State of New Mexico
ENVIRONMENT DEPARTMENT
Hazardous Waste Bureau
2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Telephone (505) 428-2500
Fax (505) 428-2567
www.nmenv.state.nm.us

GARY E. JOHNSON
GOVERNOR

PETER MAGGIORE
SECRETARY

ENTERED

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

January 30, 2002

Mat Johansen, Project Manager
Los Alamos Area Office
Department of Energy
528 35th Street, Mail Stop A316
Los Alamos, NM 87544

Dr. John C. Browne, Director
Los Alamos National Laboratory
P.O. Box 1663, Mail Stop A100
Los Alamos, NM 87545

RE: REQUEST FOR SUPPLEMENTAL INFORMATION
VOLUNTARY CORRECTIVE ACTION COMPLETION REPORT FOR
POTENTIAL RELEASE SITE 0-019
LOS ALAMOS NATIONAL LABORATORY, NM0890010515
HWB-LANL-01-023

Dear Mr. Johansen and Dr. Browne:

The Hazardous Waste Bureau (HWB) of the New Mexico Environment Department has reviewed the Voluntary Corrective Action Completion Report for Potential Release Site 0-019 dated September 2001 and referenced by LA-UR-01-4140 (ER2001-0603) and requests supplemental information as detailed in the attachment.

LANL must respond to the request for supplemental information within thirty (30) days of the receipt of this letter.

7600

Should you have any questions or require additional assistance with this request, please feel free to contact Darlene Goering at (505) 428-2548 or me at (505) 428-2538.

Sincerely,

John Young
LANL Corrective Action Project Leader
Permits Management Program

RY:dxg

cc: J. Bearzi, NMED HRMB
P. Allen, NMED HRMB
J. Davis, NMED SWQB
J. Parker, NMED DOE OB
S. Yanicak, NMED DOE OB, MS J993
D. Neleigh, EPA 6PD-N
J. Vozella, DOE LAAO, MS-A316
J. Canepa, LANL E/ER, MS-M992
M. Kirsch, LANL EM/ER, MS-M992
D. McInroy, LANL E/ER, MS-M992
file: Reading and HSWA LANL 00/1071/00-019

ATTACHMENT

General Comments

1. Mesa Top Area

Although construction is anticipated on the mesa top, surface sample results should have been run against Ecological Screening Levels (ESLs) to determine if there even would be potential for risk, rather than relying on an argument that construction will "cap" the whole mesa. LANL shall compare surface soil concentrations to ESLs to determine if there would be a potential risk to ecological receptors if some areas of the mesa top were not covered by the new construction.

There is some question about whether the proposed future site use will require excavation that may expose receptors to the subsurface contamination left in place at the site. The potential for exposure to contamination under these structures needs to be addressed. LANL shall develop a construction worker risk number for the short-term exposure to the subsurface lead and nickel.

2. Western and Eastern Outfall Areas

LANL used area-weighted averages for each "geomorphic package" (subarea) to represent the mean value. An average for each subarea was calculated and multiplied by a weighting factor corresponding to the size of that subarea compared to the overall area. The average of these weighted averages was used to represent the entire area. It appears that LANL averaged values from the eastern outfall, western outfall, and canyon bottom together. This approach was used for both human health and ecological risk screening. As explained in the comments on the Acid Canyon Interim Action Plan by both the HWB and U.S. Environmental Protection Agency (EPA), our agencies do not support the use of weighted averages for risk screening because the 95% upper confidence level (UCL) statistics are not designed for averaging of weighted means and because the use of weighted means requires the demonstration of a strong correlation between the defined subareas and the contaminants. The weighted means are inappropriate for this site because 1) all contaminants are assumed to distribute in the same manner throughout the package, even though they have very different chemical properties, and 2) there is probably not adequate sampling within some packages (lower benches and canyons) to calculate a valid 95% UCL of the mean for each package. For areas without sampling results adequate to support a 95% UCL of the mean, the maximum concentration of contaminants detected should be used for comparison to the screening values and for initial risk assessments. The different subareas should not be averaged together to come up with one set of means for contaminants for calculating risk. The risk associated with each subarea should be examined to see if contaminants in some subareas may represent an unacceptable level of excess risk.

The use of an Area Use Factor (AUF) as part of the ecological risk assessment is acceptable, but area-weighted averages should not be used for this assessment either.

2. Appendix H: Concrete and Fill Data Tables, Tables H-1 through H-3:

HWB Comment: LANL shall provide the location IDs and sampling depths for the fill material samples. If this information cannot be provided, LANL shall provide an explanation as to why the information is unavailable.

3. Appendix H: Concrete and Fill Data Tables, Tables H-4 through H-6:

HWB Comment: LANL shall distinguish between the samples collected from underneath the structures and the samples collected above the structures by providing sampling depths.