INTERIM REPORT

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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

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Health and Safety Research Division*

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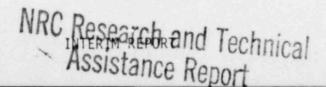
Dr. H. Miller Low-Level Waste Branch Division of Fuel Cycle and Material Safety

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.

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for the
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MONTHLY PROGRESS REPORT FOR JULY 1979

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 Rdige 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 first draft of an open literature publication entitled "A Review of Parameters Describing Terrestrial Food-Chain Transport of 210pb and 226Ra," has been prepared for publication in Nuclear Safety.

A presentation was made at the 24th Annual Meeting of the Health Physics Society entitled "Estimated 210Pb Ingestion Exposure and Dose Associated with 222Rn Releases From Generic Uranium Milling Sites."

Preparation for participation in public meetings on the GEIS on uranium milling is ongoing.

> NRC Research and Technical 998 ~ Assistance Report

BUDGET AND TECHNICAL MANPOWER EXPENDITURES (FY 1979)

Reporting Period	Project Costs, \$	Technical Support, Man-months
July 1979	9,736	2.0
Total to Date	151,936	31.5
Estimated Cost to Completion	25,046	5.0

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