



GARY E. JOHNSON  
GOVERNOR

State of New Mexico  
**ENVIRONMENT DEPARTMENT**

*Hazardous Waste Bureau*  
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PETER MAGGIORE  
SECRETARY

ENTERED

HWB-LANL 1/10/01, 2/24/01  
00-028(a)

**CERTIFIED MAIL  
RETURN RECEIPT REQUESTED**

October 22, 2001

Theodore Taylor, Project Manager  
Los Alamos Area Office  
Department of Energy  
528 35<sup>th</sup> 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  
RESPONSE TO THE 2<sup>nd</sup> NOTICE OF DEFICIENCY FOR POTENTIAL RELEASE  
SITES 0-028(a, b) RFI REPORT  
LOS ALAMOS NATIONAL LABORATORY, NM0890010515  
HWB-LANL-01-025**

Dear Mr. Taylor and Dr. Browne:

The Hazardous Waste Bureau (HWB) of the New Mexico Environment Department has reviewed the *Response to the NOD for the RFI Report for Potential Release Sites (PRS) 0-028(a,b)*, dated November 5, 1997 and referenced by EM/ER:97-436 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.

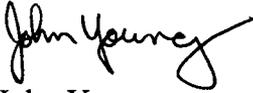
Should you have any questions or require additional assistance with this request, please feel free to contact Darlene Goering at (505) 428-2548 or me at (505) 428-2538.



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Mr. Theodore Taylor and Dr. John C. Browne  
October 22, 2001  
Page 2

Sincerely,



John Young  
LANL Corrective Action Project Leader  
Permits Management Program

JRY: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  
C. Sykes, DOE LAAO, MS A316  
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 01/1071/0-028(a,b)

## ATTACHMENT

### General Comments:

1. An ecological risk screening/assessment was originally being deferred until it could be done on the entire exposure unit. LANL shall perform the ecological risk screening/assessment for the two PRSs.
2. It is not clear from the report if composite or grab samples were collected. The report vaguely references LANL SOPs but doesn't specify which ones. LANL shall specify and provide documentation showing the samples were either grab or composite.
3. LANL shall provide all of the data collected, to include all of the analytes detected and nondetected.

### Specific Comments:

1. Section 5.1.5 Background Comparisons, page 28, paragraph 2:

**LANL Statement:** Analyses of radionuclides by gamma spectroscopy often lead to the reporting of concentrations for certain radionuclides that are inappropriate to evaluate as potential site contaminants. These include: short-lived activation/fission products, naturally occurring background radionuclides, and daughter radionuclides of naturally occurring radionuclides. These three classes of radionuclides are generally not considered site contaminants for the reasons discussed below.

- Sixteen short-lived activation/fission products reported at PRSs 0-028(a,b) (barium-140, cadmium-109, cerium-139, cesium-134, cobalt-57, europium-152, lanthanum-140, manganese-54, mercury-203, ruthenium-106, selenium-75, sodium-22, strontium-85, tin-113, yttrium-88, and zinc-65) have half-lives ranging from a few days to 2.6 years. Several of these radionuclides are used as internal standards to measure equipment performance, laboratory background (or contamination), etc. Because there were no releases at this site in the three years before the 1996 sampling campaign, any radionuclide detected with a short half-life would not be attributed to Laboratory activities at these sites.

**HWB Comment:** Europium-152, one of the aforementioned radionuclides, has a half-life of 13.5 years and was also found in a tuff sample collected at the former Pueblo Wastewater Treatment Plant in 1996. This suggests that this radionuclide may have been present in the effluent used to irrigate the golf course and should not have been eliminated as a contaminant of potential concern. Any detection of europium-152 would necessarily be attributed to LANL activities. LANL should not have excluded this radionuclide from the human health assessment

Mr. Theodore Taylor and Dr. John C. Browne  
October 22, 2001  
Page 4

based on the reasoning provided. LANL shall reevaluate the human health screening assessment and include europium-152.