NEW MEXICO ENVIRONMENT DEPARTMENT

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CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 18, 2011

George J. Rael, Assistant Manager
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Michael J. Graham, Associate Director
Environmental Programs
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Los Alamos, NM 87545

RE: **CERTIFICATES OF COMPLETION**
UPPER SANDIA CANYON AGGREGATE AREA
LOS ALAMOS NATIONAL LABORATORY
EPA ID #NM0890010515
HWB-LANL-10-099

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 Eight Solid Waste Management Units and Sixteen Areas of Concern in the Upper Sandia Canyon Aggregate Area* (Request), dated December 6, 2010 and referenced by EP2010-0540. Results of the site investigations were presented in the *Investigation Report for the Upper Sandia Canyon Aggregate Area, Revision 1,* dated 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).

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1. **SWMU 03-003(c)** is the location of a former temporary equipment storage area for used dielectric fluids and capacitors adjacent to the former building 03-287 at TA-3. Building 03-287 was constructed between 1966 and 1968 and used for experiments until the mid-1980s. The sealed capacitors containing non-polychlorinated biphenyl (PCB) dielectric oil were temporarily stored in this area. Before the remodeling of building 03-287 in late 1992 and early 1993, a single surface sample was collected and analyzed for PCBs; no PCBs were detected. Samples of asphalt and fill collected in 2001 indicated the presence of PCBs. In 2003 and 2004, building 03-287 underwent decommissioning that included removal of the building and all of the asphalt paving and fill directly beneath the asphalt including location of SWMU 03-003(c). The entire area was graded and leveled, and approximately 10 ft of clean fill was placed over the entire site to accommodate construction of a new facility. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by SWMU 03-003(c). NMED hereby issues this Certificate of Completion for SWMU 03-003(c) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

2. **AOC 03-003(n)** is the location of a one-time PCBs spill in the salvage yard at Technical Area (TA)-3. With the exception of two small areas, most of the area is asphalt-paved. The salvage yard was used to store transformers, electrical equipment, batteries, and scrap metal. In 1977, a transformer ruptured and spilled approximately 10 gallons of PCB-contaminated oil into the soil. The salvage operation and material were moved to a building in 1993. Investigations conducted in 1994 and 2009 defined the nature and extent of contamination. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by AOC 03-003(n). NMED hereby issues this Certificate of Completion for AOC 03-003(n) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

3. **AOC 03-003(o)** is the location of a former capacitor bank that was used for experiments in former building 03-287 at TA-3. The sealed capacitors contained non-PCB dielectric fluid oil; each of the associated spark gap switches at the building 03-287 required approximately two quarts of non-PCB mineral oil for electrical insulation. The experiment was decommissioned in mid-1980s and all of the capacitors were removed from the building. Oil samples from spark gap switches and swipe samples from the surfaces within the building were collected and analyzed for PCBs. PCBs were detected at concentrations of less than two parts per million. In 2003 and 2004, building 03-287 underwent decommissioning that included removal of the building all the asphalt paving and fill directly beneath the asphalt including location of SWMU 03-003(c). The entire area was graded and leveled, and approximately 10 feet of clean fill was placed over the entire site to accommodate construction of a new facility. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by AOC 03-003(o). NMED hereby issues this Certificate of Completion for AOC 03-003(o)

pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

4. **SWMU 03-014(q)** is the treated effluent storage tank located at the TA-3 power plant. Between 1951 and 1985, the tank received and stored effluent from the former wastewater treatment plant, for use as cooling water for the power plant cooling towers. The effluent was pumped to the holding tank and treated with chromate to hinder bacterial growth. The tank currently receives treated effluent from the TA-46 Sanitary Wastewater Systems Consolidation Plant to use at the power plant. The effluent is treated in a wastewater neutralization tank to adjust pH before use and subsequent discharge to an outfall. Investigations were conducted in 2009 indicating that there is no potential unacceptable risk posed by SWMU 03-014(q) to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-014(q) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

5. **AOC 03-014(v)** is the location of a former floor drain within building 03-36, that was installed in 1953 and connected to the sanitary sewer line tied to the former waste water treatment plant at TA-3. Building 03-36 and the soil beneath its footprint were removed in 1999. The area was further excavated to a depth of approximately 15 ft below grade to accommodate the foundation of new building. The depth of the excavation was approximately 8 ft deeper than the two confirmation samples collected in 1999. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by AOC 03-014(v). NMED hereby issues this Certificate of Completion for AOC 03-014(v) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

6. **AOC 03-027** is comprised of two former concrete-block lined lift wells located beneath the hydraulic lifts at a former garage (building 03-36) at TA-3. The lift wells collected floor wash water that contained residual oil and rinse water containing nitric acid. The garage was removed in 1999 for the construction of a new building. Building 03-36 and the soil beneath its footprint were removed in 1999. After demolition of the building in 1999, nine fill and tuff samples were collected from six locations within the footprint of the former lift wells. The area was further excavated to a depth of approximately 15 ft below grade to accommodate the foundation of new building. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by AOC 03-027. NMED hereby issues this Certificate of Completion for AOC 03-027 pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

7. **SWMU 03-028** is a former 12 ft x 15 ft x 6 ft deep concrete holding pond that was located at the northeast corner of the former asphalt batch plant. The site was used as a settling pond for mineral dust and particulates from gravel captured by scrubber water from the asphalt batch plant. Sediment from the bottom of the holding pond was

periodically removed and disposed of in a former landfill located southeast of the plant. Water from the pond was recycled to the scrubber system and replenished with potable water. During decommissioning of the asphalt batch plant in 2003, the pond sediment and water was removed from the pond, the pond filled with clean soil and gravel, and the surface of the site paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-028 pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

8. **SWMU 03-036(a)** is the location of two former asphalt emulsion product tanks at the former TA-3 asphalt batch plant. The tanks were 25 to 30 ft in diameter and 8 to 12 ft high. The tanks were located within a soil-bermed secondary containment area. Spills that occurred from plant operations were contained within the bermed area. Both tanks were removed and disposed of at the Los Alamos County Landfill in 1988 or 1989, as was soil around and beneath the tanks. The surface of the site was paved with asphalt for use as a parking lot in 2003. Results of investigations conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-036(a) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

9. **AOC 03-036(b)** is a former location of two 25- to 50-gallon aboveground storage tanks located at the former asphalt batch plant at TA-3. The tanks were surrounded by 3-ft soil berm and stored kerosene and No. 2 diesel fuel. The use of the tanks started in 1960. In 2002, the tanks, the soil berm, and stained soils were removed during decommissioning of the asphalt batch plant. Results of the investigation conducted in 2003 and 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-036(b) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

10. **SWMU 03-036(c)** is the location of two former asphalt emulsion storage tanks at the former TA-3 asphalt batch plant. The tanks were removed and disposed of at the Los Alamos County Landfill. The inspection of tanks indicated that the tanks had not leaked. The asphalt batch plant was decommissioned in 2002. In 2003, the site was paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-036(c) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

11. **SWMU 03-036(d)** is the location of two former asphalt emulsion storage tanks (former structures 03-75 and 03-76) at the former TA-3 asphalt batch plant. The tanks were

removed and disposed of at the Los Alamos County landfill. The inspection of tanks indicated that the tanks had not leaked. The asphalt batch plant was decommissioned in 2002. In 2003, the site was paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-036(d) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

12. **AOC 03-038(c)** is a 2-in cast-iron drainline that formerly carried rinse solution from a copper electroplating bath to an industrial waste line. Plating and acid solutions were washed of the circuit boards and down the drain. The electroplating bath initially operated in the 1960s and ceased operations in the early 1970s. The drainpipe was cut and capped inside the wall to make it inaccessible. Results of an investigation conducted in 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-038(c) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

13. **AOC 03-043(a)** is a former 20,000-gal aboveground storage tank, installed in 1948 at the former asphalt batch station at TA-3. The tank was removed in 1963 and disposed of at the Los Alamos County Landfill, and replaced by another storage tank (AOC 03-043(f)). In 2003, the surface was paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-043(a) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

14. **AOC 03-043(b)** is the location of a former 10, 000-gallon aboveground asphalt emulsion storage tank, installed in 1948 at the former TA-3 asphalt batch plant. In 1980, the tank was removed and disposed of at the Los Alamos County Landfill, as was stained soil observed beneath and around the tank. The asphalt batch plant was decommissioned in 2002. In 2003, the surface of the site was paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-043(b) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

15. **AOC 03-043(d)** is the former aboveground asphalt storage tank (former structure 03-76) at the former asphalt batch plant at TA-3. The tank was removed and disposed of at the Los Alamos County Landfill in 1988 or 1989. The surface of the site was paved with asphalt for use as a parking lot in 2003. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-

043(d) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

16. **AOC 03-043(f)** is the location of a former aboveground storage tank (former structure number 03-178) at the former asphalt batch station at TA-3. The tank was removed, disassembled, disposed of at Los Alamos County Landfill. In 2003, the surface was paved with asphalt for use as a parking lot. The potential soil contamination associated with the former tank was included in the investigations conducted at SWMUs 03-036(c) and 03-036(d). Results of the investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-043(f) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

17. **AOC 03-043(g)** is the location of a former aboveground asphalt storage tank (former structure number 03-335) at the former asphalt batch station at TA-3. The tank was removed and disposed of at the Los Alamos County Landfill. In 2003, the surface was paved with asphalt for use as a parking lot. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-043(g) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

18. **AOC 03-043(h)** is the former aboveground asphalt storage tank (former structure 03-75) at the former asphalt batch plant at TA-3. The tank was removed and disposed of at the Los Alamos County Landfill in 1988-1989. The surface of the site was paved with asphalt for use as a parking lot in 2003. Results of an investigation conducted in 2003 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 03-043(h) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

19. **AOC 03-047(d)** is the location of a former container storage area at TA-3. The storage area consisted of an asphalt pad where drums of new motor oil, used oil, and Stoddard solvent were stored from 1954-1989. The asphalt pad was removed when the area was decommissioned in 1989. Investigations conducted in 1995 indicated that the residual contamination posed no unacceptable risk to human health and ecological receptors. In 2002, before the installation of a concrete pad, soil was excavated within the boundary of AOC 03-047(d). Two days later, a waterline ruptured at the TA-3 power plant and eroded all remaining soil/fill, including the 1995 sampling locations. The location of the AOC 03-047(d) was backfilled with more than five ft of clean fill to bring the site back up to grade. Evaluation of human health and ecological risks indicates that there is no potential unacceptable risk posed by the site. NMED hereby issues this Certificate of

Completion for AOC 03-047(d) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

20. **SWMU 03-056(l)** is the location of a former outdoor storage area at TA-3. Containers of disposable clothing contaminated with beryllium powder and carboys used to store beryllium powder in water were reportedly staged at this location before disposal. There are no documented releases from the drums or carboys to the environment. Results of the investigations conducted in 2003 and 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for SWMU 03-056(l) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

21. **AOC C-03-016** is a former oil cleanout bin that was located north of the former asphalt batch plant at TA-3. The bin was approximately 4 ft x 16 ft x 3 ft deep, had a hinged lid, and was buried with the top flush to the ground surface. The bin was installed in the mid-1970s and contained used asphalt emulsion oil. In the late 1980s, the stained area surrounding the bin was removed. Clean sand and gravel was placed around the bin. The bin and stained soils around the bin were removed in the late 1990s. In 2003, the surface of the site was paved with asphalt for use as a parking lot. Results of investigations conducted in 2003 and 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC C-03-016 pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

22. **AOC 60-004(b)** is a former storage area at TA-60 for 12 containers of diesel sludge removed from underground tanks at the TA-3 power plant. The containers were staged at this area in 1988. Results of investigations conducted in 1994 and 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 60-004(b) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

23. **AOC 60-004(d)** is the location of a former storage area at TA-60. The containers were staged at this area in 1988. The area was formerly used to temporarily stage drums containing fluids removed from underground storage tanks. Decommissioned underground storage tanks were also dismantled at this location. The storage area was first used in 1979. Results of investigations conducted in 1994 and 2009 indicate that there is no potential unacceptable risk posed by the site to human health or ecological receptors. NMED hereby issues this Certificate of Completion for AOC 60-004(d) pursuant to Section VII.E.6.b of the Consent Order. Based on the information provided, no controls are necessary for this site.

The following site is eligible for Corrective Action Complete with Controls.

24. **SWMU 03-056(c)** is an inactive outdoor transformer storage area located at TA-3. The area was used to store electrical equipment, capacitors, and transformers with PCB-containing dielectric oils. Waste solvents used to clean electric equipment were also stored at this location. Investigations and remedial actions were conducted at the site in 1994, 1995, 2000, and 2001. The nature and extent of contamination was defined and confirmatory sample results indicated that the site met the Environmental Protection Agency's PCB cleanup criterion of less than 1 part per million. Evaluation of human health and ecological risks 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 institute and maintain a control on the site by monitoring 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 03-056(c) pursuant to Section VII.E.6.b of the Consent Order, subject to the aforementioned control.

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

Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,

James P. Bearzi
Chief
Hazardous Waste Bureau

cc: J. Kieling, NMED HWB
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