

Lee M. Gordon

From: Barbara Warren [REDACTED]
Sent: Wednesday, February 29, 2012 11:29 AM
To: Lee M. Gordon; Moira Maloney
Subject: Erosion suggestions for SMEs
Attachments: Erosion Subject Matter Expert Panel.docx

Hi, Please see attached.

Barbara Warren
Executive Director
[REDACTED] nmental Coalition

Suggestions by B.Warren for this topic.

The Erosion topic should include foundation stability of the site.

I think a critical time for public input is at the beginning when the issue is being framed.

Rather than just throw experts in the room, each with a particular specific background, I think it is best to frame the issue with a set of questions. Joanne Hameister has also referred to this as scoping.

What are the questions that we are trying to answer?

For me, the questions begin with:

Is it possible at this site, given known conditions and natural processes, for radioactive materials to be safely stored and contained over the long term, so that radioactive materials are not distributed in the environment and resulting in public exposure? Who and what are we trying to protect?

Could human activities exacerbate the situation or successfully control it?

The long term picture was not adequately analyzed in the EIS. NYSERDA criticized the absence of a long term analysis. The full cost accounting study partly addressed the long term and found that it would be safer and cheaper to dig up and remove all radioactive material from the site.

What is the geologic stability for this site? There are two different types of events that need study— sudden, dramatic erosion events, like landslides and slower but inexorable progression of erosion that overtime results in the release of radioactive materials if not actively controlled.

What natural processes could exert a dramatic change in site stability and threaten to release radioactivity? Two immediately come to mind: seismic events and severe weather events. Climate change will increase the magnitude and frequency of severe weather events.

What human induced activities could affect site stability or erosion? Here, for example, the excavation, the demolition, the hydraulic barrier or groundwater flow problems could result in a deep fissure, collecting water and causing ground saturation and lateral movement—a potential landslide.

Worst case single events as well as multiple interacting events should be considered as potential scenarios.

If full removal of radioactive materials is not undertaken, what engineering controls will be needed and what will it cost? How likely is it that adequate funding will be made available over the long term? And in the event of an emergency situation?