

TASU



NEW MEXICO  
ENVIRONMENT DEPARTMENT



*Hazardous Waste Bureau*

2905 Rodeo Park Drive East, Building 1

Santa Fe, New Mexico 87505-6303

Phone (505) 476-6000 Fax (505) 476-6030

www.nmenv.state.nm.us

BILL RICHARDSON  
Governor

DIANE DENISH  
Lieutenant Governor

RON CURRY  
Secretary

CINDY PADILLA  
Deputy Secretary

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

November 19, 2007

David Gregory  
Federal Project Director  
Los Alamos Site Office, Department of Energy  
528 35<sup>th</sup> Street, Mail Stop A316  
Los Alamos, NM 87544

David McInroy  
Remediation Services Deputy Project Director  
Los Alamos National Laboratory  
P.O. Box 1663, Mail Stop A992  
Los Alamos, NM 87545

**RE: APPROVAL WITH DIRECTION  
WORK PLAN FOR THE IMPLEMENTATION OF AN IN SITU SOIL-VAPOR  
EXTRACTION PILOT STUDY AT TECHNICAL AREA 54, MATERIAL  
DISPOSAL AREA G, LOS ALAMOS NATIONAL LABORATORY  
EPA ID #NM0890010515  
HWB-LANL-07-022**

Dear Messrs. Gregory and McInroy:

The New Mexico Environment Department (NMED) is in receipt of the United States Department of Energy and Los Alamos National Security, LLC (collectively, the Permittees) document entitled *Work Plan for the Implementation of an In Situ Soil-Vapor Extraction Pilot Study at Technical Area 54, Material Disposal Area G, Los Alamos National Laboratory* (hereafter, the Plan) dated October 2007 and referenced by LA-UR-07-7134/EP2007-0641. NMED has reviewed the Plan and hereby issues this Approval with the following direction.

In Section 3.0 of the Plan, the Permittees propose to conduct a passive venting test in the Otowi Member of the Bandelier Tuff to determine the feasibility to use this passive technology as an alternative method for remediation of vapor-phase volatile organic compounds (VOC) in pore gas. However, performance of a passive venting system in removing VOCs from pore gas may be limited not only by low permeability of the Otowi Member but also by reduced extraction



Messrs. Gregory and McInroy  
Approval with Direction – MDA G SVE Pilot Study Work Plan  
November 19, 2007  
Page 2

force from barometric pumping. As a result, passive venting may not be useful in achieving cleanup objectives contemplated in the March 1, 2005 Order on Consent in a timely manner.

To support selection of adequate remedies in the Corrective Measures Evaluation process, the Permittees must therefore conduct an active pilot soil vapor extraction (SVE) test to evaluate the feasibility of using SVE as a potential remedy to cleanup VOCs present in the Otowi Member. The test must be conducted using similar methods and procedures developed in the Plan for the proposed test in the Tshirege Member. If feasible, the Permittees should consider conducting the SVE pilot test first in the Otowi Member so that relevant information may be used to assist with remedy selections for other material disposal areas at Technical Area 54. The Permittees must submit the SVE pilot study report to NMED for approval no later than August 30, 2008.

Should you have any questions or comments, please contact Dave Cobrain at (505) 476-6055 or Hai Shen at (505) 476-6039.

Sincerely,



James P. Bearzi  
Chief  
Hazardous Waste Bureau

JPB:hs

cc: D. Cobrain, NMED HWB  
J. Young, NMED HWB  
K. Roberts, NMED HWB  
H. Shen, NMED HWB  
T. Skibitski, NMED DOE OB  
S. Yanicak, NMED DOE OB, MS J993  
B. Olson, NMED GWQB  
L. King, EPA 6PD-N  
G. Rael, DOE LASO, MS A316  
F. Bosiljevac, DOE LASO, MS A316  
S. Stiger, LANL ENV, MS J591  
C. Mangeng, LANL ENV, MS J591  
J. Hopkins, LANL ENV, MS M992

file: Reading and LANL TA-54 (MDA G, SWMU 54-013(b))