

December 23, 2003

MEMORANDUM TO: Martin J. Virgilio, Director  
Office of Nuclear Material Safety  
and Safeguards

FROM: Robert Pierson, Director */RA/*  
Division of Fuel Cycle Safety  
and Safeguards  
Office of Nuclear Material Safety  
and Safeguards

SUBJECT: UPDATE ON ACTIONS RESULTING FROM PANEL REPORT -  
DIFFERING PROFESSIONAL VIEW ON CHEMICAL CONSEQUENCES  
AT THE PROPOSED MIXED OXIDE (MOX) FUEL FABRICATION  
FACILITY (NMSS-DPV-2003-01)

In your June 7, 2003, memorandum to me (Actions Resulting From Panel Report - Differing Professional View on Chemical Consequences at the Proposed Mixed Oxide (MOX) Fuel Fabrication Facility (NMSS-DPV-2003-001)) you directed me to conduct a lessons-learned review of the closure of Item CS-5 during the public meeting. The memorandum asked that we determine whether all relevant staff views about the issue were appropriately considered and addressed before the item was closed, and to conduct staff training consistent with the lessons learned. In my September 3, 2003, response I informed you of the lessons-learned review we conducted of the closure of CS-5.

As a result of this independent review we concluded that the closure of CS-5 was done appropriately. I also informed the staff of FCSS of these conclusions. Attachment 1 is a copy of my e-mail to FCSS staff. However, pending conclusions which were still forthcoming concerning the Panels' findings (NMSS-DPV-2002-03), I did not make a determination as to whether CS-5 should be re-opened or a new item established to resolve alleged conflicting information provided in the Revised Construction Application Request.

In your October 14, 2003, memorandum to me (Supplemental Actions Resulting From Panel Report - Differing Professional View on Chemical Consequences at the Proposed Mixed Oxide (MOX) Fuel Fabrication Facility (NMSS-DPV-2003-01)) you concluded that CS-5 should not be re-opened and that a new open item should not be established to request that the applicant provide additional information. However you also said that the NRC should ensure that adequate information had been supplied in the application to support the safety rationale for all chemicals regulated by NRC.

We have reviewed the application and concluded that sufficient information does exist to support the regulatory safety decisions we have made involving chemicals regulated by NRC.

In the course of this review we also examined: 1) whether there was sufficient clarity of the Integrated Safety Analysis (ISA) Summary and radiation protection guidance contained in NUREG-1520; and 2) whether chemical hazards that could result in elevated radiological doses below the 10 CFR 70.61 threshold are effectively addressed or regulated by the NRC. To resolve this issue, I appointed a group within FCSS which was comprised of volunteers solicited at large from the division to make a determination and recommendation as to whether sufficient regulatory guidance and basis were available to assure that chemical hazards which caused radiological doses below 10 CFR 70.61 were addressed.

The group's conclusions and supporting findings are included in the attached memorandum (Attachment 2) from Patrick Castleman to me dated November 7, 2003. I agree with the staff's conclusions and recommendations. It is also my intention to adopt the group's recommendations and clarify NUREG-1520 to improve cross-referencing between Chapters 3, 4, and 8 and revise Chapter 4 of NUREG-1520 to include the NUREG-1718 language. These changes will be included in the interim staff guidance to clarify the review process for ISA's. I also agree that 10 CFR Part 20 and 10 CFR 70.22, as described in Chapters 4 and 8 of NUREG-1520, adequately address the regulatory approach to hazards that could result in radiological consequences below the 10 CFR Part 70.61 performance requirements.

I now consider closed all actions associated with NMSS-DPV-2003-01 which were directed to me for review and consideration.