



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SAB-RAC-88-001

October 9, 1987

OFFICE OF
THE ADMINISTRATOR

The Honorable Lee M. Thomas
Administrator
U.S. Environmental Protection Agency
401 M Street S.W.
Washington, DC 20460

Dear Mr. Thomas:

The Science Advisory Board's Radiation Advisory Committee has reviewed the revised plan for the Idaho Radionuclide Exposure Study at the request of the Office of Radiation Programs (ORP).

The request for review was received September 5, 1986 and the work plan was first presented at the Radiation Advisory Committee meeting October 1-2, 1986. A revised plan for the study was presented at the December 17, 1986 meeting and the final document describing the study, sent to the Committee March 30, 1987, was reviewed at the June 12, 1987 meeting.

The objective of the Idaho Radionuclide Exposure Study is "to determine the magnitude and relative importance of the various industrial sources of radiation and to estimate the dose to the populations of Soda Springs and Pocatello, Idaho from these sources." This objective is more limited than that found in the September 5, 1986 work plan, and the Committee believes that it is achievable.

The Committee finds that the current version of the study plan is of sufficient quality and detail to achieve the study's objective. This conclusion is due primarily to changes in approaches to sampling and measurement of radionuclides, enhanced use of existing data, and improved use of meteorological information.

There are two additional Committee comments, neither of which will affect the overall plan, that will be relatively easy to address in the final report.

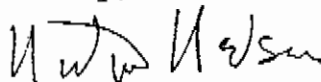
These comments include:

1. The March 30, 1987 ORP transmittal memorandum states (on page 2, item 7) that, in the absence of information on indoor/outdoor polonium-210 ratios, it will be assumed that the indoor polonium-210 concentration is the same as the outdoor concentration; the memorandum points out that this assumption will result in a conservative estimate of dose. However, this estimate may also be incorrect because it is generally accepted that indoor concentrations of any aerosols originating outdoors are lower than the outdoor concentrations. A better approach would be to take a conservative value for the indoor/outdoor ratio based on literature values, rather than to assume the ratio is unity.

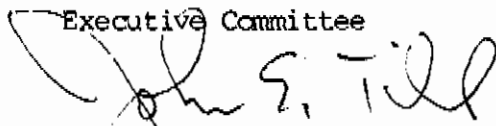
2. The Committee hopes that in the final report of the Idaho Radionuclide Exposure Study lung doses due to inhalation will be converted into effective dose equivalents to permit these doses to be added to the external dose from gamma rays originating in slag. Since these two pathways are expected to be the principal modes of exposure, it is important that they be expressed in comparable units.

Thank you for the opportunity to present our evaluation of this study plan. We request and look forward to the Agency's response to our report.

Sincerely,



Norton Nelson
Chairman
Executive Committee



John E. Till
Acting Chairman
Radiation Advisory Committee

cc: S. Meyers
T. Yosie