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NEW MEXICO ENVIRONMENT DEPARTMENT

Hazardous Waste Bureau

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EP2013-5160

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

August 7, 2013

Pete Maggiore Assistant Manager Environmental Projects Office National Nuclear Security Administration Los Alamos Site Office 3747 West Jemez Road, MS A316 Los Alamos, NM 87544 Jeffrey D. Mousseau Associate Director Environmental Programs Los Alamos National Security, L.L.C. P.O. Box 1663, MS M991 Los Alamos, NM 87545

RE:

REVIEW

DERIVATION AND USE OF RADIONUCLIDE SCREENING ACTION LEVELS, REVISION 2, OCTOBER 2012

EPA ID #NM0890010515

HWB-LANL-13-033

Dear Messrs. Maggiore and Mousseau:

The New Mexico Environment Department (NMED) has received the United States Department of Energy (DOE) and the Los Alamos National Security L.L.C.'s (LANS) (collectively, the Permittees) *Derivation and Use of Radionuclide Screening Action Levels*, dated June 19, 2013 and referenced by EP2013-0129.

NMED notes that the radionuclide screening action levels (SALs) were revised based on selection of a higher target dose limit. In previous versions of SALs, the driving regulatory document that the Permittees followed was the National Nuclear Security Administration Service Center (NNSA SC), which dictated that site-specific radiation dose not exceed 15 millirem per year (mrem/yr). In addition, the use of a 15 mrem/yr dose was demonstrated by the Environmental Protection Agency (EPA) as being equivalent to an approximate increased lifetime cancer risk of 1E-04. The EPA risk range, as established in the 1990 revisions to the

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National Contingency Plan and EPA guidance under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) for cleanups and remedial actions under the Superfund program, is 1E-04 to 1E-06 excess lifetime cancer risk from all radiological and non-radiological carcinogens. However, Revision 2 of the radionuclide SALs follows the guidance outlined in 2011 Department of Energy (DOE) Order 458.1. NMED agrees with the EPA's position that DOE meets the Superfund/EPA risk range for all sites proposed for corrective action, regardless of whether the site is slated for continued laboratory use or released to the public.

DOE Order 458.1, allows a site-specific modeled radiation dose up to 25 mrem/yr for cleanup guidelines and the release of real property. While the use of a 25 mrem/yr dose limit does result in less conservative radiological SALs, the guidance specifically states in Section 4 of the SAL guidance that "if the analysis determines the dose is not [As Low As Reasonably Achievable] ALARA, additional remediation is warranted to lower the dose further or an alternative scenario may be used to restrict activity and land use for that property, if transferred." NMED believes that it is likely that the application of ALARA will ensure adequate evaluation and assessment of risk and provide for flexibility if additional remediation and/or controls are required for sites to be released for public use. The Permittees have proposed (Section 4) that for sites where public access is or will be available and the radiological dose is above 3 mrem/yr and equal to or below 25 mrem/yr, a quantitative ALARA analyses will be conducted.

The proposed SALs are acceptable; however, the Permittees must ensure that cumulative risk from all radiological and non-radiological carcinogenic sources meets both the Superfund/EPA and NMED risk range before a site is proposed for corrective action complete. Please contact Neelam Dhawan at (505) 476-6042, if you have any questions.

Sincerely,

John E. Kieling

Chief

Hazardous Waste Bureau

cc:

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File: 2013 LANL, Radionuclides SALs (LANL 13-033)

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