



Date: JUL 2 1 2011  
Refer To: EP2011-0256

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

**Subject: Submittal of the Response to the New Mexico Environment Department's Notice of Agreement Regarding Force Majeure for the Las Conchas Wildfire**

Dear Mr. Kieling:

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). Verbal notice of force majeure was made on the morning of Monday, June 27, 2011, to the New Mexico Environment Department (NMED) Hazardous Waste Bureau by Pete Maggiore and Tori George of the U.S. Department of Energy (DOE) and Los Alamos National Security (LANS), respectively.

The Consent Order requires written notice of force majeure within 7 days of the verbal notice. On the afternoon of Tuesday, June 28th, 2011, Dave Cobrain of your office spoke with Ms. George to discuss the force majeure notice. They discussed that DOE/LANS could not submit the Consent Order deliverables due the week of June 27 and that a number of future deliverables would also be affected by the of Los Alamos National Laboratory (the Laboratory) as a result of the Las Conchas fire. Because of the continued closure of the Laboratory, Mr. Cobrain explained that an email would meet the Consent Order requirement for written notice.

On July 1, 2011, DOE/LANS submitted an email to NMED to satisfy the written notice of force majeure requirement in Section III.H.3 of the Consent Order. The DOE/LANS email explained that because the fire, which was the cause of the force majeure notification, was still ongoing and the community was still under evacuation, it was not possible at that time to ascertain the expected duration of the delay, identify any additional actions that might be taken to minimize the delay, or develop a timetable for implementation.

NMED issued a response to the DOE/LANS July 1, 2011, force majeure notification on July 5, 2011. NMED's response required LANS and DOE to

- provide notification by email to NMED within 1 business day of resuming normal operations and

- submit written notification of force majeure that identifies the submittal dates and other deadlines affected by the force majeure event within seven business days of resumption of normal operations.

The first requirement was satisfied by the July 13, 2011, LANS and DOE email notification to NMED that a substantial number of normal operations had resumed as of that date. The email explained that while a great deal of the Laboratory's work had returned to normal, not all Laboratory areas had fully resumed normal operations. It also explained that some Consent Order work was still impacted because of safety concerns or because a number of technical resources were diverted to ongoing recovery efforts.

This letter, which is submitted within 7 business days of the resumption of normal operations, satisfies the NMED's second requirement. 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**

On June 26, 2011, an aspen tree blown down by wind struck a power line about 14 miles southwest of Los Alamos and caused the Las Conchas fire. In less than 48 hours, the fire grew to more than 40,000 acres, consumed more than 60 homes and structures, and went on to become the largest wild land fire in New Mexico history. The fire burned up to the Laboratory boundary and in one case burned an acre of Laboratory property. No Laboratory contaminants were directly impacted by the fire. Vegetation in several canyons above the Laboratory was burned. The danger of fire and unhealthy smoke conditions was ever present. The Los Alamos townsite was under mandatory evacuation for 7 days, and the Laboratory was closed from June 27 to July 5, 2011.

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

The Laboratory reopened on Wednesday, July 6, 2011, and began implementing wildfire recovery actions to safely resume Laboratory operations and to minimize potential impacts. As discussed above, a substantial number of normal operations associated with the Consent Order resumed on July 13, 2011. Mitigating actions to minimize these delays were implemented as soon as possible and are still underway as DOE/LANS continues to exercise due diligence in determining the full extent of the Las Conchas wildfire's impact on Consent Order-related work. Several canyons are at risk of flash flooding, and fieldwork in these canyon bottoms is currently restricted because of safety concerns. Additionally, a number of technical resources have been diverted from Consent Order work to recovery efforts and may remain engaged in recovery or flood mitigation efforts for some time.

Attachment 1 identifies the submittal dates and other deadlines affected by the Las Conchas wildfire force majeure event. The duration of the force majeure event is 11 business days, from closure of the Laboratory on June 27, 2011, to the resumption of a substantial number of normal operations on July 13, 2011. Although DOE/LANS are exercising due diligence to minimize any delays resulting from the force majeure event, the nature of this event has caused some submittal dates to be affected by periods longer than the duration of the event. Brief summaries of the rationale for the revised submittal dates are included in Attachment 1.

Because the Las Conchas wildfire is still not fully contained, there may be additional impacts from smoke, ongoing fire, runoff and flood potential, extreme fire conditions, limited facility access, or other unforeseen events that may continue to delay field work. For example, a “cascading effect” to well-installation delays will occur because of drilling rig scheduling. Attachment 1 is the current best estimate of the schedule impacts.

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

Containment of the Las Conchas fire was the highest national wildfire priority, and significant federal, state, and local resources were dedicated to this emergency.

Many actions have been taken by DOE/LANS both to minimize the length of the time needed to restart work and to minimize future impacts. These actions include, but are not limited to, the following:

- Subcontractors were mobilized in a phased approach to facilitate a prompt resumption of operations associated with the Consent Order;
- Worker safety documents and systems were revised to reflect changes in field conditions and potential hazards; and
- Mitigation projects such as sediment removal from weirs and retention basins, installation of concrete barriers above wells, and installation of temporary well seals were implemented in burned canyons that are vulnerable to flooding.

DOE/LANS continue to carefully monitor field conditions as fire response activities proceed and the summer monsoon season progresses and will take additional actions as necessary to minimize any potential schedule impacts.

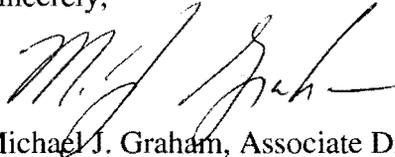
### **Timetable for Implementation**

Attachment 1 identifies the submittal dates and other deadlines affected by the 11–business day Las Conchas wildfire force majeure event. This attachment shows all remaining fiscal year (FY) 2011 deliverables and all FY2012 deliverables that are impacted by the fire. As shown in Attachment 1, many submittal dates were not affected by the fire, and others do not require the full 11–business day delay. Conversely, some submittal dates require a longer extension because of field delays and staff reassignment to fire recovery actions. If new fire-response–related issues arise that affect submittal dates, DOE/LANS will promptly notify NMED.

In addition to the schedule impacts set out in Attachment 1, there will be additional impacts to Consent Order work. For example, the completeness of data in some future reports may be affected by limited access to certain facilities and remote geographic areas. Further, not all wells may be accessible for some future periodic monitoring reports (PMRs), even though the PMRs will be submitted on time. Any such impacts will be described in the document as a deviation.

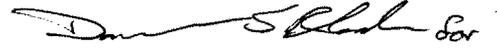
Thank you for your support during this event. We look forward to working with your staff as we continue Consent Order implementation. If you have any questions, please contact Pete Maggiore at (505) 665-5025 (pmaggiore@doeal.gov) or Tori George at (505) 606-2337 (torig@lanl.gov).

Sincerely,



Michael J. Graham, Associate Director  
Environmental Programs  
Los Alamos National Laboratory

Sincerely,



George J. Rael, Assistant Manager  
Environmental Projects Office  
Los Alamos Site Office

MG/GR/TG/JE:sm

Cy: Laurie King, EPA Region 6, Dallas, TX  
Steve Yanicak, NMED-DOE-OB, MS M894  
Tom Skibitski, NMED-OB, Santa Fe, NM (date-stamped letter emailed)  
Annette Russell, DOE-LASO (date-stamped letter emailed)  
Pete Maggiore, DOE-LASO, MS A316 (date-stamped letter emailed)  
David Rhodes, DOE-LASO, MS A316 (date-stamped letter emailed)  
Allan Chaloupka, EP-TA-21, MS C348 (date-stamped letter emailed)  
Andy Baumer, EP-TA-54, MS J910 (date-stamped letter emailed)  
Craig Douglass, EP-CAP, MS M992 (date-stamped letter emailed)  
Dave McInroy, EP-CAP, MS M992 (date-stamped letter emailed)  
Tori George, EP, MS M991 (date-stamped letter emailed)  
Bruce Schappell, EP, MS M991 (date-stamped letter emailed)  
Dan Cox, EP, MS M991 (date-stamped letter emailed)  
Michael J. Graham, ADEP, MS M991 (date-stamped letter emailed)  
William Alexander, EP-BPS, MS M992 (date-stamped letter emailed)  
RPF, MS M707 (electronic copy)  
Public Reading Room, MS M992 (hard copy)

**Attachment 1**  
**Submittal Dates and Deadlines Affected by Las Conchas Wildfire Force Majeure Event**

<b>Deliverable</b>	<b>Original Submittal Date</b>	<b>Revised Submittal Date/Deadline</b>	<b>Rationale for Revised Date</b>
Summary of New Los Alamos National Laboratory Groundwater Data Loaded in May 2011	June 29, 2011	Submitted on July 8, 2011	Laboratory closure delayed document preparation.
Progress Report for Material Disposal Area B, 3rd Quarter FY2011	June 30, 2011	Submitted on July 8, 2011	Laboratory closure delayed document preparation.
Phase III Investigation Report for Material Disposal Area C	June 30, 2011	Submitted on July 15, 2011	Laboratory closure delayed document preparation.
Response to Notice of Disapproval and Revised Investigation Report for Ancho, Chaquehui, and Indio Canyons	June 30, 2011	Submitted on July 8, 2011	Laboratory closure delayed document preparation.
Work Plan for Redevelopment and Conversion of R-5, R 7, R-8, and R-9i	July 1, 2011	Submitted on July 15, 2011	Laboratory closure delayed document preparation.
Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area V	July 2, 2011	Submitted on July 7, 2011	Laboratory closure delayed document preparation.
Completion Report for Well R-63	July 9, 2011	Submitted on July 15, 2011	Laboratory closure delayed document preparation.
Well R-64 NMED Complete	July 15, 2011	July 11, 2011	No impact.
Work Plan Proposing a Vapor Monitoring Wells and Moisture Wells at Material Disposal Area T	July 15, 2011	August 1, 2011	Laboratory closure delayed document preparation. (Day for day)
Periodic Monitoring Report for Vapor Sampling Activities at Material Disposal Area L, Quarter 2 FY2011	July 27, 2011	August 5, 2011	Laboratory closure and recovery efforts delayed work on document. However, work on this document resumed early, only 7-day force majeure impact.
2011 Interim Facility-Wide Groundwater Monitoring Plan	July 29, 2011	August 15, 2011	Laboratory closure and recovery efforts delayed work on document (day for day).
Report of Results of TA-16 Westbay Study	July 29, 2011	August 15, 2011	Laboratory closure and recovery efforts delayed work on document (day for day).
Summary of New Los Alamos National Laboratory Groundwater Data Loaded in June 2011	July 29, 2011	No change	n/a*
Periodic Monitoring Report for Vapor Sampling Activities at Material Disposal Area T, July 2011	July 30, 2011	No change	n/a
Response to Approval with Modifications for SWMU 01-001(f) Supplemental Interim Measure Report	July 31, 2011	August 15, 2011	Laboratory closure and recovery efforts delayed work on document (day for day).

<b>Deliverable</b>	<b>Original Submittal Date</b>	<b>Revised Submittal Date/Deadline</b>	<b>Rationale for Revised Date</b>
Response to Notice of Disapproval and Revised Phase II Investigation Report for Middle Los Alamos Canyon Aggregate Area	August 1, 2011	August 16, 2011	Laboratory closure and recovery efforts delayed work on document (day for day).
Well R-62 NMED Complete	August 19, 2011	September 19, 2011	Laboratory closure and recovery efforts impacted contractor availability, delayed mobilization of drilling equipment, and affected sequencing of drilling work.
Summary of New Los Alamos National Laboratory Groundwater Data Loaded in July 2011	August 29, 2011	No change	n/a
Well SCI-3 NMED Complete	August 30, 2011	September 30, 2011	Drilling schedule impacted by delays in starting well R-62 (cascading schedule impact).
Response to Notice of Disapproval and Revised Corrective Measures Evaluation Report for Material Disposal Area G	August 31, 2011	September 9, 2011	Laboratory closure and recovery efforts delayed work on document. However, work on this document resumed early, only 7-day force majeure impact.
Response to Notice of Disapproval and Revised Corrective Measures Evaluation Report for Material Disposal Area H	August 31, 2011	September 9, 2011	Laboratory closure and recovery efforts delayed work on document. However, work on this document resumed early, only 7-day force majeure impact.
Response to Notice of Disapproval and Revised Corrective Measures Evaluation Report for Material Disposal Area L	August 31, 2011	September 9, 2011	Laboratory closure and recovery efforts delayed work on document. However, work on this document resumed early, only 7-day force majeure impact.
Work Plan for Regional Monitoring Wells at Northeast Corner of Material Disposal Area G	August 31, 2011	September 16, 2011	Laboratory closure and recovery efforts delayed work on document (day for day).
Work Plan for Regional Monitoring Wells (East-Southeast) Material Disposal Area H	August 31, 2011	September 16, 2011	Laboratory closure and recovery efforts delayed work on document (day for day).
Investigation Report for Water Canyon and Cañon de Valle	August 31, 2011	September 30, 2011	Laboratory closure and recovery efforts delayed work on document. Additionally, key project staff were reassigned to fire recovery activities.
2010 Nest Box Monitoring Report for Upper Pajarito Canyon Watershed	August 31, 2011	No change	n/a
Periodic Monitoring Report for Water/Cañon de Valle Watersheds, Quarter 2 FY2011	August 31, 2011	No change	n/a
Periodic Monitoring Report for Mortandad and Sandia Watersheds, Quarter 2 FY2011	August 31, 2011	No change	n/a
Periodic Monitoring Report for Pajarito Watershed, Quarter 2 FY2011	August 31, 2011	No change	n/a

Deliverable	Original Submittal Date	Revised Submittal Date/Deadline	Rationale for Revised Date
Periodic Monitoring Report for Los Alamos and Pueblo Watersheds, Quarter 2 FY2011	August 31, 2011	No change	n/a
Periodic Monitoring Report for Ancho Watershed, Quarter 2 FY2011	August 31, 2011	No change	n/a
Final Design for Grade-Control Structure and Stilling Basin for the Stabilization of Sandia Canyon Wetland	August 31, 2011	September 30, 2011	Laboratory closure and recovery efforts delayed work on document. Additionally, key project staff were reassigned to fire recovery activities.
Work Plan for Pump Test at R-66 (TW-3r)	September 1, 2011	September 19, 2011	Laboratory closure and recovery efforts delayed work on document (day for day).
Investigation Report for Material Disposal Area B	September 9, 2011	September 21, 2011	Laboratory closure and recovery efforts delayed field activities and work on document. However, work on this activity resumed early, only 8-day force majeure impact.
Report on Background Concentrations of Inorganic Chemicals in Unit 4 of the Bandelier Tuff	September 11, 2011	No change	n/a
Annual Updated to 260 Outfall Surface CMI Long-Term Monitoring and Maintenance Plan	September 15, 2011	September 30, 2011	Laboratory closure and recovery efforts delayed work on document (day for day).
Phase II Investigation Work Plan for S-Site Aggregate Area	September 15, 2011	September 30, 2011	Laboratory closure and recovery efforts delayed work on document (day for day).
Investigation Report for Lower Mortandad/Cedro Canyons Aggregate Area	September 23, 2011	October 12, 2011	Laboratory closure and recovery efforts delayed field activities and work on document (day for day).
Summary of New Los Alamos National Laboratory Groundwater Data Loaded in August 2011	September 29, 2011	No change	n/a
Determine if Piezometer Nests Can Obtain Representative Samples (Buckman Well Field Monitoring)	September 30, 2011	October 18, 2011	Laboratory closure and recovery efforts delayed field work (day for day).
Response to Notice of Disapproval and Revised Report on Stormwater Performance Monitoring in the Los Alamos/Pueblo Watershed During 2010	September 30, 2011	No change	n/a
Completion Report for Well R-61	September 30, 2011	No change	n/a
Well R-65 NMED Complete	September 30, 2011	October 30, 2011	Drilling schedule impacted by delays in starting Well SCI-3 (cascading schedule impact).
DP Site Aggregate Area Footprint IR	October 3, 2011	October 19, 2011	Laboratory closure and recovery efforts delayed project activities (day for day).

<b>Deliverable</b>	<b>Original Submittal Date</b>	<b>Revised Submittal Date/Deadline</b>	<b>Rationale for Revised Date</b>
Well R-10i NMED Complete	December 1, 2011	January 11, 2012	Drilling schedule impacted by delays in starting Well R-66 (cascading schedule impact).
TA-16 and Upper Water Canyon Watershed Well Evaluation and Network Recommendation Study Report	December 15, 2011	January 15, 2012	Delay in predecessor activity (Investigation Report for Water Canyon and Cañon de Valle) because of reassignment of project staff to recovery activities (cascading schedule impact).
Plugging and Abandonment of Test Well 3	December 20, 2011	January 20, 2012	Well R-66 must be completed and pump tested before Test Well 3 can be abandoned. Drilling schedule for Well R-66 impacted by delays in starting Well R-65 (cascading schedule impact).
Cañon de Valle Aggregate Area Investigation Report (TA-14)	January 15, 2012	February 15, 2012	Delay in field activities because of Laboratory closure and recovery activities in Cañon de Valle.
Cañon de Valle Aggregate Area Investigation Report (TA-15)	June 15, 2012	July 15, 2012	Delay in field activities because of Laboratory closure and recovery activities in Cañon de Valle.
Twomile Canyon Aggregate Area Investigation Report	August 15, 2012	September 15, 2012	Delay in mobilization of field team because of Laboratory closure and recovery activities in Pajarito watershed.

\*n/a = Not applicable.