April 30, 2010

Patty Wagner
Manager
Sandia Site Office/NNSA
U.S. Department of Energy
P.O. Box 5400, MS 0184
Albuquerque, NM 87185-5400

Dr. Marianne C. Walck
Director
Nuclear Energy & Global Security Technologies
Sandia Corporation
P.O. Box 5800, MS 0701
Albuquerque, NM 87185-0701

RE: TOLUENE DETECTIONS IN GROUNDWATER
SANDIA NATIONAL LABORATORIES MIXED WASTE LANDFILL
EPA ID# NM5890110518, HWB-SNL-MISC

Dear Ms. Wagner and Dr. Walck:

The New Mexico Environment Department (NMED) has recently obtained laboratory analytical results for groundwater samples collected by the NMED’s Department of Energy (DOE) Oversight Bureau from wells located at the Mixed Waste Landfill (MWL) at Sandia National Laboratories (attached). These results indicate that toluene has been detected in groundwater samples from all four of the most recently installed wells at the MWL, including the new background well. Toluene concentrations in the groundwater samples range from 0.37 to 0.97 μg/L, well below the U. S. Environmental Protection Agency Maximum Concentration Level for toluene (1,000 μg/L) and the human health standard set forth by the New Mexico Water Quality Control Commission (750 μg/L). Nevertheless, the NMED expects the U.S. Department of Energy and Sandia Corporation (collectively, the Permittees) to determine the source of toluene. Potential sources include equipment or materials used to drill or construct the new wells, analytical laboratory contamination, or the MWL itself.

Pursuant to Section VI.A of the Sandia National Laboratories Compliance Order on Consent (April 29, 2004), the NMED is notifying the Permittees that further investigation is needed to determine the source of the toluene in groundwater at the MWL. The Permittees are directed to conduct a purging/sampling study of the groundwater and any other necessary studies of
groundwater or other media (including evaluation of blanks and potential analytical laboratory contamination) to determine the source of the toluene in the groundwater at the MWL. The Permittees must report the analytical results, the results of quality control samples, and the results of the study to the NMED no later than July 31, 2010.

If you have any questions regarding this matter, please contact Mr. William Moats of my staff at (505) 222-9551.

Sincerely,

James P. Bearzi
Chief
Hazardous Waste Bureau

BRZ:wpm

cc: J. Kieling, NMED HWB
    W. Moats, NMED HWB
    T. Skibitski, NMED DOE OB
    L. King, EPA Region 6 (5PD-N)
    J. Gould, DOE/NNSA, MS 0184
    J. Cochran, SNL, MS 0719
    File: Reading and SNL 2010