Los Alamos National Laboratory

UNIVERSITY OF CALIFORNIA

Environmental Restoration

Environmental Science and Waste Technology (E)
Environmental Restoration, MS M992
Los Alamos, New Mexico 87545
505-667-0808/FAX 505-665-4747

Date: November 2, 2000
Refer to: ER2000-0640

Mr. John Young, Corrective Action Project Leader
Permits Management Program
NMED – Hazardous Waste Bureau
2044 A Galisteo
Santa Fe, NM 87502

SUBJECT: SAMPLING NOTIFICATION

Dear Mr. Young:

The Los Alamos National Laboratory (LANL) Environmental Restoration (ER) Project is planning to conduct a comprehensive in situ gamma spectroscopy radiation survey over the entire outfall and hillside area designated as Potential Release Site (PRS) 21-011(k). The purpose of the survey is to establish the depth profile of radio-cesium in soil, sediment and tuff at the site. The survey will help confirm the nature and extent of radionuclide contamination and allow for more accurate volume estimates of contaminated material to be removed during the planned Voluntary Corrective Measure (VCM) of PRS 21-011(k) later this Fiscal Year.

The non-intrusive survey will be conducted using either a high purity germanium detector or a sodium iodide detector with a portable multi-channel analyzer that will allow the mapping of surface concentrations of multiple radioisotopes. This survey methodology will provide surface concentrations of Cs-137, in addition to less mobile and detectable isotopes including Am-241 and Pu-239/240 while using the decay scheme of Cs-137 to determine the approximate depth profile of contamination. The survey will be conducted along a grid to be located via transects across the site. The data will be contoured and overlain against a digital elevation model of the site and presented in three-dimensional images. The data will be used to guide the collection of preliminary waste characterization samples and radiation screening samples to validate the in situ gamma screening results. The radiation screening will be presented and discussed in the subsequent VCM plan.

The gamma spectroscopy radiation survey of PRS 21-011(k) is tentatively scheduled to begin the week of November 15, 2000; however, this date is subject to the availability of the screening equipment and weather conditions. The ER Project will verbally confirm and/or notify New Mexico Environment Department Hazardous Waste Bureau staff of any changes to the schedule.

If you have any questions or concerns please feel free to give me a call at (505) 667-0819.

Sincerely,

for David McInroy
Environmental Restoration Project

DM/PB/ev

Cy: M. Backsen, E/ER, MS M992
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