

December 21, 2006

James Woolford, Director  
Office of Superfund Remediation  
and Technology Innovation  
U.S. Environmental Protection Agency  
M.S. 5210G  
1200 Pennsylvania Avenue, NW  
Washington DC 20460

SUBJECT: DECOMMISSIONING OF THE KAISER ALUMINUM AND CHEMICAL  
CORPORATION SITE IN TULSA, OKLAHOMA

Dear Mr. Woolford:

This letter is to notify you of the decommissioning oversight actions that the U.S. Nuclear Regulatory Commission (NRC) has taken, and intends to take, for the Kaiser Aluminum and Chemical Corporation (Kaiser) site in Tulsa, Oklahoma.

On October 9, 2002, NRC and the U.S. Environmental Protection Agency (EPA) entered into a Memorandum of Understanding (MOU) titled, "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites." The MOU provides that, unless an NRC-licensed site exceeds any of three trigger criteria contained in the MOU, EPA agrees to defer to NRC the decision-making for decommissioning without the need for consultation.

For sites with residual radioactivity that trigger the MOU criteria, NRC consults with EPA at two points in the decommissioning process depending on the nature of the residual radioactivity at that point: (Level 1) before NRC's approval of the license termination plan (LTP) or decommissioning plan (DP); and (Level 2) after completion of the final status survey (FSS). NRC's process for consulting with EPA calls for Level 1 consultations to occur early in the decommissioning process; however, NRC has several sites which are in the latter stages of decommissioning. Because these sites are further along in the decommissioning process, the next opportunity to consult with EPA is after the completion of the FSS (Level 2 consultation).

On October 27, 2004, NRC informed EPA that the Kaiser facility had an approved DP that included radionuclide concentrations for soil that exceeded the values in the MOU for thorium-232 (Th-232) and radium-226 (Ra-226). EPA responded to this letter on December 21, 2004, and on February 23, 2005, NRC committed to additional consultation with EPA to resolve any remaining issues, if, following remediation activities, remaining levels of residual radioactivity exceed the MOU values.

This letter is to notify you that the Kaiser site requires a Level 2 consultation because post-remediation residual radioactivity levels exceed the 5 picocuries per gram (pCi/g) MOU criteria for Th-232 in soil. The NRC staff has completed its review of the Kaiser FSS, and has verified that Kaiser met the decommissioning criteria specified in the approved DP, and that some soil remaining on-site at depths greater than 10 feet below the surface, has Th-232 concentrations

up to 31 pCi/g. The soil containing residual radioactivity above the MOU criteria is overlain by a minimum of 10 feet of clean soil containing Th-232 at concentrations that do not exceed environmental background levels. Concentrations of Ra-226 do not exceed the MOU values and radionuclide concentrations in groundwater at the site do not exceed the MOU criteria. Because Kaiser is not a licensee, Kaiser was not obligated to meet the criteria of the License Termination Rule (LTR) in 10 CFR 20, Subpart E. However, Kaiser agreed to remediate the site in accordance with the LTR criteria, which are fully protective of the public health and safety. The estimated dose from remaining residual radioactivity at Kaiser, assuming a resident farmer scenario, is less than 2 millirem per year.

As part of the DP review and approval process, the NRC staff prepared, and issued for public comment, environmental assessments (EAs) to document how remediation at the Kaiser site would ensure protection of the public health and safety, and the environment. The EA for the first phase was published in the *Federal Register* on March 8, 2000, at 65 FR 12283, and the EA for the second phase was published in the *Federal Register* on June 9, 2003, at 68 FR 34422. The EAs concluded that remediation activities would not result in any significant impacts on the human environment and are protective of health. Approval of the DPs was based on the NRC staff's Safety Evaluation Reports (SERs) issued on April 4, 2000 (Phase 1) (ML003715786), and June 8, 2003 (Phase 2) (ML031620343). The SERs concluded that the activities described in the DPs were consistent with NRC regulations and that remediation activities would not be inimical to the common defense and security, or to the health and safety of the public.

Kaiser has completed all decommissioning activities described in the approved DPs, and the site meets the NRC's criteria for unrestricted use, based on an analysis of potential doses to the public from residual radioactivity at the site. As such, the NRC finds that Kaiser has discharged all of its obligations to the NRC with respect to the decommissioning of its Tulsa, Oklahoma site. In accordance with 10 CFR 20.1401(c), NRC will not require Kaiser to perform additional decommissioning activities at the site, unless new information demonstrates that the criteria were not met and residual radioactivity at the site could result in a significant threat to public health and safety.

If EPA believes that unresolved issues remain regarding the Kaiser site, please contact Keith McConnell, Deputy Director, Decommissioning & Uranium Recovery Licensing Directorate, at 301-415-7295. NRC intends to finalize its activities by December 29, 2006.

Sincerely,

**/RA/**

Charles L. Miller, Director  
Office of Federal and State Materials  
and Environmental Management Programs

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