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

Subject: Request to Remove the Final Corrective Measures Evaluation Report for RDX, Technical Area 16 from the Appendix B Milestones and Targets Table in the 2016 Consent Order

Dear Mr. Kieling:

This letter proposes removing the final corrective measures evaluation (CME) report for RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine) at Technical Area 16 (TA-16) from the Appendix B Milestones and Targets Table in the 2016 Compliance Order on Consent (the Consent Order) and replacing it with a new deliverable and date as described below. The milestone date for the CME report in Appendix B is September 30, 2017. The U.S. Department of Energy (DOE) is actively pursuing completion of a set of requirements that the New Mexico Environment Department (NMED) established in a notice of disapproval (NOD) letter received in April 2008 for Los Alamos National Laboratory's (the Laboratory's) 2007 Corrective Measures Evaluation Report, Intermediate and Regional Groundwater, Consolidated Unit 16-021(c)-99. In the NOD, NMED required the Laboratory to conduct additional characterization to evaluate the feasibility of the remedial alternatives proposed in the CME and to assess the extent of groundwater contamination in perched-intermediate groundwater and in the regional aquifer.

Since the NOD was issued, the Laboratory has installed several new monitoring wells in perched-intermediate and regional groundwater, including R-25b, R-25c, R-48, R-63, R-63i, CdV-9-1(i), R-47, R-47i, and R-58. These wells have substantially advanced the understanding of the complex nature and extent of the perched-intermediate and regional aquifers. However, data from recently installed CdV-9-1(i) and emergent data from regional aquifer monitoring R-18, which shows steadily increasing RDX concentrations, have revealed potentially important gaps in the characterization of the nature and extent of contamination in perched-intermediate and regional groundwater north of Cañon de Valle. These data suggest the possible presence of an additional

source of high explosives contamination at TA-09, which could potentially be contributing to groundwater contamination in the area.

To address these data gaps, the Laboratory submitted a Groundwater Investigation Work Plan (GIWP) for Consolidated Unit 16-021(c)-99 on September 6, 2016. The objectives of the GIWP are to (1) refine nature and extent of contamination in the regional aquifer, (2) evaluate the potential TA-09 source of high explosives contamination in the regional aquifer, (3) constrain the regional water table north of Cañon de Valle, (4) characterize the northern extent of the contaminated perched-intermediate groundwater zone observed at CdV-9-1(i), and (5) fill gaps for regional aquifer performance monitoring.

The fundamental approach for addressing these objectives is to install and monitor a new regional aquifer well, R-68, north of Cañon de Valle, as described in the GIWP. An additional well, R-69, may also be installed east of TA-09, depending upon information collected from drilling and monitoring well R-68 and other investigation activities related to a potential TA-09 source. NMED approved the GIWP on September 27, 2016, and the Laboratory began drilling R-68 in early January 2017.

Given the NMED-approved schedule for completion of R-68 and the possible need for R-69, key data will not be available in time to submit the CME report by the September 30, 2017, due date currently in Appendix B of the 2016 Consent Order. Additionally, key data from in-progress tracer studies, aquifer tests, and bench-scale testing to evaluate potential remedial alternatives address other requirements in NMED's 2008 NOD and will provide important data for the final CME report.

DOE proposes to use the Annual Planning Process described in Section VIII.C of the 2016 Consent Order to discuss and establish a new target date for the final CME report based upon data from the new monitoring wells and progress with the studies described above. DOE proposes to replace the CME report milestone in Appendix B with a report summarizing hydrology and geochemistry data from R-68. The report will also provide a recommendation as to whether R-69 will be required to address the objectives presented in the GIWP. The proposed milestone date for the R-68 summary report is September 30, 2017.

If you have any questions, please contact Stephani Swickley at (505) 606-1628 (sfuller@lanl.gov) or Cheryl Rodriguez at (505) 665-5330 (cheryl.rodriguez@em.doe.gov).

Sincerely,

Bruce Robinson, Program Director
Environmental Remediation Program
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Sincerely,

David S. Rhodes, Director
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