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PETER MAGGIORE
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CERTIFIED MAIL
RETURN RECEIPT REQUESTED

December 3, 2001

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

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

SUBJECT: ADDITIONAL FIELDWORK AT MDA H, 54-004
LOS ALAMOS NATIONAL LABORATORY
EPA ID # NM0890010515
HWB-LANL-01-001

Dear Dr. Browne and Mr. Johansen:

On October 15, 2001, the Hazardous Waste Bureau (HWB) of the New Mexico Environment Department (NMED), Los Alamos National Laboratory (LANL) and the Department of Energy (DOE) discussed preliminary analytical results of fieldwork conducted at Material Disposal Area (MDA) H, Solid Waste Management Unit (SWMU) 54-004. LANL conducted fieldwork during the summer of 2001 in accordance with the "Plan for Supplemental Sampling for the RCRA Facility Investigation at Material Disposal Area H" dated May 2001 (LA-UR-01-2516) and the corresponding record of communication dated June 11, 2001. Based on the discussion, HWB determined that sufficient data were not collected. The following field activities must be conducted at MDA H. These activities must be completed by December 21, 2001. The screening and analytical results must be summarized in an addendum to the RFI report that is scheduled for submittal to HWB in spring 2002.

Screening, clean out and sampling activities must be conducted at three boreholes currently located in the vicinity of MDA H. The boreholes LANL identifies as #54-1023, #54-15461 and #54-15462 were drilled in 1995 and 2001 and remain open; however, the bottom of each hole contains drilling debris or slough. The slough is the result of common drilling activities,



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powdery cuttings generated during drilling and the scraping of the borehole walls while drilling equipment was removed. Slough currently fills 9 to 67 feet of the bottom of each borehole, which alters the total depth of the boreholes. Borehole #54-1023 was drilled to a depth of 260 feet, but currently is open to 251 feet. #54-15461 was drilled to 100 feet, but remains open to 75 feet. #54-15462 was drilled to a depth of 300 feet; however, the hole is only accessible to 233 feet. The primary goal of the field activities will be to obtain vapor samples from the Cerro Toledo interval. Observations at #54-1023 indicate that drilling penetrated approximately four feet into this interval. At #54-15462, drilling suggests that the Cerro Toledo interval occurs between approximately 255 and 265 feet below ground surface (bgs).

Field activities must be performed as follows. Initial field screening measurements for percent carbon dioxide and oxygen must be collected in all three boreholes. The field measurements must be collected at 50 feet bgs and at current total depth, just above the slough. Then the slough will be removed from each borehole using injected air with a vacuum return. The slough will be collected. The boreholes will need to be purged to remove injected air in order to return to conditions similar to those downhole before the slough was removed. The boreholes will be purged (by vacuum) and field measurements will be collected again. The borehole will be purged until ambient subsurface conditions for percent carbon dioxide and oxygen are achieved. While air is injected or a vacuum is pulled at one borehole, simultaneously monitor pressure or vacuum at the other two boreholes.

Samples will be collected after ambient conditions are confirmed. The method of soil vapor sample collection must be in accordance with methods described in the "Plan for Supplemental Sampling for the RCRA Facility Investigation at Material Disposal Area H" dated May 2001 (LA-UR-01-2516). Soil vapor samples will be collected from several intervals in each borehole for VOC and tritium analyses:

Borehole #	Sample depth bgs (feet)	Sample type	# of samples	analyses
#54-15462	50, 100 and ~260 (within CT)	summa	3	VOC
#54-15462	50, 100 and ~260 (within CT)	air	3	tritium
#54-1023	50, 100, ~260 (at *TD, just above or within CT)	summa	3	VOC
#54-1023	50, 100, ~260 (at *TD, just above or within CT)	air	3	tritium
#54-15461	50 and ~100 (*TD)	summa	2	VOC
#54-15461	50 and ~100 (*TD)	air	2	tritium

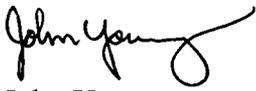
*TD assumes the borehole will be open to a new total depth following slough removal.
CT=Cerro Toledo interval.

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As previously stated, this fieldwork must be completed by December 21, 2001, and the screening and analytical results must be summarized in an addendum to the RFI report that is scheduled for submittal to HWB in Spring 2002.

If you have any questions about this letter or at any time during or after the fieldwork, please contact me at (505) 428-2538, David Cobrain at (505) 428-2553 or Eliza Frank at (505) 428-2539.

Sincerely,



John Young
LANL Corrective Action Project Leader
Permits Management Program

JRY:eaf

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