May 24, 2006

Mr. Michael B. Cook, Director
Office of Superfund Remediation and Technology Innovation
M.S. 5201G
1200 Pennsylvania Avenue, N.W.
U.S. Environmental Protection Agency
Washington, D.C. 20460

## SUBJECT: TERMINATION OF THE KERR McGEE CUSHING REFINERY SITE LICENSE

Dear Mr. Cook:

The U.S. Nuclear Regulatory Commission (NRC) terminated Special Nuclear Materials License No. SMN-1999, for the Kerr McGee Corporation Cushing Refinery site (Cushing) located in Cushing, Oklahoma, on May 18, 2006. The termination letter is available in NRC's electronic reading room, at http://www.nrc.gov/reading-rm/adams.html (ML060960069).

NRC notified the U.S. Environmental Protection Agency (EPA) of the decommissioning activities at Cushing in a letter dated October 18, 2005. In accordance with the 2002 Memorandum of Understanding entitled, "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites," the letter provided notification of the existence of a small plume of groundwater contaminated with uranium isotopes at concentrations exceeding the EPA maximum contaminant levels (MCLs). On December 13, 2005, EPA responded to NRC's notification by concluding that, "EPA is satisfied with how NRC addressed the issues raised by NRC for this consultation."

The maximum concentration of total uranium measured in any groundwater sample to date is 102 pCi/l. On October 14, 2005, Kerr-McGee submitted a technical memorandum containing residual source concentrations for each sector (ML052920696). Using the sector-averaged source concentrations, Kerr-McGee conducted a radiological assessment using the RESRAD computer code to estimate post-decommissioning dose to an average member of the critical group, and submitted a technical memorandum, also on October 14, 2005, documenting the results of this analysis (ML05290699). Kerr McGee's dose assessment demonstrates, and the staff concurs, that the post remediation site conditions meet the unrestricted release criteria of 10 CFR Part 20, Subpart E. Thus, no groundwater remediation was required at the site.

NRC conducted a number of on-site inspections of the licensee's actions during the decommissioning process to verify that decommissioning and cleanup were being conducted as described in the decommissioning plan (DP) and to evaluate the quality of this activity. NRC also conducted independent measurements to verify the company's final radiation surveys. NRC has concluded that: (i) The remaining dismantlement has been performed in accordance with the approved DP; (ii) The final status survey and associated documentation demonstrate that the Cushing Refinery Site meets the criteria for decommissioning and release of the site for unrestricted use that are stipulated in Condition 11(N) of SNM-1999, and 10 CFR Part 20,

M. Cook

Subpart E; and (iii) Kerr-McGee has met the Part 70 requirements for forwarding of specific records to NRC prior to license termination.

If you, or your staff, have any questions about this letter, or the license termination activities at the Kerr-McGee Cushing Refinery site, please contact me, at 301-415-7295.

Sincerely,

## /**RA**/

Daniel M. Gillen, Deputy Director Division of Waste Management and Environmental Protection Office of Nuclear Material Safety and Safeguards M. Cook

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