

March 11, 2011

Mr. Thomas K. Spencer  
Radiation Safety Officer  
Sigma-Aldrich Company  
P.O. Box 14508  
St. Louis, MO 63178

SUBJECT: ACCEPTANCE REVIEW OF THE SIGMA-ALDRICH CHEMICAL COMPANY  
LICENSE AMENDMENT REQUEST FOR RELEASE OF THE FORT MIMS SITE  
FOR UNRESTRICTED USE (MAIL CONTROL NO. 574094)

Dear Mr. Spencer:

By letter February 2, 2011, Sigma-Aldrich Company (Sigma) requested that the U.S. Nuclear Regulatory Commission (NRC) amend your Byproduct Material License No. 24-16273-01 to release the Fort Mims site located in Maryland Heights, Missouri for unrestricted use, based on the conclusions provided in the dose assessment you provided by letter dated December 13, 2010, and subsequent letter dated January 25, 2011. As part of our review process, NRC staff performed an acceptance review of your request and associated dose assessment to determine if it is acceptable to begin a detailed technical review. Staff used the acceptance review guidance in NUREG-1757, "Consolidated Decommissioning Guidance," to perform the acceptance review.

The NRC staff has completed its acceptance review and has determined the request needs additional information for the NRC to begin a detailed technical review. The necessary information required includes a description of historical releases made to the identified septic tank previously located at the site and justification that these releases do not present a significant dose pathway outside the bounds of your proposed dose assessment or modification to the proposed dose assessment to consider the source term from the septic tank. Sigma should submit additional information that is available as soon as possible, but no later than 60 days from the date of this letter.

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

T. Spencer

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If you have any questions concerning the attached information, please contact Katie Streit at (630) 829-9621 or at [Katherine.Streit@NRC.gov](mailto:Katherine.Streit@NRC.gov).

Sincerely,

*/RA/*

Christine Lipa, Chief  
Materials Control, ISFSI, and  
Decommissioning Branch  
Division of Nuclear Materials Safety

Docket No.: 030-10716  
License No.: 24-16273-01

T. Spencer

-2-

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Sincerely,

*/RA/*

Christine Lipa, Branch Chief  
Materials Control, ISFSI, and  
Decommissioning Branch  
Division of Nuclear Materials Safety

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