

February 28, 2012

Dr. Leslie P. Tolbert  
Vice President for Research  
University of Arizona  
P.O. Box 210066  
Tucson, Arizona 85721-0066

SUBJECT: TERMINATION OF FACILITY OPERATING LICENSE NO. R-52 FOR THE  
UNIVERSITY OF ARIZONA RESEARCH REACTOR AT THE NUCLEAR  
REACTOR LABORATORY

Dear Dr. Tolbert:

On May 21, 2009, the Decommissioning Plan (DP) for the University of Arizona Research Reactor (UARR) (ADAMS Accession Number ML091490074) was submitted to the U.S. Nuclear Regulatory Commission (NRC) for review. This DP was supplemented on March 26, 2010 (ML100920089). NRC approved the UARR DP by Amendment No. 20, dated April 15, 2011 (ML110470589).

As required by the DP license amendment, the Final Status Survey (FSS) Plan for the Nuclear Reactor Laboratory (NRL) was submitted on May 25, 2011 (ML11168A059). Although no NRC approval was required, the NRC reviewed the survey plan and determined that it was consistent with the guidance in NUREG-1757, "Consolidated Decommissioning Guidance" and NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual". The University of Arizona submitted a revised FSS Plan on August 18, 2011 (ML11234A164). The NRC reviewed this revision and determined it also to be acceptable.

The FSS report for the NRL was submitted on December 1, 2011 (ML11346A300). That report stated that the survey met the FSS plan and the DP, and demonstrated that the NRL met the requirements for unrestricted release specified in 10 CFR Part 20, Subpart E. The NRC reviewed the FSS report and has determined that the survey was conducted in accordance with the Decommissioning Plan and the FSS Plan. Additionally, the NRC has determined that the survey results in the report comply with the criteria in the NRC-approved decommissioning plan and the release criteria in 10 CFR Part 20, Subpart E for both the UARR and the NRL have been met.

On July 5, 2011, NRC Region IV issued inspection report 050-00113/11-001 for the research reactor at the NRL (ML11187A017). The inspector interviewed licensee staff, observed work in progress, and reviewed selected documents related to the licensee's decommissioning activities. The inspector concluded that the licensee and its contracted work force were conducting decommissioning activities in accordance with the NRC approved decommissioning plan. The inspector also determined that the licensee's final status survey plan was in general agreement with NRC guidance.

At the request of the NRC, the Oak Ridge Institute for Science and Education (ORISE) conducted confirmatory survey activities at the NRL during the week of September 6, 2011. The confirmatory survey activities included visual inspections/assessments, gamma measurements, alpha plus beta measurements, smear sampling, and soil sampling activities. As a result of the confirmatory survey activities, ORISE identified two issues with the FSS activities performed at the NRL. As noted in the enclosed Notice of License Termination, both issues were subsequently resolved satisfactorily. ORISE documented the conduct and results of its survey activities in a report dated November 7, 2011 (ML11319A101) ORISE concluded that the licensee's FSS data adequately and accurately demonstrated that the NRL is below the appropriate screening levels and that the ORISE confirmatory survey activities validate UARR's conclusion that the appropriate guidelines have been met.

The NRC has reviewed UARR's request dated December 1, 2011, to terminate Facility Operating License No. R-52 for the UARR (ML11346A300). Pursuant to 10 CFR 50.82(b)(6), the NRC staff has concluded that the final status survey and associated documentation demonstrate that the decommissioning is complete and the facility and site meet the criteria for license termination in accordance with the NRC approved Decommissioning Plan.

Therefore, on the basis of decommissioning activities carried out by UARR, the NRC's review of UARR's final status survey report, the results of NRC inspections conducted at UARR's facilities, and the results of NRC confirmatory surveys, the NRC concludes that decommissioning is complete and the facilities and site are suitable to be released for unrestricted use. Facility Operating License No. R-52 is hereby terminated.

In connection with the license termination, we are enclosing two copies of Amendment No. 12 to Indemnity Agreement No. E-14. Please sign and return one copy to this office.

Also enclosed is a copy of the Notice of License Termination, which is being sent to the Office of the Federal Register for publication.

L. P Tolbert

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In accordance with 10 CFR 2.390 of the NRC's "Rules of General Applicability," a copy of this letter and the referenced correspondence will be available electronically in the NRC Public Document Room or from the Publicly Available Records (PARS) component of the NRC's document system (ADAMS) at the referenced ML numbers. ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html>.

If you have any questions concerning this matter, please contact John Hickman at (301) 415-3017.

Sincerely,

Keith I. McConnell, Deputy Director  
Decommissioning and Uranium Recovery  
Licensing Directorate  
Division of Waste Management  
and Environmental Protection  
Office of Federal and State Materials and  
Environmental Management Programs

Docket No.: 50-113

Enclosures:

1. Amendment No. 12 to  
Indemnity Agreement No. E-14
2. *Federal Register* Notice

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Sincerely,

/RA/

Keith I. McConnell, Deputy Director  
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University of Arizona

Docket No. 50-113

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