

January 9, 2006

Dr. Julian M. Earls, Director
NASA Glenn Research Center at Lewis Field
21000 Brookpark Road M.S. 3-2
Cleveland, Ohio 44135

SUBJECT: NRC's Staff Review of NASA's Survey Plan and Sampling Results of the Contamination at the Plum Brook Reactor Facility.

Dear Dr. Earls:

This letter provides the findings of the NRC's staff related to your submittal, dated December 19 and 29, 2005, via email, of the survey plan and preliminary results of the sampling of onsite and off-site contamination at the Plum Brook Reactor Facility. The staff notes that NASA has taken a phased approach to the soil sampling, employing the recommendations in the Multi Agency Radiation Survey and Site Investigation Manual (MARSSIM) to design surveys and analyze the survey results. The staff has arranged for an in-process, independent evaluation of the NASA's survey methodology by Oak Ridge Associated Universities, and the results of this evaluation will be shared with NASA once it is completed. At the present time, the NRC understands that sampling and radiological analysis of creek bed soil are on hold due to freezing temperatures.

The staff also notes that, so far, most of the areas sampled are at or only slightly above background radiation levels and show little or no contamination. However, the identified hot spots need further evaluation to determine whether remediation is required. Additionally, biological samples taken from the deer harvest this Fall in nearby areas did not reveal any bio-accumulation of known radio-nuclides from past reactor operations at the site.

Therefore, the staff finds that the decommissioning activities at the Plum Brook Site are conducted in accordance with the NRC approved Decommissioning Plan and NRC regulatory requirements. Furthermore, all available radiological data indicates that there is presently no safety hazards to site personnel or the members of the public in areas adjacent to the contaminated sections of Plum Brook.

Currently, we find your actions to be acceptable and no response to this letter is required.

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

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Should you have any questions concerning this evaluation, please contact Mr. Thomas Dragoun at 610-337-5373 or Mr. Patrick Isaac at 301-415-1019.

Sincerely,

/RA/

Brian Thomas, Branch Chief
Research and Test Reactors Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Docket Nos. 50-30 and 50-185
License Nos. TR-3 and R-93

cc: Please see next page

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Docket Nos. 50-30/185

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