



Geosciences Management Institute, Inc.

31 July 1995

Dr. John Bradbury
U.S. Nuclear Regulatory Commission
Mail Stop 7D13
Washington, D.C. 20555

Dear John,

Enclosed are the two reports I promised you on radionuclide releases from the waste forms. One is on radionuclide releases from borosilicate glasses, and the other from spent nuclear fuel.

The most important point of these two reports is that the fractional radionuclide releases from the waste forms, that is, the annual ratio of isotopic releases to the inventory at 1,000 years, exceeds the 10CFR60 limits of 1 part in 100,000 (or is greater than $1E-05$) for certain radionuclides under certain unsaturated flow [drip] conditions. Actually, the 10CFR60 release limits are for the engineered barrier system [EBS], but if the waste forms exceed the limits, then the onus is on the DoE to show that the whole EBS release limits are less than the legal limits.

If there are any questions, please feel free to contact me.

Sincerely,

Don L. Shettel (Ph.D.)
Chairman

Enclosures.

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