

APR 29 1994

Mr. Joseph C. Vozella, Chief  
Environment, Safety and Health Branch  
Department of Energy  
Los Alamos Area Office  
Los Alamos, New Mexico 87544

Re: NOD Response on VCA at SWMU 0-016, Inactive Firing Range  
Los Alamos National Laboratory (NM0890010515)

Dear Mr. Vozella:

The Environmental Protection Agency (EPA) has reviewed your response dated February 28, 1994 on the Voluntary Corrective Action for SWMU 0-016, an inactive firing range in Operable Unit 1071. The revised plan is acceptable with one modification that a final report on the remediation and confirmation analysis will be submitted to EPA within 60 days of receipt of analytical data.

In addition, EPA would like Los Alamos National Laboratory (LANL) to note that an additional remedy under section 3.2 would be removal and disposal of the contaminated material to a proper hazardous waste disposal facility. Relocation of the material to another small-arms range, as indicated in the text, would be a violation of RCRA waste management regulations.

LANL shall apply for a Class 3 permit modification for this unit as soon as possible. Should you have any questions, please contact Barbara Driscoll of my staff at (214) 655-7441.

Sincerely,

*W*  
William K. Honker, Chief  
RCRA Permits Branch (6H-P)

cc: Benito Garcia, NMED  
Jorg Jansen, ER Program Manager, LANL, M992

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**RESPONSE TO NOTICE OF DEFICIENCY  
VOLUNTARY CORRECTIVE ACTION PLAN  
SWMU 0-016, INACTIVE FIRING RANGE**

- 1994
1. *"LANL shall provide analytical methods for any laboratory analysis"*

Analytical methods for laboratory analyses are cited in Section 4.3., paragraph 1. They include SW 7421 for Pb and SW 6010 for Cu and Zn.

*"LANL should ensure that lab analysis can be directly compared with field analysis using an XRF in order to demonstrate that field screening techniques are adequate for determining lead levels. If LANL demonstrates that results using XRF are comparable with laboratory analysis, then it is acceptable for the soil washing batch samples to be analyzed with an XRF and composite sampling to be used for final confirmation of cleanup."*

The five background soil samples will be analyzed using by both XRF and in the laboratory to verify that the accuracy and quality of the field screening technique is adequate. See Section 4.3., para. 3 and Table 1.

2. *"3.1 Background Sampling, p. 5 - At what depth will background samples be collected? What method will be used for sampling?"*

Surface samples for soil will be taken from the top 6" of soil following LANL-ER-SOP-06.09, R0, Spade and Scoop Method for Collection of Soil Samples. See Sections 4.3., para. 5.

3. *"3.2 Sampling during soil washing, p. 5" - How will analysis be conducted (field or laboratory) for the samples collected on a daily basis from the recirculating ponds?"*

Samples will be analyzed by XRF during the soil washing process. See Section 4.3., para 6 and 7.

4. *"A schedule of activities including timeframes for the confirmatory sampling results report shall be provided to EPA within the 45 day timeframe for the NOD response."*

It is anticipated that soil washing will start on 15 March 1994 and will be completed in about 32 days, weather permitting. Verification sample collection will begin no earlier than 29 April 1994. Analytical results from the verification samples will be received no earlier than 12 May 1994. See Section 5.6.

5. *"LANL shall submit results of the confirmatory sampling in a phase report."*

A phase report on the VCA will be submitted to the EPA. See Section 4.1, paragraph 7.