

SUSANA MARTINEZ Governor JOHN A. SANCHEZ Lieutenant Governor

## NEW MEXICO ENVIRONMENT DEPARTMENT

2905 Rodeo Park Drive East, Building 1 Santa Fe, New Mexico 87505-6303 Phone (505) 476-6000 Fax (505) 476-6030 www.env.nm.gov



RYAN FLYNN Cabinet Secretary BUTCH TONGATE Deputy Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

April 28, 2016

Doug Hintze Manager Environmental Management Los Alamos Field Office 3747 West Jemez Rd, MS A316 Los Alamos, NM 87544 Michael T. Brandt Associate Director Environment, Safety, Health Los Alamos National Laboratory P.O. Box 1663, MS M991 Los Alamos, NM 87545

RE: APPROVAL

COMPLETION REPORT FOR COMBINED REGIONAL AQUIFER WELL R-67 AND CHROMIUM COREHOLE 6 LOS ALAMOS NATIONAL LABORATORY

EPA ID#NM0890010515 HWB-LANL-16-008

Dear Messrs. Hintze and Brandt:

The New Mexico Environment Department (NMED) is in receipt of the United States Department of Energy (DOE) and the Los Alamos National Security, L.L.C.'s (collectively, the Permittees) document entitled *Completion Report for Combined Regional Aquifer Well R-67 and Chromium Corehole* 6 (Report) dated February 2016 and referenced by EP2016-0005. The Report was received on February 18, 2016. NMED has reviewed the Report and hereby issues this approval with the following comment.

NMED notes that post-completion water-quality and contaminant characterization results at R-67, obtained from sampling events on December 3, 2015 and February 3, 2016, indicate that the well may not be producing representative samples. For example, both sampling events produced elevated concentrations of manganese, molybdenum, and uranium at levels ranging from  $33.4-93.2~\mu g/L$ ,  $1.87-2.98~\mu g/L$ , and  $1.41-1.96~\mu g/L$ , respectively, with higher levels occurring during the most recent sampling event. Elevated dissolved iron was detected during the February

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3, 2016, sampling event at  $38.3 \mu g/L$ . Additionally, dissolved oxygen measurements collected at the time of sample collection on December 3, 2015 and February 3, 2016 produced what appears to be abnormally low concentrations at 5.80 mg/L and 4.81 mg/L, respectively. These data collectively suggest that unstable hydrochemical conditions may be present at the R-67 screened interval and that additional re-development (e.g., extended pumping) actions may be warranted with the objective of re-conditioning the well so that representative water-quality and contaminant characterization data can be obtained.

Please contact Michael Dale at (505) 476-3078 if you have questions.

Sincerely,

John E. Kieling

Chief

Hazardous Waste Bureau

cc:

- D. Cobrain, NMED HWB
- N. Dhawan, NMED HWB
- B. Wear, NMED HWB
- M. Dale, NMED HWB
- M. Hunter, NMED GWQB
- S. Lucas Kamat, NMED DOE OB
- S. Yanicak, NMED DOE OB, MS M894
- L. King, EPA 6PD-N
- R. Martinez, San Ildefonso Pueblo
- D. Chavarria, Santa Clara Pueblo
- C. Rodriguez, DOE-EM-LA, MS A316
- J. Buckley, LANL ENV-CP, MS K490
- S. Swickley, LANL ADEP ER Program, MS M992

File: Reading and LANL 2016, R-67, LANL-16-008