

Dear Madam Secretary:

Enclosed for your information is a report prepared by the Advisory Board on Radiation and Worker Health (the Board). The Board conducts independent reviews of selected radiation dose reconstructions completed by the National Institute for Occupational Safety and Health (NIOSH) in accordance with the requirements of the Energy Employees Occupational Illness Compensation Program Act of 2000. The purpose of the Board's review process as mandated by the Act is to advise you on the "scientific validity and quality of dose estimation and reconstruction efforts being performed for purposes of the compensation program."

This report was initially prepared by the Board's Subcommittee for Dose Reconstruction Reviews with input from the full Board and approved by the Board on..... This report covers the Board's review of 232 dose reconstructions conducted since the last report to the Secretary in 2009. The reviews represent over one percent of the dose reconstructions performed by NIOSH during this time period. These reviews are generally representative of the overall population and work locations covered by the program but were prioritized to focus on dose reconstructions that involved more comprehensive dose reconstruction procedures and on results that were close to the level where errors in dose reconstruction could have a greater impact on compensation decisions.

The Board's review of the 232 individual dose reconstructions found only 626 findings and of these findings only 22 (4%) were judged to have the potential for a significant impact on the dose reconstruction. Given the greater complexity of the cases reviewed compared to the first set, the Board believes that the NIOSH dose reconstruction process has improved since our last report. Many of the findings result from the limited availability of relevant technical and work information from facilities that were first in operation over 50 years ago. Our review of these dose reconstructions and our ongoing review of dose reconstruction procedures provides the Board with a high level of confidence that the dose reconstruction process is scientifically sound. Finally, the Board has made several recommendations to modify and improve our review process.

We hope that you will find this information useful and informative.