



Department of Energy
Washington, DC 20585

AUG 19 1992

Mr. Joseph J. Holonich, Director
Repository Licensing and Quality Assurance
Project Directorate
Division of High-Level Waste Management
Office of Nuclear Material Safety
and Safeguards
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Dear Mr. Holonich:

Enclosed, for your information, is a copy of the document entitled "Technical Assistance to the Environmental Protection Agency on 40 CFR Part 191", prepared by the U.S. Department of Energy, August 10, 1992. As indicated in the letter transmitting this document to the U.S. Environmental Protection Agency (EPA), this report completes the tasks requested by EPA.

If you have any questions about this document please contact Priscilla Bunton of my staff at (202) 586-8365.

Sincerely,

John P. Roberts / FDR
SPR

John P. Roberts
Acting Associate Director for
Systems and Compliance
Office of Civilian Radioactive
Waste Management

Enclosure: As Stated

on the shelf

9209250256 920819
PDR WASTE PDR
WM-1

*406.3.3
WM-1
NH01*

cc: w/ enclosure

R. Loux, State of Nevada
M. Baughman, Lincoln County, NV
J. Bingham, Clark County, NV
B. Raper, Nye County, NV
P. Niedzielski-Eichner, Nye County, NV
G. Derby, Lander County, NV
P. Goicoechea, Eureka, NV
C. Schank, Churchill County, NV
F. Mariani, White Pine County, NV
V. Poe, Mineral County, NV
E. Wright, Lincoln County, NV
J. Pitts, Lincoln County, NV
R. Williams, Lander County, NV
J. Hayes, Esmeralda County, NV
M. Hayes, Esmeralda County, NV
B. Mettam, Inyo County, NV



Department of Energy

Washington, DC 20585

August 12, 1992

William G. Rosenberg
Assistant Administrator for Air and Radiation
U.S. Environmental Protection Agency
Washington, DC 20460

Dear Mr. Rosenberg:

We have completed the tasks requested by the Environmental Protection Agency (EPA) on January 7, 1992, to provide technical assistance related to the repromulgation of EPA's standard for disposal of high-level and transuranic radioactive waste, 40 CFR Part 191. The task report is enclosed.

Our efforts on these tasks reinforce DOE's long-standing belief that the standards themselves, as stated in our 1983 comments on the previously proposed rule, "are unnecessarily conservative and reflect a numerical risk that is unusually low in comparison to other risks commonly considered acceptable by society. This low level, when coupled with the unprecedented long-term and probabilistic nature of the standards, adds additional predictive uncertainties in demonstrating compliance. Consequently, the proposed standards impose requirements that may be costly to implement, without corresponding demonstrated health benefit."

DOE remains concerned that the approach being taken by EPA is to make minor adjustments to a fundamentally flawed standard in an attempt to make it nominally workable. Such an undertaking is extremely difficult to carry out successfully and carries a high risk of inadvertently creating future problems in being able to demonstrate compliance in a licensing process for a high-level waste repository. We believe that the changes being considered by EPA will not adequately correct the underlying fundamental problems with the rule.

There are two fundamental problems with the rule. First, the risk management decisions initially made by EPA in developing the hybrid achievability-health risk basis for the rule should be reevaluated. DOE believes that the rule should be founded on a true health-risk basis, although it probably should be somewhat more protective than for traditional operating facilities because of the long-term nature of the disposal facilities. Second, the unprecedented probabilistic nature of the standards, particularly for human intrusion, should also be reevaluated. Problems with this approach are evident from the resounding criticism in the scientific community and the widespread concern for the adverse

and unwarranted impacts of this approach on licensing of a repository. The risk management strategy of including human intrusion in overly stringent containment requirements is masking and jeopardizing the real benefits to society of excellent deep geologic disposal locations. DOE therefore believes that other reasonable risk management strategies should be reconsidered.

DOE considers the development of a technically defensible and implementable standard to be of the highest priority. If you have any questions concerning the enclosed tasks or other issues related to this standard, please call me.

Sincerely,



Paul L. Ziemer, Ph.D.
Assistant Secretary
Environment, Health and Safety

Enclosure