



NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT

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Jennifer A. Salisbury
CABINET SECRETARY

June 5, 1996

RECEIVED

JUN 12 1996

NM ENVIRONMENT DEPARTMENT
OFFICE OF THE SECRETARY

Mr. George Dials
Manager
Carlsbad Area Office
U.S. Department of Energy
P.O. Box 3090
Carlsbad, New Mexico 88221

Dear George:

I recently received a copy of a May 29, 1996 letter sent to you by Lindsay Lovejoy of the New Mexico Attorney General's Office regarding DOE's recent decision to incorporate a magnesium oxide (MgO) backfill in the WIPP repository. In that letter, Mr. Lovejoy requests a meeting with appropriate DOE and/or Sandia National Laboratories personnel to discuss critical issues surrounding this backfill decision.

As you are aware, we have a keen interest in this potentially important component of WIPP repository performance. Therefore, I am requesting that Cabinet Secretary Jennifer A. Salisbury, as Chair of the New Mexico Radioactive Waste Consultation Task Force, be notified about this prospective meeting and invited to participate (and/or send appropriate representatives).

Please don't hesitate to have your staff contact me at 827-5950 to coordinate the scheduling of the MgO backfill meeting among Task Force representatives. Thank you.

Sincerely,

Chris J. Wentz
Task Force Coordinator

c: Jennifer A. Salisbury, EMNRD Cabinet Secretary
Mark Weidler, NMED Cabinet Secretary
Lindsay Lovejoy, Jr., Assistant Attorney General

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Attorney General of New Mexico



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TOM UDALL
Attorney General

May 29, 1996

MANUEL TIJERINA
Deputy Attorney General

Received

MAY 31 1996
Energy, Minerals & Environment
Resources Department
Office of the Secretary

Mr. George E. Dials
Manager
Carlsbad Area Office
U.S. Department of Energy
P.O. Box 3090
Carlsbad, NM 88221

Dear George:

The recent decision by DOE to incorporate a magnesium oxide backfill in the repository plans raises several questions which are of concern to agencies overseeing the project. We request that DOE meet with us to discuss the following issues:

1. What data and reports led DOE to the conclusion that "in order to comply with 40 CFR 191 §13, which regulates the long-term release of radionuclides from a geologic disposal facility, it is necessary to add magnesium oxide (MgO) to each disposal room," as reported to have occurred on March 25, 1996 in the RCRA permit application, Rev. 6, at page B-8?

2. Is the decision to use MgO backfill subject to change or modification? Will the MgO backfill be included in the 40 CFR Part 191 certification application and in the application for a no-migration determination?

3. What reports and analyses were generated by or for DOE in studying MgO and other backfills, leading to the decision to use a backfill and, specifically, to use MgO?

4. How did DOE establish the quantities of MgO to be used in the repository?

5. What interactions between the MgO backfill and the repository and its contents does DOE expect during the regulatory time frame? How have they been modeled to date?

6. What alternatives to MgO backfill were considered by DOE in reaching its decision? The materials from the April 24 quarterly meeting list several candidate pH controllers as having been considered. What analyses were performed as to each? What

Mr. George E. Dials
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attributes of backfills were compared or quantified in choosing a backfill material? What reports exist concerning such studies?

7. How will the actions of MgO be modeled in the performance assessment?

8. How is it expected that MgO will behave if the repository is flooded with brine, as from an intrusion borehole striking a Castile brine reservoir? How will such behavior be modeled in performance assessment?

9. Are any adverse consequences anticipated over the long term of incorporating MgO?

Please let us know when personnel of DOE and/or Sandia knowledgeable in these matters will be available to meet and to discuss the relevant data. Please also advise with whom we should discuss the agenda for this meeting.

Best regards,



LINDSAY A. LOVEJOY, JR.
Assistant Attorney General

LAL:mh

cc: B. Neill, EEG
C. Wentz, EMNR