

MAY 15 2000

502 Ord Drive  
Boulder, CO 80303-4732  
March 26, 2000

Secretary Bill Richardson  
US Department of Energy, Forrestal Building  
1000 Independence Avenue, SW  
Washington, DC 20585

Dear Secretary of Energy Richardson:

1 I am opposed to the proposed Nuclear Waste Repository at Yucca Mountain, Nevada. Having one central nuclear waste storage facility is a bad idea, because it involves shipping nuclear waste large distances. Your department projects 1 accident per 343 shipments. That projects about 268 accidents during transport over the next 30 years moving waste to the Yucca site. This would be a problem for any site.

Second Yucca Mountain is a poor location to store nuclear waste as this area has had more than 621 earthquakes with a Richter Scale reading over 2.5 in the last 20 years. An earthquake could cause storage canisters to rupture.

2 Also, Yucca Mountain lies within Newe Sogobia, land guaranteed to the Western Shoshone by US treaty. DOE and your predecessors did not ask the Shoshone if they could use their land for a nuclear waste dump. Is DOE paying the Shoshone anything for use of their land? The Shoshone have already been exposed to unacceptably high levels of radiation resulting in elevated levels of cancer. Their homeland is too ~~close~~ to the Nevada Test Site. The Shoshone should not be exposed to more radiation.

3 The federal government should not force taxpayers to pay for disposal of nuclear waste from private industry. Private industry should pay for their own waste storage. Nuclear waste should be stored near its place of origin and this storage paid for by the company that produced it. For safe storage of nuclear waste please turn the page to see a nuclear safe storage container.

Sincerely,

*Martha Bushnell*  
Martha Bushnell, Ph.D.

# Long Life Multi-layer Chemically Resistant Toxics Containers.

This information courtesy of Solstice Institute, 1999 (303) 939.8463

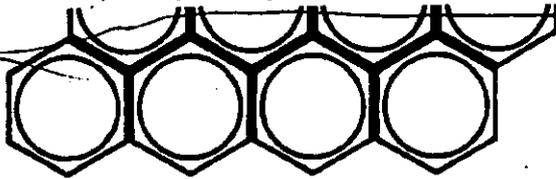
4... Proposed is a multi-layer package that can withstand or significantly reduce the potentially catastrophic failure conditions which could easily occur with the current WIPP design. For very long term storage of unusually hazardous materials, why not use containers with a geologically relevant lifespan? Glass has a potential lifespan of MILLIONS of years, comparable to the hazard life plutonium and related wastes represent. Recycled glass, as compared to quartz or ceramic, is cheap, plentiful and easy to work with. Higher grade materials could be used, but a multi-layer, mechanically isolating design should be adequate.

Intruding groundwaters will not corrode steel barrels, if they are encapsulated with a Long Life Chemically Resistant Toxics Container. The current design could mean catastrophe.

An errant drill seeking oil or gas can only puncture several marbles, not release the entire vault.

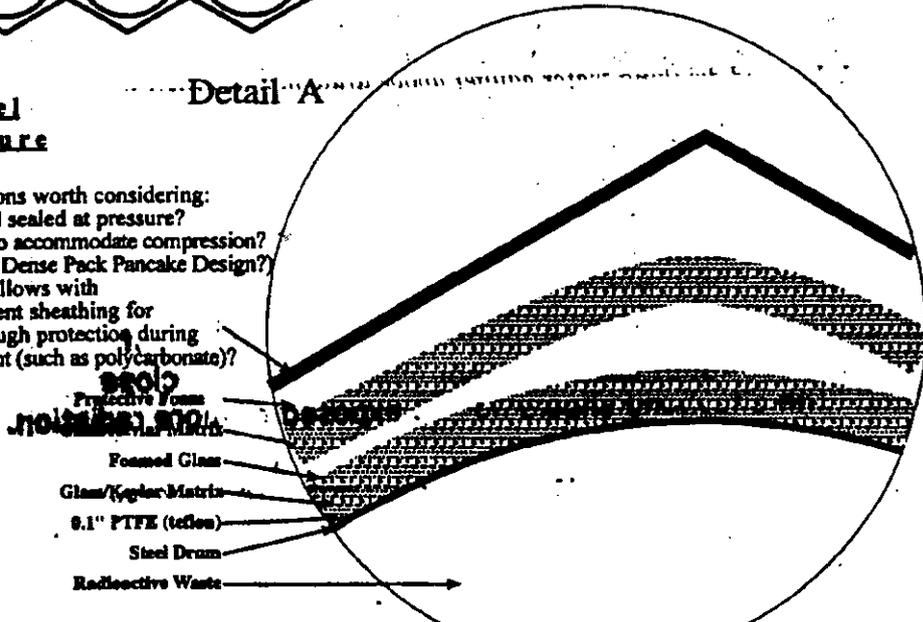
4 cont.

Kevlar woven glass is tough and chemically resistant, and can encapsulate the waste for the geologically relevant time frame required. Glass provides long term mechanical isolation for the inner layer(s). More than two solid glass layers could be used. An inner PTFE (Teflon) coating provides a reserve seal.



## Stainless Steel Outer Enclosure

Additional Design options worth considering:  
 TIG welded and sealed at pressure?  
 Bellows design to accommodate compression?  
 (Stacked Dense Pack Pancake Design?)  
 Protection of bellows with transparent sheathing for see-through protection during placement (such as polycarbonate)?



Note this design presented by Ben Lipman, Executive Director of the Solstice Institute. Mr. Lipman holds a Mechanical Engineering degree from Stanford University and spent two years indirectly working for the DOE designing ultra high vacuum analytical instruments.

— This drawing is part of WIPP package, also see pages 3-6 —