dose reconstruction or in the generation of coworker dose distributions.
- (2) Dose reconstruction is feasible for the internal sources of exposure *in vitro* (urinalysis, airborne dust, lung, gamma, beta, neutron, and occupational medical X-ray).
- (3) Data and documents covering external dosimetry and related records covering the entire operational period of the Rocky Flats Plant are readily available.
- (4) Coworker data may be applied to estimate internal and external dose. It is also feasible to estimate ambient environmental internal and external dose for monitored as well as unmonitored workers.
- (5) The fact that all workers with significant neutron exposures were monitored is the basis for concluding that maximum dose could be determined after 1966. Conversely, it is the lack of this belief (i.e., that all workers with significant neutron exposure were monitored prior to 1967), that forms the basis for the conclusion that maximum dose could not be determined prior to 1967. At the commencement of operations at the Rocky Flats Plant in 1952, the site had limited neutron monitoring capabilities. Neutron exposures were monitored using glass track plates supplied by the Los Alamos Scientific Laboratory, and there were only about 20 plates per exchange cycle available. Starting in the late 1950's, neutron exposures were monitored using film badges, beginning with those workers judged to be at highest risk by the health physics staff. Throughout the early 1960's, the neutron monitoring program was expanded and more workers were brought into the program. Based upon information provided by site expert personnel involved in the dosimetry program during that time, by 1967 all workers with significant neutron exposure potential were being monitored.
- (6) The determination that it is feasible to estimate with sufficient accuracy the radiation doses encountered by the employees specified in this case is based on administrative policies that determined which workers were to be monitored, the scientific rationale that was used to develop the administrative policies.

comparisons of worker monitoring records and job titles, and scientific calculations that compare measured dose with derived dose.

(7) NIOSH has established that it has access to sufficient information to either: (1) estimate the maximum internal and/or 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 class; or (2) estimate the internal and/or external radiation doses to members of the class more precisely than a maximum dose estimate.

In its letter to the Secretary, the Board concurred with these NIOSH findings.

### Health Endangerment

Because the Secretary established that it is feasible to estimate with sufficient accuracy the radiation doses encountered by certain Rocky Flats Plant 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 not included in the SEC, qualified cancer claims under Subpart 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 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.