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*Date:* March 15, 2008  
*Refer To:* EP2008-0130

James P. Bearzi, 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 Approval with Direction Evaluation of the Suitability of Wells Near Technical Area 16 for Monitoring Contaminant Releases from Consolidated Unit 16-021(c)-99, Revision 1**

Dear Mr. Bearzi:

Enclosed are two hard copies with electronic files of the response to the New Mexico Environment Department's (NMED's) Approval with Direction of "Evaluation of the Suitability of Wells Near Technical Area 16 for Monitoring Contaminant Releases from Consolidated Unit 16-021(c)-99, Revision 1" (hereafter, the Report). This response consists of the following: (1) this letter detailing Los Alamos National Laboratory's (LANL's) and the Department of Energy's (DOE's) response to NMED's comments in its Approval with Direction letter; (2) additional calculations and associated discussion of well-network efficiency and the likelihood of detecting contaminants at CdV-R-37-2 (Attachment 1, which is now also an addendum to the Report); (3) a drilling work plan for CdV-16-3(i) (Attachment 2); and (4) a drilling work plan for CdV-R-15-1 (Attachment 3).

### **Response to Comments**

The responses below address each well and activity proposed in section 6 of the Report.

*R-25 [New wells R-25b and R-25c]*—Two new wells into the intermediate zone at R-25 will be drilled to replace screens 1 and 3 of this well. A drilling work plan for well R-25b (LA-UR-07-3952), which is proposed as an 800-ft well targeting screen 1 at R-25, was submitted to NMED on June 30, 2007, and approved by NMED in a letter dated November 2, 2007. A drilling work plan for R-25c (LA-UR-08-0337), which is proposed as a 1200-ft well targeting screen 3 of R-25, was submitted to NMED in February 2008 and was approved by NMED in a letter dated March 11, 2008.

*CdV-16-2(i)*—Because of its proximity (2000 ft northeast) to *CdV-16-3(i)*, LANL will plug and abandon well *CdV-16-2(i)* following the deepening and installation of *CdV-16-3(i)*. Note that *CdV-16-2(i)* is functional and will continue to be sampled.

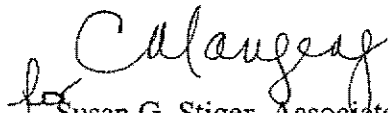
*CdV-16-3(i)*—LANL will extend this borehole to approximately 1700 ft below ground surface (bgs) without using drilling fluids other than potable water and will complete a well in the uppermost water-producing zone. A drilling work plan for this activity is provided as Attachment 2.

*CdV-R-15-1*—LANL will drill a well to approximately 1350 ft bgs between R-18 and *CdV-R-15-3*. A drilling work plan for this activity is provided as Attachment 3.

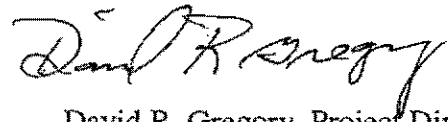
*CdV-R-37-2*—Based on NMED's approval of the Report and on discussions with NMED staff, it appears the rehabilitation of screen 2 of *CdV-R-37-2* is not likely to significantly improve the quality of water samples collected from that screened interval. The two deeper screens of *CdV-R-37-2* are effectively developed and reliable monitoring points of the regional aquifer. Screen 2 provides useful water-level data. LANL proposes to wait on any decision concerning Screen 2 until the drilling effort at *CdV-16-3(i)* and *CdV-R-15-1* have been completed and several sampling rounds have been accomplished. Additional information addressing *CdV-R-37-2*, including additional well network efficiency calculations, is provided in Attachment 1.

If you have any questions, please call Don Hickmott at (505) 667-8753 ([dhickmott@lanl.gov](mailto:dhickmott@lanl.gov)) or Lance Woodworth at (505) 665-5820 ([lwoodworth@doeal.gov](mailto:lwoodworth@doeal.gov)).

Sincerely,

  
Susan G. Stiger, Associate Director  
Environmental Programs  
Los Alamos National Laboratory

Sincerely,

  
David R. Gregory, Project Director  
Environmental Operations  
Los Alamos Site Office

SS/DG/JM/DH:sm

Enclosures: Two hard copies with electronic files:

- (1) Addendum to the Evaluation of the Suitability of Wells Near Technical Area 16 for Monitoring Contaminant Releases from Consolidated Unit 16, Revision 1 (EP2008-0135)
- (2) Drilling work plan for CdV-R-15-1 (EP2008-0113)
- (3) Drilling work plan for CdV-16-3(i) (EP2008-0114)

Cy: (w/enc.)

Don Hickmott, EP-CAP, MS M992  
RPF, MS M707 (with two CDs)  
Public Reading Room, MS M992

Cy: (Letter and CD only)

Laurie King, EPA Region 6, Dallas, TX  
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