## U.S. Department of Labor

Employment Standards Administration
Office of Workers' Compensation Programs
Division of Energy Employees Occupational
Illness Compensation
Washington, D.C. 20210



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Larry J. Elliott
Director, Office of Compensation Analysis and Support
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
Mail Stop C-46
4676 Columbia Parkway
Cincinnati, Ohio 45226

Re: Return of All Cases for New SEC Classes: Y-12 Plant, 1943 – 1947; and IAAP Radiographers, 1948 - 1949

Dear Larry:

On August 25, 2005, the Secretary of the Department of Health and Human Services (HHS), Michael Leavitt, designated the Y-12 Plant, 1943 – 1947, and IAAP Radiographers, 1948 – 1949, for addition to the SEC in reports to Congress.

## Y-12 Plant, 1943 – 1947:

Department of Energy (DOE) employees or DOE contractor or subcontractor employees who worked in uranium enrichment operations or other radiological activities at the Y-12 facility in Oak Ridge, Tennessee from March 1943 through December 1947 and who were employed for a number of work days aggregating at least 250 work days, either solely under this employment or in combination with work days within the parameters (excluding aggregate work day requirements) established for other classes of employees included in the SEC.

This designation became effective on September 24, 2005, as provided for under 42 U.S.C. § 7384l(14)(C). Hence, beginning on September 24, 2005, members of this class of employees, defined as reported in this notice, became members of the SEC.

A report attached to Secretary Leavitt's letter, entitled "HHS Designation of Additional Members of the Special Exposure Cohort," provided the supporting rationale for designating a class of employees from the Y-12 Plant in Oak Ridge, Tennessee from March 1943 through December 1947.

Section IV, "Designation Findings," summarized NIOSH's finding that "... it lacks access to sufficient information to either 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 to estimate the radiation doses of members of the class more precisely than a maximum dose estimate with sufficient accuracy."

Also, "NIOSH found that employees involved in the calutron uranium enrichment process were exposed to levels of airborne uranium products that cannot be determined because of the absence of bioassay data for the time period and the lack of air sampling sufficient to develop maximum exposure scenarios."

The discussion further notes, "NIOSH is unable to estimate such doses based on source term and process information for lack of documentation on the varying levels of enrichment of the source materials and on the production rate of operations, and because the manual recycling and cleaning activities are unique and not comparable to any operations for which NIOSH has access to adequate monitoring data."

Finally, "There is not sufficient information for individual dose reconstruction on other radiological activities during this time period, including the development of beneficial radiological isotopes, development and testing of a neutron monitor, maintenance and use of a large Radium 226 sealed source, and thorium extraction. However, NIOSH has determined that it is possible to estimate the exposure that resulted from occupational medical x-ray doses alone to complete sufficiently accurate dose reconstruction for this class."

The Secretary of Health and Human Services has determined that it is not feasible to undertake dose reconstructions for the class of employees employed at Y-12 Plant from March 1943 through December 1947. However, NIOSH has determined that it is possible to estimate the exposure that resulted from occupational medical x-ray doses alone to complete sufficiently accurate dose reconstruction for this class.

Thus, NIOSH should provide two lists of employees at the Y-12 Plant during the SEC class period. One list should cover employees with specified cancers and the other list should address employees with non-specified cancers. NIOSH should return all cases with specified cancers (with the administrative record on a CD) to the Department of Labor Jacksonville District Office for the Office of Workers' Compensation Programs to complete adjudication as appropriate. DOL will review employment and medical information for both lists of employees. Since NIOSH has determined that it is possible to estimate the exposure that resulted from occupational medical X-ray doses alone, after the district office review DOL will request that NIOSH continue to perform dose reconstructions for cases with non-specified cancers for the SEC class time period based solely on medical x-ray dose. Also, for any cases with a specified cancer that do not meet the 250 work day or cancer latency period criteria, DOL will request that NIOSH perform a dose reconstruction based solely on medical x-ray dose.

## IAAP Radiographers, 1948 – 1949:

Department of Energy (DOE) employees or DOE contractor or subcontractor employees who worked as radiographers from May 1948 to March 1949 in support of Line 1 operations at the Iowa Army Ammunition Plant and who were employed for a number of work days aggregating at least 250 work days, occurring under this employment or in combination with work days within the parameters (excluding aggregate work day requirements) established for other classes of employees included in the SEC.

This designation became effective on September 24, 2005, as provided for under 42 U.S.C. § 7384l(14)(C). Hence, beginning on September 24, 2005, members of this class of employees, defined as reported in this notice, became members of the SEC.

A report attached to Secretary Leavitt's letter, entitled "HHS Designation of Additional Members of the Special Exposure Cohort," provided the supporting rationale for designating radiographers who supported Line 1 operations at the Iowa Army Ammunition Plant (IAAP), Burlington, Iowa, from May 1948 to March 1949.

Section IV, "Designation Findings," summarized NIOSH's finding that "... it lacks access to sufficient information to either 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 to estimate the radiation doses of members of the class more precisely than a maximum dose estimate with sufficient accuracy."

The discussion further notes, "NIOSH found that there is insufficient information to estimate either the maximum radiation dose incurred by the workers defined in the class or to estimate such radiation doses more precisely than a maximum dose estimate. Additional information is needed on the radiological sources, shielding, and the radiography process of radiographic operations during the period May 1948 - March 1949 to reconstruct doses using surrogate data from later time periods. NIOSH concluded that it is not feasible to estimate with sufficient accuracy the external doses incurred by these radiographers at IAAP during the time period in question"

The Secretary of Health and Human Services has determined that it is not feasible to undertake dose reconstructions for radiographers who supported Line 1 operations at the Iowa Army Ammunition Plant from May 1948 through March 1949.

Thus, NIOSH should return all cases concerning workers in this SEC class to the Department of Labor Denver District Office for the Office of Workers' Compensation Programs to complete adjudication as appropriate.

Sincerely,

Peter M. Turcic

Peter M. Twee

Director, Division of Energy Employees

Occupational Illness Compensation