

INTERIM REPORT

ACCESSION NO. _____

ORNL/HASRD-80

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

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for the
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INTERIM REPORT

NRC Research and Technical
Assistance Report

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BUDGET AND TECHNICAL MANPOWER EXPENDITURES

| <u>Reporting Period</u> | <u>Project Costs, \$</u> | <u>Technical Support Man-Months</u> |
|---------------------------------|--------------------------|---|
| April 1980 | 6,336 * | 1.1 |
| Total to Date | 165,666 | 33.0 |
| Estimated Cost to Completion | 11,316 | 2.0 |

*15% of this cost is an adjustment from March.

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MONTHLY PROGRESS REPORT
FOR APRIL 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:

A final draft of an open literature publication entitled, "A Review of Parameters Describing Terrestrial Food-Chain Transport of ^{210}Pb and ^{226}Ra ," has been prepared for publication in Nuclear Safety.