

Department of Energy

Washington, DC 20585

December 27, 2002

The Honorable John T. Conway Chairman Defense Nuclear Facilities Safety Board 625 Indiana Avenue, N.W. Suite 700 Washington, D.C. 20004

Dear Mr. Chairman:

The purpose of this letter is to respond to your June 5, 2002, letter regarding maintenance and reliable operations at the K Basins at the Hanford site. This also provides an update on the status of sludge removal, removal of 957 metric tons heavy metal from the K-West Basin to the Cold Vacuum Drying Facility (CVDF), and fuel transfer from K-East to K-West Basin.

Your June 5, 2002, letter noted equipment failures and maintenance program weaknesses at the spent nuclear fuel project, including poor work control, inadequate outage planning, and insufficient efforts to improve equipment reliability and availability. The following corrective actions have been taken to address these issues:

- Work control procedures were modified to clarify command and control responsibilities;
- Outage management teams and multi-craft maintenance teams dedicated to specific facilities were established;
- Process improvements were made in fuel washing, handling, and accountability procedures;
- Equipment reliability improvements were made, specifically:
 - ➤ The manipulator stingers were modified to significantly increase their life;
 - ➤ The primary cleaning machine basket was modified to strengthen the area of fuel impact; and
 - ➤ The telescoping stiffback guides were chamfered to prevent arm interferences.

These actions have improved project reliability and equipment availability. MCO production rates have more than doubled from a maximum of nine MCOs per month in 2000 and 2001 to an average of about 17 MCOs per month over the past six months. The Project is working on removing MCO 166 for a total of approximately 852 metric tons or 90 percent of the fuel originally in the K-West Basin. I anticipate that all 957 metric tons of fuel originally in K-West Basin will

be removed by January 30, 2003 (Milestone 118W). These results were achieved in part due to equipment availability has increased from 52 percent at the time of the Board's letter to 81 percent in the most recent six months.

DOE also committed to transferring spent fuel from K-East Basin to K-West Basin by November 30, 2002 (Milestone 117E). On November 25, 2002, the first load of fuel was successfully transferred from K-East to K-West Basin. The K-East fuel that was transferred to K-West Basin was subsequently loaded and shipped out to the CVDF in MCO 162 on December 11, 2002.

While we have made progress and improvements in fuel removal, progress in removing sludge from the basins (Milestone 119 Begin K-Basin Sludge Removal) will not be completed by December 31, 2002. Construction of the K-East Basin sludge and water system has been delayed due to problems associated with vendor fabrication of the system including physical integration with suppliers and uncertainty in the characteristics of the sludge. The site is projecting the sludge operations will begin by May 30, 2003. We will continue to keep you informed on the progress toward sludge removal. We will also brief your staff on the detailed corrective actions that address the issues identified in the attachment to your letter.

If you have any further questions, please call me or Mr. Paul Golan, Chief Operating Officer, Environmental Management at (202-586-0738).

Sincerely,

Lessie Hill Roberson
Assistant Secretary for

Environmental Management

cc: Mark Whitaker, S-3.1 Keith Klein, RL