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Date: 04.20.2011  
 Refer To: EP2011-0175

James Bearzi, Bureau Chief  
 Hazardous Waste Bureau  
 New Mexico Environment Department  
 2905 Rodeo Park Drive East, Building 1  
 Santa Fe, NM 87505-6303

**Subject: Update on April 18, 2011, Oral Notification of Power Outage at Material Disposal Area B and Written Notice of Force Majeure**

Dear Mr. Bearzi:

This letter is submitted pursuant to the requirement in Section III.H.3, *Procedure for Claiming Force Majeure* of the March 2005 Compliance Order on Consent (Consent Order) to provide written notice within 7 business days of the U.S. Department of Energy's and Los Alamos National Security, LLC's (DOE's/LANS's) verbal notification of a force majeure event. Victoria George of LANS contacted Art Vollmer of the New Mexico Environment Department (NMED) by phone on Monday, April 18, 2011, to provide oral notification of a power failure at Material Disposal Area (MDA) B caused by an April 9, 2011, wind storm. As required by Section III.H.3 of the Consent Order, this verbal notification was made within 72 hr of when DOE/LANS first knew this event may cause a delay in the completion of remediation activities at MDA B. The following is a description of the event, the possible schedule impacts of the event, and actions that have been and will be taken to minimize any possible delays.

**The Cause or Causes of the Delay**

Los Alamos experienced a severe wind storm (winds gusting to more than 50 miles per hour) early in the evening of Saturday, April 9, 2011. Soon thereafter, Los Alamos National Laboratory (LANL) Utilities noted momentary power transients on the electrical feed to Technical Area 21 (TA-21) and MDA B and determined that the systems appeared to reset normally. Because the Excavation Enclosures were placed in a safe configuration at close of business on Friday, April 8, 2011, no safety concerns to the public resulted from the power outage.

Early Monday morning when corrective action work resumed at MDA B, the MDA B team noted varying equipment status indicators that are typical after a power outage or loss. However, attempts later that same morning to restart MDA B equipment (e.g., high-efficiency particulate air (HEPA) ventilation fans, fire suppression units, and cameras) revealed numerous subsystem failures. As a result Excavation Enclosures 1, 2, 5, 9, and 12 were temporarily taken out of service.

By mid-day on April 11, 2011, LANL Utilities confirmed the 13.2-kVA power feed to MDA B site had failed at a transformer at the perimeter of the site. By close of business the following day, LANL Utilities had repaired the transformer and confirmed proper 13.2-kVA power in aerial transmission lines to the MDA B remediation site. LANL Utilities reported to the MDA B team that the failure mode observed was typical of their experience with high voltage power distribution system failures in extreme wind or other storm conditions.

After the transformer was repaired, the MDA B team confirmed proper 480-V power through all enclosure power panels. Power was then restored, and the effectiveness of the subsystem repairs was confirmed, allowing work to resume at Enclosure 1 on April 13, 2011. Enclosure 5 was restarted on April 14, 2011.

Attempts to restart Enclosures 2 and 9 on the morning of April 15, 2011, however, revealed widespread subsystem failures (most notably of required video equipment) that were not observed during the restart of Enclosures 1 and 5. Further investigation determined that Enclosure 9, the largest at MDA B, obtains single-phase power from a different 480-V phase than the other enclosures and therefore was subjected to more damage from high sustained voltages. It was the extensive damage to required systems in Enclosures 9 and 12 that prompted the force majeure notification on Monday April 18, 2011.

The HEPA ventilation unit repairs to Enclosure 2 were completed by end of April 15, 2011, to allow restart on April 18, 2011. The extensive repairs necessary at Enclosure 9 delayed restart until April 19, 2011. Enclosure 12 was also found to require similar extensive repairs. Work began on April 15, 2011, and is still ongoing.

In summary,

- excavation activities at MDA B were suspended entirely from April 11 to 13, 2011;
- excavation activities at MDA B were impaired because Enclosures 1, 2, 5, and 9 were out of service during all or part of the following 6 days;
- more extensive damage to Excavation Enclosures 9 and 12, which was confirmed on April 15, 2011, raised a concern that the delay resulting from the power outage may affect the performance of obligations under the Consent Order; and
- Enclosure 12 is still out of service as of the date of this letter.

### **The Expected Duration of the Delay**

As described above, DOE/LANS have taken all reasonable actions to mitigate or prevent any delays resulting from the wind storm-related power failure at MDA B. Enclosure 12 is anticipated to be back in service by April 25, 2011. As Ms. George explained to Mr. Vollmer during the oral notification on April 18, 2011, DOE/LANS currently believe that lost days resulting from this force majeure incident should not adversely affect the August 31, 2011, submittal of the MDA B investigation/remediation report. If, however, other events require the schedule to be extended, DOE/LANS request that the lost days resulting from this force majeure event be preserved so they can be used to extend the submittal date. DOE/LANS will promptly notify NMED if the work stoppage that resulted from the power outage is later determined to have affected any obligations in the MDA B schedule.

**The Actions Taken or To Be Taken to Minimize the Delay**

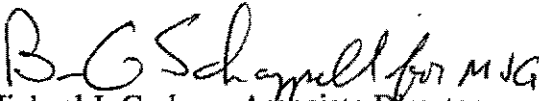
The actions taken by DOE/LANS to respond to the effects from the wind storm-related power outage on April 9, 2011, are described above.

**Timetable for Implementation**

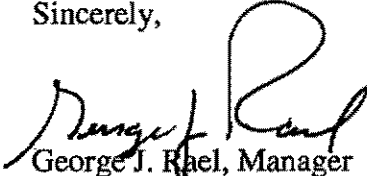
The implementation timetable for DOE/LANS response to the effects of the power outage at MDA B is described above.

If you have any questions regarding the event or DOE/LANS response please contact Allan Chaloupka at (505) 665-4858 (allanc@lanl.gov) or Everett Trollinger at (505) 667-0281 (etrollinger@doeal.gov).

Sincerely,

  
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Sincerely,

  
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