

February 3, 2006

Dr. Charles R. Fay  
Vice Provost for Research Administration  
Cornell University  
314 Day Hall  
Ithaca, NY 14853-2801

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION CONCERNING  
DECOMMISSIONING PLAN FOR THE WARD CENTER FOR NUCLEAR  
STUDIES AT CORNELL UNIVERSITY, TRIGA REACTOR, DOCKET NO.  
50-157, LICENSE R-80 AND THE ZPR, DOCKET NO. 50-97, LICENSE R-89  
(TAC NO. MC1141)

Dear Dr. Fay:

We are reviewing your Revision 1, July 2003 Decommissioning Plan (DP) for the Ward Center for Nuclear Studies at Cornell University for Facility Operating Licenses No. R-80 and R-89 for the Cornell University Reactors. The DP was submitted on August 22, 2003, and changes were proposed in your response dated May 13, 2005, to the Nuclear Regulatory Commission's (NRC) request for additional information (RAI), dated March 28, 2005. During our review of your response, a question has arisen for which we require additional information and clarification. Please provide a response to the enclosed request for additional information within 60 days of the date of this letter. In accordance with 10 CFR 50.30(b), your response must be executed in a signed original under oath or affirmation. Following receipt of the additional information, we will continue our evaluation of your amendment request.

If you have any questions regarding this RAI, please contact me at 301-415-1631.

Sincerely,

**/RAI/**

Daniel E. Hughes, Project Manager  
Research and Test Reactor Branch  
Division of Policy and Rulemaking  
Office of Nuclear Reactor Regulation

Docket Nos. 50-157/97

Enclosure: As stated

cc w/enclosure: See next page

Cornell University

Docket Nos. 50-157/97

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**ACCESSION NO: ML060270501**

**TEMPLATE NO: NRR-106**

OFFICE	PRTA:PM	PRTA:LA	PRTA:BC
NAME	DHughes	EHylton	BThomas
DATE	1/31/2006	1/30/2006	2/2/2006

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REQUEST FOR ADDITIONAL INFORMATION  
CORNELL UNIVERSITY RESEARCH REACTORS  
DOCKET NO. 50-157/97

The RAI was as follows:

DP, Page 26 of 73, Section 2.3.1.1.3.1 Disposition of Decommissioning Equipment and Materials and Section 4.1.2, page 64 of 73 RG 1.86, "Termination of Operating Licenses for Nuclear Reactors," June 1974 described methods and procedures considered acceptable by the Regulatory staff for the termination of operating licenses for nuclear reactors. NUREG 1575, MARSSIM, provides information on planning, conducting, evaluating, and documenting building surface and surface soil final status radiological surveys for demonstrating compliance with dose or risk-based regulations or standards. It is not appropriate to use either document as criteria for determination of clean waste vs. radioactive waste. The appropriate criterion is that no licensed radioactive material may be disposed of as clean waste. For practical purposes, that means no detectable licensed material. The licensee is responsible for determining that waste disposed as clean waste contains no licensed radioactive material. Please propose a program for screening the waste.

For guidance use:

Information Notice No. 88-22, "Disposal of Sludge from Onsite Sewage Treatment Facilities at Nuclear Power Stations" at (<http://www.nrc.gov/reading-rm/doc-collections/gen-comm/info-notices/1988/in88022.html>),

Information Notice No. 85-92, "Surveys of Wastes Before Disposal From Nuclear Reactor Facilities" at (<http://www.nrc.gov/reading-rm/doc-collections/gen-comm/info-notices/1985/in85092.html>), and

IE Circular No. 81-07, "Control of Radioactively Contaminated Material" at (<http://www.nrc.gov/reading-rm/doc-collections/gen-comm/circulars/1981/cr81007.html>)

In your May 13, 2005 response to the above RAI, you proposed the following revision of Section 2.3.1.1.3.1 of the DP:

The equipment, materials, instrumentation, and tools that are used or encountered during the decommissioning may be free released if surveyed and shown not to be radioactive or to have total or removable contamination in excess of the minimum detectable activities associated with the survey methodologies employed. Items that can not be free released will be handled using one of three methods described below;

- The items may be shipped directly for disposal as radioactive waste at a licensed facility
- The items may be shipped for processing at a licensed facility
- The items may be shipped to another licensed facility for storage or use

In each case the term 'licensed facility' refers to a facility holding the appropriate radioactive material disposal, processing, storage, or use license appropriate to the class of waste involved.

As you have stated, the minimum detectable activity is dependent on the survey methodology employed. To ensure that the release of equipment, materials and items for unrestricted use is consistent with NRC policy, please state the guidance documents to which your survey methodologies shall conform.