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Date: July 3, 1997  
Refer to: EM/ER:97-248

Mr. Benito Garcia  
NMED-HRMB  
P.O. Box 26110  
Santa Fe, NM 87502

**SUBJECT: 15-DAY WRITTEN NOTIFICATION OF A RELEASE FROM SWMU 33-002(a) (FORMER OU 1122)**

Dear Mr. Garcia:

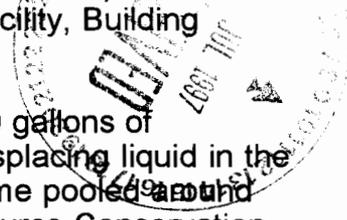
The purpose of this letter is to provide written notification on a release from Solid Waste Management Unit (SWMU) 33-002(a). The initial notification was made to Mr. John Kieling with the Hazardous and Radioactive Materials Bureau (HRMB) by Roy Michelotti and Pat Shanley for the Los Alamos National Laboratory on June 20, 1997.

SWMU 33-002(a) is comprised of a septic tank, drainfield, and "daylight" discharge pipe. It is one of five SWMUs located within Material Disposal Area (MDA) K. All SWMUs received liquid effluent from the High Pressure Tritium Facility, Building TA-33-86.

The release occurred as a result of a maximum volume of 195,840 gallons of noncontact cooling water discharged to 33-002(a), diluting and displacing liquid in the septic tank. The liquid migrated to the drainfield and a small volume pooled around the daylight pipe location. Existing data collected during the Resource Conservation and Recovery Act facility investigation (RFI) at the SWMU suggests that the threat to human health and the environment present at this SWMU was not changed as a result of this release. The Environmental Restoration (ER) Project continues to recommend no further action for all other SWMUs at MDA K except 33-002(a). The ER Project plans to remove the contaminated sludge present in the 33-002(a) tank as a voluntary corrective action in coordination with future decontamination and decommissioning activities at Building 33-86.

Presented below is a brief history of pertinent release information.

Sampling at 33-002(a) was conducted in 1993 as described in the May 1992 RFI Work Plan in 1993. The analyses conducted were: volatile organics; semi-volatile organics; target analyte list metals; and radionuclides. The RFI Work Plan was approved with modifications in July 1993. The Phase I results of this RFI were reported in the September 1995, RFI Report for MDA K.



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Results of the sampling of the liquid within the tank indicated two constituents above screening action levels: concentrations of tritium at 136,210 pCi/L and cadmium at 9.2 ug/L. Tritium and cadmium below screening action levels were found in some samples collected in surface and subsurface samples near the SWMU. The September 1995 RFI Report, which describes the work performed during Phase I, indicated that Phase II sampling was necessary and the waste in the septic tank should be removed and further liquid discharges at the site should cease. The Phase II sampling was to determine if releases from 33-002(a) had occurred. The Phase II sampling was conducted in 1996 and the analytical results demonstrate that the septic tank did not leak.

The tritiated water that had been in the tank was diluted by the large volume of noncontact cooling water, was discharged from the septic tank to the drain field and surface soil due to the influx of noncontact cooling water. Due to the volume of water discharged to the SWMU and the contaminant level present in the liquid of the septic tank, the Laboratory does not believe this situation has resulted in a threat to human health and the environment. The large volume of water would have significantly decreased the tritium concentration in the water and the amount of cadmium present would similarly present no threat to the environment.

In 1991, the operating group analyzed the noncontact cooling water for tritium. No detectable activity was found in the water. Based on the 1991 radiological data, no additional radioactivity was added to the septic tank. No additives are used in the noncontact cooling water.

The ER Project intends to perform a voluntary corrective action of sludge removal at the SWMU when the facility is decommissioned. The facility is currently scheduled to be decommissioned in the 1998-1999 time frame.

If you have any questions or would like additional information, please contact Dave McInroy at 667-0819 or Joe Mose at 667-5808.

Sincerely,



Jorg Jansen, Program Manager  
LANL/ER Project

Sincerely,



Theodore J. Taylor, Program Manager  
DOE/LAAO

JJ/TT/rfr

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