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**CERTIFIED MAIL - RETURN RECEIPT REQUESTED**

October 24, 2013

Peter Maggiore  
Assistant Manager, Env. Projects Office  
Los Alamos Site Office, DOE  
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Los Alamos, NM 87544

Jeffery D. Mousseau, Associate Director  
Environmental Programs  
Los Alamos National Security, L.L.C.  
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Los Alamos, NM 87545

**RE: STORM WATER PERFORMANCE MONITORING  
IN THE LOS ALAMOS/PUEBLO WATERSHED  
DURING 2012  
LOS ALAMOS NATIONAL LABORATORY  
EPA ID#NM0890010515  
HWB-LANL-13-015**

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) *Storm Water Performance Monitoring in the Los Alamos/Pueblo Watershed*, dated March 29, 2013, and referenced by LA-UR-13-22113/EP2013-0009 (Report). NMED has reviewed the Report and has the following comments.

**NMED Comments:**

1. In Section 5.0 *Conclusions*, the Permittees state that “[a]nalytical data collected from storm water samples in 2012 indicate that for the 9 analytes exceeding NMWQCC water-quality standards (used as comparison vales), only 1, total PCBs, has a recognized source at Laboratory sites and off-site transport.” It is unclear from this summary which locations and analytes exceeded the New Mexico Water Quality Control Commission (NMWQCC) surface water quality

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standards. In future reports the Permittees must provide a table of exceedances including gage station number, analyte, analytical results (either as a value, or as a range of values), and the exceeded water quality standard for that analyte.

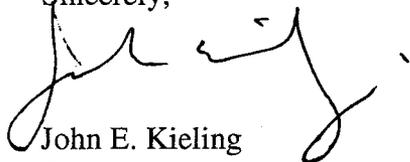
2. In Table 4.2-2 *Maximum Detected Results By Station and Event above Comparison Values in LA/P Storm Water Samples in 2012*, the comparison values for analytes are based on the NMWQCC hardness-based criteria for waters with 30 mg/L CaCO<sub>3</sub> /L hardness. In 2012, the dissolved hardness varied from an average of 23.5 mg/L at CO111041 to 2730 mg/L at E50.1 it is unclear from this Table if the results exceed the NMWQCC hardness-based comparison values since those values are not based on the sample-specific hardness of individual samples. In future reports the Permittees must include a table that compares the results to hardness-dependent comparison values based on filtered hardness values for each specific sample. Refer to Table # in the New Mexico Standards for Interstate and Intrastate Surface Waters (NMWQCC 20.6.4.900) for the hardness-dependent comparison values.
3. In Table 4.2-2 *Maximum Detected Results By Station and Event above Comparison Values in LA/P Storm Water Samples in 2012*, and Table 4.4-1 *Analytical Results Obtained below the SWMU 01-001(f) Drainage* the Permittees reported results for filtered aluminum obtained using methods which no longer correspond with the methods described in NMQCC 20.4.900(I)(1). These methods are also described in the document titled *Procedures for Assessing Water Quality Standards Attainment for the State of New Mexico CWA §303(d) /§305(b) Integrated Report: Assessment Protocol* submitted by the New Mexico Environment Department Surface Water Quality Bureau (SWQB) and dated August 24, 2012; which states that “total recoverable aluminum criteria are based on samples that were filtered to minimize mineral phases. SWQB’s study of this issue concluded that a filter of 10 µm pore size minimizes mineral-phase aluminum without restricting amorphous or colloidal phases”. In the future, the Permittees must filter aluminum samples with a pore size of 10 µm prior to performing an analysis.
4. In Figure 4.3-2 *Relationship of plutonium-239/240 and total PCBs to TSS in the LA/P watershed in 2012*, it appears the Permittees have combined values from multiple gage stations and watershed sources; from this combined data it is unclear if a relationship exists between plutonium-239/240 and total polychlorinated biphenyls (PCBs) to total suspended solids (TSS). In Section 4.3 *Relationship between Discharge, SSC, and Contaminant Concentration*, the Permittees discuss the relationship between plutonium-239/240 and total PCBs and state “[c]orrelations may be better at specific gaging stations because the source areas for runoff and associated sediment may be similar between runoff events, although considerable variability still exists in the LA/P data sets”. NMED agrees, and in future reports the Permittees must also include figures

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showing the relationship of plutonium-239/240 and total PCBs to TSS at each gaging station.

Should you have any questions or comments, please contact Siona Briley at (505) 476-6049 or Ben Wear at (505) 476-6041.

Sincerely,



John E. Kieling  
Chief  
Hazardous Waste Bureau

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File: Reading and LANL 2013 Los Alamos/Pueblo Watershed