

National Aeronautics and  
Space Administration

**John H. Glenn Research Center**  
**Lewis Field**  
Plum Brook Station  
Sandusky, OH 44870



Reply to Attn of: 0500

U.S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

Subject: NASA PLUM BROOK REACTOR FACILITY DECOMMISSIONING PLAN  
LICENSE AMENDMENT SUPPLEMENTAL INFORMATION (NO  
SIGNIFICANT HAZARDS ANALYSIS)

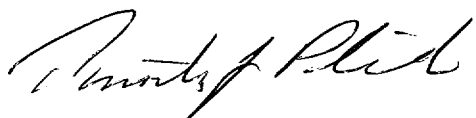
The following is affirmed under 28 USC Section 1746. Pursuant to the National Aeronautics and Space Administration (NASA) submittal of the "Decommissioning Plan For The Plum Brook Reactor Facility" dated January 20, 1999, as revised on March 26, 2001, and November 19, 2001, we are providing the following supplemental information. The original request and revisions did not include a "No Significant Hazards Analysis." On December 13, 2001, via telephone, NRC (Mendonca) requested a supplement to this license amendment submittal, desiring NASA's analyses for significant hazards, per 10 CFR 50.92. The enclosed "No Significant Hazards Analysis" was requested to process the License Amendments for Licenses TR-3 and R-93, Docket Nos. 50-30 and 50-185 at the Plum Brook Reactor Facility (PBRF). This information applies to both licenses.

Per 10 CFR 50.92, NASA presents its review and conclusions on whether the proposed Decommissioning Plan would (1) involve a significant increase in the probability or consequences of an accident previously evaluated; (2) create the possibility of a new or different kind of accident from any accident previously evaluated; or (3) involve a significant reduction in a margin of safety. The rationale that justifies a finding of "No Significant Hazards" is provided in enclosure (1).

Should you have any questions or need additional information, please contact Mr. Timothy J. Polich, NASA Plum Brook Station, 6100 Columbus Avenue, Sandusky, OH 44870, telephone number (419) 621-3314.

A020

The enclosed information is true and correct to the best of my knowledge and belief. I declare under penalty of perjury that the foregoing is true and correct. Executed on the 20<sup>th</sup> day of December, 2001.

A handwritten signature in cursive script, appearing to read "Timothy J. Polich".

Timothy J. Polich  
NASA Decommissioning Project Manager

1 Enclosure

cc: (W/Enclosures)  
Ohio Department of Health  
Bureau of Radiation Protection  
Attn: J. Eric Denison  
35 E. Chestnut Street  
7<sup>th</sup> Floor  
Columbus, OH 43216

U.S. Nuclear Regulatory Commission  
Attn: Mr. Marvin Mendonca  
MS-0-12-D1  
Washington, DC 20555

U.S. Nuclear Regulatory Commission  
Region III  
Attn: Mr. James P. Dwyer  
801 Warrenville Road  
Lilse, IL 60532-4351

SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS  
OF PROPOSED AMENDMENT TO  
LICENSES TR-3 AND R-93, DOCKET NOS. 50-30 AND 50-185

I. SIGNIFICANT HAZARDS CONSIDERATION ANALYSIS

An evaluation was performed on whether or not significant hazards consideration is involved with the approval of the proposed Decommissioning Plan by focusing on the three standards set forth in 10CFR50.92(c). The conclusions to this analysis are presented in the following:

1. Does the proposed approval of the PBRF Decommissioning Plan involve a significant increase in the probability or consequences of an accident previously evaluated?

All nuclear fuel has been removed from the PBRF site. Radioactive inventories at the PBRF are very small compared to those in operating reactors (both power and non-power) and in various kinds of fuel cycle facilities subject to NRC regulation. Analyses indicate that decommissioning activities would not involve a significant increase in the probability or consequences of an accident previously evaluated in the current Final Hazards Summary for the NASA Plum Brook Reactor Facility.

SUMMARY

NASA considers that the approval of the Decommissioning Plan does not involve a significant increase in the probability or consequences of an accident previously evaluated.

2. Does the proposed approval of the PBRF Decommissioning Plan create the possibility of a new or different kind of accident from any accident previously evaluated?

The current Final Hazards Summary for the NASA Plum Brook Reactor Facility evaluated those cause-and-effect accidents related to external events and loss/failure of reactor support systems that would result in the dispersal of fission products and radioactive materials to the environment. Due to the combined absence of fuel at the PBRF site and the non-operational condition of reactor support systems, NASA has determined that decommissioning activities, as described in the Decommissioning Plan, will not create the possibility of a new or different kind of accident from any accident previously evaluated.

## SUMMARY

NASA considers that the approval of the Decommissioning Plan does not create the possibility of a new or different kind of accident from any accident previously evaluated.

### 3. Do the proposed changes involve a significant reduction in a margin of safety?

Current Technical Specifications adequately restrain the scope and nature of decommissioning activities to loose equipment removal and preparations for dismantlement. Approval of the proposed Decommissioning Plan provides for additional controls prior to commencement of dismantlement activities, thereby achieving a greater margin of safety.

## SUMMARY

NASA considers that the approval of the Decommissioning Plan does not involve a significant reduction in a margin of safety.

Based on the above evaluations, NASA concludes that the activities associated with the above described changes present no significant hazards consideration under the standards set forth in 10CFR50.92(c) and, accordingly, a finding by the NRC of no significant hazards consideration is justified.