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Official Correspondence Form

Name:	U1101097	
Title:	Certificates of Completion Material Disposal Area V, Technical Area 21 Los Alamos National Laboratory EPA ID #NM0890010515 HWB-LANL-11-030	
Date Received:	6/8/2011	
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Action Item Description:		
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U1101097



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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

June 3, 2011

George J. Rael, Assistant Manager
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Michael J. Graham, Associate Director
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RE: **CERTIFICATES OF COMPLETION
MATERIAL DISPOSAL AREA V, TECHNICAL AREA 21
LOS ALAMOS NATIONAL LABORATORY
EPA ID #NM0890010515
HWB-LANL-11-030**

Dear Messrs. Rael and Graham:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Request for Certificates of Completion for Four Solid Waste Management Units and One Area of Concern at Material Disposal Area V, Technical Area 21* (Request), dated May 13, 2011 and referenced by EP2011-0138. Results of the site investigations were presented in the *Investigation Report for Consolidated Unit 21-018(a)-99, Material Disposal Area V, at Technical Area 21, Revision 1*, dated July 2007 and the *Supplemental Investigation Report for Consolidated Unit 21-018(a)-99, Material Disposal Area V, at Technical Area 21, Revision 1*, dated April 2008.

To determine extent of subsurface tritium contamination, the Permittees implemented the *Vadose Zone Subsurface Characterization and Vapor-Monitoring Well Installation Work Plan for Material Disposal Area V, Consolidated Unit 21-018(a)-99, Revision 1*, dated August 2009. Four rounds of quarterly sampling were conducted and periodic monitoring reports were submitted to

NMED in December 2009, March 2010, June 2010, and October 2010. The Permittees have satisfied the requirements of the March 1, 2005 Consent Order for corrective action at the following Solid Waste Management Units/Areas of Concern (SWMUs/AOCs).

SWMU 21-013(b) is the location of a former surface debris disposal site located immediately south of MDA V on the south-facing slope leading into BV Canyon. It is not known how long this site received building debris; however, it did not receive waste after 1994. SWMU 21-013(b) contained the external concrete piers, the concrete building foundations, and other building debris derived from the 1965 demolition of the laundry facility (building 21-20 [SWMU 21-018(b)]) and a waste treatment laboratory (building 21-33 [AOC 21-009]). The debris was removed in 2005 and investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Evaluation of both human health and ecological risk indicates that there is no potential unacceptable risk posed at the site. However, storm water discharge may mobilize residual contamination from the site. The Permittees must monitor storm water discharge for potential off-site transport of residual contamination. This is currently being accomplished under the National Pollutant Discharge Elimination System (NPDES) "Stormwater" Permit. NMED hereby issues this Certificate of Completion for Corrective Action Complete with Controls for SWMU 21-013(b) pursuant to Section VII.E.6.b of the Consent Order.

SWMU 21-018(a), more commonly referred to as Material Disposal Area (MDA) V, is an approximately 1-acre site located immediately south of the former laundry facility [building 21-20; SWMU 21-018(b)]. The SWMU consists of three interconnected liquid waste absorption beds. MDA V was constructed to receive radioactive liquid wastewater from the laundry facility and was designed to enhance the infiltration of liquids into the tuff bedrock. The absorption beds were constructed in 1945 and operated until 1961. They remained on stand-by status until September 1963 when they were permanently removed from service. All absorption bed material and associated piping was removed and investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Evaluation of both human health and ecological risk indicates that there is no potential unacceptable risk posed at the site. However, storm water discharge may mobilize residual contamination from the site. The Permittees must monitor storm water discharge for potential off-site transport of residual contamination. This is currently being accomplished under the National Pollutant Discharge Elimination System (NPDES) "Stormwater" Permit. In addition, in the letter entitled *Extended Tritium Sampling at Material Disposal Area V*, dated February 15, 2011 and referenced by EP2011-0058, the Permittees commit to continue quarterly vapor monitoring at MDA V in connection with remedial actions currently in progress at MDA B. The need for continued vapor monitoring at MDA V will be reconsidered upon completion of the review of the final report detailing remedial actions at MDA B. NMED hereby issues this Certificate of Completion for Corrective Action Complete with Controls for SWMU 21-018(a) pursuant to Section VII.E.6.b of the Consent Order.

SWMU 21-018(b) is a former laundry facility (building 21-20) located at the eastern end and south of DP Road, immediately west of the security fence that encloses other former TA-21 facilities. Operational from 1945 to 1961, the laundry facility was used to wash personal protective clothing and other reusable cloth items used in both research and production operations involving radioactive materials at TA-21. It is estimated that the laundry facility

generated approximately two million gallons of effluent annually, which was discharged to MDA V. The laundry facility was a wood-frame structure with both concrete slab and wood-framing-on-pier floors. The wood portions of the building were decommissioned and demolished in 1965 and taken to MDA G where the debris was burned. The concrete foundation and associated piping were bulldozed over the edge of DP Mesa onto the south-facing slope of BV Canyon. Investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Evaluation of both human health and ecological risk indicates that there is no potential unacceptable risk posed at the site. NMED hereby issues this Certificate of Completion for SWMU 21-018(b) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

SWMU 21-023(c) is a former septic system that consisted of a tank, inlet and outlet lines, and an outfall that served a waste treatment laboratory (building 21-33 [AOC 21-009]). The septic tank was located immediately west of the MDA V absorption beds and was constructed of reinforced concrete. The inlet and outlet lines were 4-inch vitrified clay pipe (VCP); the outlet line surfaced 40 feet southwest from the tank, approximately 30 feet from the canyon edge above BV Canyon. The outfall area extended south into BV Canyon. The waste treatment laboratory septic system was put into service in 1948. Wastewater was pumped from a sump in building 21-33 through the septic system. The tank was removed in 1965 and taken to MDA G. Investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Evaluation of both human health and ecological risk indicates that there is no potential unacceptable risk posed at the site. However, storm water discharge may mobilize residual contamination from the site. The Permittees must monitor storm water discharge for potential off-site transport of residual contamination. This is currently being accomplished under the National Pollutant Discharge Elimination System (NPDES) "Stormwater" Permit. NMED hereby issues this Certificate of Completion for Corrective Action Complete with Controls for SWMU 21-023(c) pursuant to Section VII.E.6.b of the Consent Order.

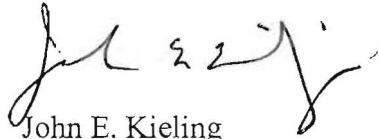
AOC 21-013(g) is located immediately south of MDA V on the south-facing slope leading into BV Canyon and has historically been described as a surface debris disposal site. It is not known how long the site received building debris; however, it did not receive waste after 1994. AOC 21-013(g) consisted of two discarded drainlines and miscellaneous building materials of unknown origin. The debris was removed in 2005 and investigations were conducted between 2005 and 2007 to define the nature and extent of contamination. Evaluation of both human health and ecological risk indicates that there is no potential unacceptable risk posed at the site. However, storm water discharge may mobilize residual contamination from the site. The Permittees must monitor storm water discharge for potential off-site transport of residual contamination. This is currently being accomplished under the National Pollutant Discharge Elimination System (NPDES) "Stormwater" Permit. NMED hereby issues this Certificate of Completion for Corrective Action Complete with Controls for SWMU 21-013(g) pursuant to Section VII.E.6.b of the Consent Order.

If new information becomes available that indicates that these sites pose a potential risk to human health or the environment, NMED may require the Permittees to conduct additional corrective action at these sites in the future.

Messrs. Rael and Graham
June 3, 2011
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Please contact Ben Wear at (505) 476-6041, if you have any questions.

Sincerely,



John E. Kieling
Acting Chief
Hazardous Waste Bureau

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File: 2011 LANL, Certificates of Completion, MDA V, TA-21 SWMUs/AOCs

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