

LANL  
FW

TONEY ANAYA  
GOVERNOR

DENISE D. FORT  
DIRECTOR



STATE OF NEW MEXICO

ENVIRONMENTAL IMPROVEMENT DIVISION

P.O. Box 968, Santa Fe, New Mexico 87504-0968  
(505) 984-0020

MEMORANDUM

TO: PETER PACHE, PROGRAM MANAGER, HAZARDOUS WASTE SECTION  
RICHARD PERKINS, ACTING BUREAU CHIEF, GW/HW BUREAU

THRU: KARL SOUDER, <sup>VCS</sup> WATER RESOURCES SPECIALIST, T. & E. SECTION  
RON CONRAD, <sub>EC</sub> PROGRAM MANAGER, T. & E. SECTION

FROM: GREG MELLO, WATER RESOURCE SPECIALIST, T. & E. SECTION <sup>GW</sup>  
GREG LEWIS, WATER RESOURCE SPECIALIST, T. & E. SECTION <sub>SC</sub>

RE: DRILLING AT LANL UNDER COMPLIANCE ORDER

DATE: SEPTEMBER 23, 1985

On September 10 we visited LANL TA-54 to inspect the new holes and wells that are being drilled to meet the requirements of Paragraph 25 of EID's May 7, 1985 compliance order. Our visit began with a quick briefing in LAAO offices (roster attached) and then we proceeded directly to TA-54.

The (augered) holes looked very much like, well, holes, and the number of holes we saw corresponded to the number of holes that are required to satisfy Paragraph 25. We did not visit Canada del Buey, or actually see the wells there. Since the compliance order provides no guidance on where in Areas L and G these holes are to be located, the holes appear to be in complete compliance with Paragraph 25. Drilling the holes comprises, of course, only a small part of the work required by Paragraph 25.

Even so, we were not given enough information, in the case of the holes in Area G, to evaluate the appropriateness of these holes' locations. For example, we do not know the contents of the pits near the pore gas sampling holes, and so we can't judge whether these are well-placed or what types of gases might be expected to occur there. No rationale was offered for the locations of any of the Area G holes, and, since we left these locations entirely up to LANL's discretion, we might ask them what their criteria were. In addition, the following specific questions could be asked.

1. Why was a pore gas sampling hole located south of pits 1 and 3? Wasn't Pit 3 investigated fairly thoroughly by horizontal coring in 1976? Isn't this site one that would be relatively unlikely to show any contaminated pore gas?
2. Why was the infiltration-measuring nest located near the edge of the mesa? Since the interior of the mesa is considerably wetter than air-dry tuff, isn't there a chance that this nest will be influenced by the proximity of the exposed mesa scarp, due to the many fractures which penetrate the mesa from the edges? It was already a serious compromise to drop the requirement to measure infiltration through crushed tuff backfill; placing the measuring devices on the mesa edge, and far from any filled pits, could bias the measurement even more toward the dry.



Peter Pache  
Richard Perkins  
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On September 12 and 17 we verbally informed Charlene Baca and Don Gallegos at DOE/LAAD of these concerns. Mr. Gallegos said he would speak to Wayne Hansen of HSE Division about them and get back to us.

GM/ps