

INTERIM REPORT

ACCESSION NO. _____

ORNL/HASRD-76

Contract Program or Project Title:

Assessment of the Radiation
Doses Resulting From Releases
of Radon-222 and Radium-226
From Uranium Mining and
Milling Activities

Subject of this Document:

Technical Progress

Type of Document:

Monthly Progress Report
March 1980

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Health and Safety Research
Division*

Date of Document:

April 22, 1980

NRC Individual and NRC Office or
Division to Whom Inquiries Should
be Addressed:

Dr. H. Miller
Low-Level Waste Branch
Division of Fuel Cycle and
Material Safety

This document was prepared primarily for preliminary or
internal use. It has not received full review and approval.
Since there may be substantive changes, this document should
not be considered final.

Prepared for
U. S. Nuclear Regulatory Commission
Washington, D.C. 20555
Under Interagency Agreement DOE #40-549-75
NRC FIN No. B0281

*Oak Ridge National Laboratory
Oak Ridge, Tennessee 37830
operated by
Union Carbide Corporation
for the
U. S. Department of Energy

INTERIM REPORT

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OAK RIDGE NATIONAL LABORATORY

OPERATED BY
UNION CARBIDE CORPORATION
NUCLEAR DIVISION



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May 1, 1980

Dr. H. Miller
Low-Level Waste Branch
Division of Fuel Cycle and
Material Safety
Mail Stop 42655
Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Dr. Miller:

Enclosed is the monthly progress report (March 1 through March 31, 1980) on the NMSS project entitled, "Assessment of the Radiation Doses Resulting From Releases of Radon-222 and Radium-226 from Uranium Mining and Milling Activities" (189 No. B0281).

Sincerely,

A handwritten signature in cursive script that reads "John P. Atterton for".

Paul S. Rohwer, Head
Technology Assessments Section
Health and Safety Research Division

PSR:CCT:vsw

Enclosures

MONTHLY PROGRESS REPORT
FOR MARCH 1980

ASSESSMENT OF THE RADIATION DOSES RESULTING FROM RELEASES OF
RADON-222 AND RADIUM-226 FROM URANIUM MINING AND MILLING ACTIVITIES
(189 No. B0281)

Health and Safety Research Division
Oak Ridge National Laboratory

PRINCIPAL SCIENTISTS: C. C. Travis, L. M. McDowell-Boyer, A. P. Watson

OBJECTIVE:

The principal objective of this assessment is to provide estimates of integrated population exposure and resultant dose to American, Canadian, and Mexican populations which would result from releases of radon-222 from uranium mining and milling activities in the western United States. A continental transport, diffusion, and deposition model developed by the National Oceanic and Atmospheric Agency (NOAA) will be utilized in conjunction with available population and food production data to develop best-estimate population exposures and doses. Estimates will be made on the basis of a unit release rate of radon-222 from Grants, New Mexico; Falls City, Texas; Caspar, Wyoming; and Wellpinit, Washington.

TECHNICAL PROGRESS:

Response was made to reviewers' comments regarding sections of the Draft GEIS supported by our assessments.

BUDGET AND TECHNICAL MANPOWER EXPENDITURES

<u>Reporting Period</u>	<u>Project Costs, \$</u>	<u>Technical Support Man-Months</u>
March 1980	4,781	0.9
Total to Date	159,324	31.9
Estimated Cost to Completion	17,658	2.9

REPORTS AND OTHER CORRESPONDENCE ISSUED:

A. P. Watson, "Responses to GEIS Reviewers' Comments," copy to Dan Martin, March 26, 1980.

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