



**NEW MEXICO
ENVIRONMENT DEPARTMENT**

ESHID-600989



SUSANA MARTINEZ
Governor
JOHN A. SANCHEZ
Lieutenant Governor

**2905 Rodeo Park Drive East, Building 1
Santa Fe, New Mexico 87505-6303
Phone (505) 476-6000 Fax (505) 476-6030
www.env.nm.gov**

RYAN FLYNN
Cabinet Secretary
BUTCH TONGATE
Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

October 28, 2015

Doug Hintze, Manager
U.S. Department of Energy
EM-Los Alamos Field Office, DOE
3747 West Jemez Rd, MS A316
Los Alamos, NM 87544

Michael T. Brandt, Associate Director
Environment, Safety, and Health
Los Alamos National Laboratory
P.O. Box 1663, MS K491
Los Alamos, NM 87545

**RE: APPROVAL WITH MODIFICATIONS
2015 INVESTIGATION WORK PLAN FOR SOUTH ANCHO CANYON
AGGREGATE AREA
LOS ALAMOS NATIONAL LABORATORY
EPA ID #NM0890010515
HWB-LANL-15-035**

Dear Messrs. Hintze and Brandt:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security, LLC (LANS) (collectively, the Permittees) *Investigation Work Plan for South Ancho Canyon Aggregate Area (IWP)*, dated July, 2015 and referenced by LA-UR-15-25429/EP2015-0104. NMED has reviewed the IWP and issues this Approval with Modifications with the following comments.

COMMENTS:

1. Section 2.3.4 Cleanup Standards: page 4:

The Permittees state “[a]s specified in section VIII.B.1 of the Consent Order, NMED soil screening levels (SSL) (NMED 2009, 108070) or Laboratory screening action levels (LANL 2009, 107655) will be used as soil cleanup levels....”

NMED Comment: The 2009 NMED soil screening levels have been updated. Please be advised that the Permittees must use soil screening levels from the most current version

U1600208

of NMED's *Risk Assessment Guidance for Site Investigations and Remediation* in all future documents.

2. Section 3.2.2 Hydrogeology, page 7:

NMED Comment:

NMED noted that the entirety of paragraph 2 is repeated as part of paragraph 4. Please delete the duplicate text.

3. Section 4.2.3 SWMUs 33-003(a) and (b), Proposed Activities, page 12:

The Permittees state “[b]ecause Chamber 2 was only used twice to perform experiments on initiators and the components of the experiment included HE, radionuclides, and metals, cyanide, and VOC will not be analyzed for at the site.”

NMED Comment:

As reported in the HIR, Section 2.2.3, page 5 and Table 2.2-2, page 48, cyanide was detected above background values (BVs) in three surface samples collected during the 1994 Phase I RCRA Facility Investigation (RFI) conducted at SWMU 33-003(b). The Permittees must include cyanide in the analytical suite for both SWMU 33-003(a) and SWMU 33-003(b).

4. Section 4.3.3 SWMU 33-004(c), Proposed Activities, page 13:

4.1

The Permittees state “[o]ne location will be sampled approximately midway from beneath the inlet line from building 33-87 to the septic tank. Samples will be collected from three depths (0–1 ft, 2–3 ft, and 5–6 ft below the inlet line).”

NMED Comment:

The proposed single sampling point located midway along the length of the vitrified clay pipe drain line between building 33-87 and the septic tank is insufficient to characterize potential contamination from possible spills/leaks because there are likely several other joints/connection points along the pipe drain line. Therefore, further sampling is required in order to characterize the extent of contamination. The Permittees must first clarify whether or not any part of the drain line will be excavated with the septic tank. If the drain line is excavated, collect additional samples from beneath the drain line at 25-foot intervals or beneath each pipe joint. If the drain line is not excavated, either collect samples at 25-foot intervals along the length of the drain line or provide an explanation for not collecting additional samples along the drain line.

4.2

The Permittees state “[w]astewater was conveyed to the tank through a 4-in.-diameter vitrified clay pipe, and effluent from the tank flowed through a similar pipe to a small drain field approximately 30 ft east of the septic tank (LASL 1955,025040).

NMED Comment:

U1600208

The Permittees have attempted to locate the septic tank outlet drain line, drainage tiles, and drain field using the Engineer Drawings ENG-C-3359 (LASL 1955, 025040). If as-built drawings are available, the Permittees must use the as-built drawings to verify the location of the outlet drain line and drain field and adjust the sampling locations as necessary. The location of the septic tank outlet drain line may also be confirmed when the septic tank is removed. If sampling locations are adjusted, please document those changes in the investigation report.

5. Section 4.7.2, SWMU 33-008(b), Previous Investigations, page 18:

The Permittees state that “[d]uring the 1996 Phase I RFI conducted at SWMU 33-008(b), boreholes were advanced into the landfill at six locations to depths ranging from 4.5–7.5 ft bgs or approximately 3 ft into tuff (LANL 1997, 071478, pp.85–97). Twenty-one samples were collected from six locations at depths ranging from 0–16 ft bgs.”


NMED Comment:

The cited document (LANL 1997, 071478, Section 5.7.4, p.88) reports that 22 samples were collected from six locations in the landfill and that sampling depths ranged from 0–7.5 ft bgs, rather than 0–16 ft bgs. The Permittees must resolve the discrepancy in the Investigation Report.

The Permittees must incorporate the above modifications during implementation of the IWP. The Permittees must submit the final report no later than **October 28, 2016**.

Please contact Robert Murphy of my staff at (505) 476-6022 should you have any questions.

Sincerely,



John E. Kieling
Chief
Hazardous Waste Bureau

cc: K. Roberts, Director, NMED RPD
D. Cobrain, NMED HWB
N. Dhawan, NMED HWB
R. Murphy, NMED HWB
S. Yanicak, NMED DOE OB, MS M894
L. King, EPA 6PD-N
A. Duran, DOE-EM-LA, MS A316
K. Rich, ADEP ER Program, MS M992
J. Y. Buckley, LANS, MS K490

U1600208