



**Department of Energy**  
Office of Civilian Radioactive Waste Management  
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OVERNIGHT MAIL

FEB 03 1998

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**TRANSMITTAL OF THE "REPOSITORY SAFETY STRATEGY: U.S. DEPARTMENT OF ENERGY'S STRATEGY TO PROTECT PUBLIC HEALTH AND SAFETY AFTER CLOSURE OF A YUCCA MOUNTAIN REPOSITORY," REVISION 1**

This letter formally transmits the subject document, previously titled "Highlights of the U.S. Department of Energy's Updated Waste Containment and Isolation Strategy for the Yucca Mountain Site." This strategy defines the process for the integration of information about the site, a repository design, and an assessment of postclosure performance to develop a Safety Case for the Yucca Mountain site. Current site information and a reference design are used to develop a quantitative assessment of performance to be compared with the appropriate performance measure. This updated strategy continues to focus on four key attributes of the system that are critical to meeting these objectives:

- Limited water contacting the waste packages
- Long waste package lifetime
- Slow rate of release of radionuclides from the breached packages
- Concentration reduction during transport through engineered and natural barriers

These key attributes are evaluated by summarizing current understanding of the natural and engineered barriers and identifying remaining issues in the form of testable hypotheses. Appendix A of the Strategy provides a road map to document changes from Revision 0 of the Strategy.

Repeated interactions among site, design, and performance assessment organizations produces an evolving picture of the site information and design features that are most important to the performance of the system. This iterative process produces the Safety Case, which is a set of arguments that describe how the repository system will contain and isolate waste sufficiently to protect public health and safety. As the Yucca Mountain Site Characterization Office continues to evaluate new site information and design features, this strategy will be updated, as appropriate.

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John T. Greeves

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If you have any questions, please contact Abraham E. Van Luik at (702) 794-1424 or April V. Gil of my staff at (702) 794-5578.



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As stated

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