

October 21, 2009

Ms. Elizabeth Southerland, Director
Assessment and Remediation Division
Office of Superfund Remediation
and Technology Innovation
U.S. Environmental Protection Agency
M.S. 5204P
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460

SUBJECT: RESPONSE TO RECOMMENDATIONS REGARDING THE
DECOMMISSIONING OF THE MALLINCKRODT INCORPORATED SITE IN
ST. LOUIS, MISSOURI

Dear Ms. Southerland:

I would like to thank the U.S. Environmental Protection Agency (EPA) for providing its views on the decommissioning of the Mallinckrodt Incorporated (Mallinckrodt) site in St. Louis, Missouri, in your letter dated September 9, 2009. The U.S. Nuclear Regulatory Commission (NRC) consulted with EPA about the Mallinckrodt site because the licensee's proposed derived concentration guideline levels (DCGLs) for certain radionuclides exceed the soil concentration values in Table 1 of the 2002 "Memorandum of Understanding (MOU) between NRC and EPA on Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites."

In your letter you stated:

In EPA's view, if the licensee is unable to meet the Table 1 soil values, NRC should consider the use of a more restricted land use and appropriate institutional controls. In addition, NRC should consider determining if the use of site-specific parameters was justified in modeling at this site.

The NRC staff reviewed the licensee's proposed decommissioning plan (DP) and has concluded that the proposed cleanup levels for soil in the DP do not pose an adverse impact to public health and safety, or the environment. The NRC staff determined that the licensee provided adequate information to justify an industrial scenario as the most likely land use in the foreseeable future. Thus, the NRC staff concluded that an industrial scenario is the appropriate land use for demonstrating compliance with the requirements in Title 10 of the Code of Federal Regulations (CFR), Part 20, Subpart E. It should be noted that the DCGLs were derived from the licensee's commitment to meeting an annual dose limit of 25 millirem (mrem) per year, which is prescribed in 10 CFR 20.1402, "Radiological Criteria for Unrestricted Use." Remediation at the site will likely result in "as-left" residual concentrations well below the approved DCGLs, and therefore, the potential post-remediation dose to a member of the critical group will be some fraction of the annual dose limit of 25 mrem per year. Because we believe these measures are adequately protective, NRC will not adopt EPA's recommendations in your September 9, 2009, letter. Nonetheless, following site remediation activities, NRC staff will review the information in the Final Status Survey (FSS) reports and compare the levels of

residual radioactivity with the MOU trigger levels. If the FSS measurements exceed the trigger levels in the MOU, we will contact your office pursuant to the MOU.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice for Domestic Licensing Proceedings and Issuance of Orders," a copy of this letter will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records component of NRC's Agencywide Documents Access and Management System (ADAMS). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions regarding this letter or the decommissioning activities at the Mallinckrodt site, please contact Dr. Keith I. McConnell, Deputy Director, Decommissioning and Uranium Recovery Licensing Directorate, at (301) 415-7295.

Sincerely,

/RA/

Larry W. Camper, Director
Division of Waste Management
and Environmental Protection
Office of Federal and State Materials
and Environmental Management Programs

cc: Mallinckrodt Service List

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Sincerely,

Larry W. Camper, Director
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Office of Federal and State Materials
and Environmental Management Programs

cc: Mallinckrodt Service List

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