



UNITED STATES
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

October 14, 2003

MEMORANDUM TO: Robert C. Pierson, Director
Division of Fuel Cycle Safety
and Safeguards, NMSS

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

SUBJECT: 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)

In a memorandum to you dated June 7, 2003, I requested that the Division of Fuel Cycle Safety and Safeguards take certain actions in response to a report, dated May 9, 2003, issued by the ad hoc panel which I chartered to review a Differing Professional View (DPV) on chemical consequences at the proposed Mixed Oxide (MOX) Fuel Fabrication Facility.

There were four panel recommendations. On June 7, 2003, I issued final decisions on Recommendations 2, 3, and 4 of this DPV. However, since this DPV dealt with matters closely related to matters in DPV-NMSS-2002-03, "Modeling Chemical Consequence Effects for Determining Safety Requirements at the Proposed Mixed oxide (MOX) Fuel Fabrication Facility," I deferred a decision and action on Recommendation 1 until I had an opportunity to evaluate and consider the implications of the possible interrelationships between the recommendations of the other DPV panel and Recommendation 1 of this DPV.

Review Panel Recommendation 1 was as follows:

1. Item CS-5 should be reopened or a new open item be established to request that the applicant provide additional information to resolve conflicting information provided in the Revised Construction Application Request (RCAR) and documented in the meeting minutes. The applicant should understand that hazardous chemicals which would affect the safety of licensed material and thus present an increased radiological risk are regulated by the NRC, even when the dose is below the 10 CFR 70.61 performance criteria. The applicant should document the preliminary analyses and data in the RCAR to clearly support its conclusions that no safety controls outside the control room are needed for identified hazardous chemicals that would affect the safety of licensed material and thus present an increased radiological risk (including the chemicals and the resulting doses), and confirm that this category of chemical hazards will be analyzed as part of the Independent Safety Analysis (ISA) as indicated in the RCAR and required by 10 CFR 70.62(c)(1)(iii). This documentation should be reflected in the Safety Evaluation Report.

The Panel Report in DPV-NMSS-2002-03 was issued on September 30, 2003, and a copy of that report and my decision on that DPV have been provided to you separately. I have had an

opportunity to evaluate and consider the recommendations of both DPV panels, and have issued my final decision on Recommendation 1 of NMSS-DPV-2003-01. A copy of that decision is being provided to you separately.

It is my view that there is not a direct link between the recommendations of the two panels. With regard to Recommendation 1, I am not persuaded, by the information presented, that Item CS-5 should be reopened or a new open item be established to request that the applicant provide additional information. However, I believe that NRC should ensure that adequate information has been supplied in the application to support the safety rationale for all chemicals regulated by NRC.

Accordingly, I request that the Division of Fuel Cycle Safety and Safeguards reconfirm that information supplied in the application is adequate to support the applicant's conclusions that no safety controls outside the control room are needed for identified hazardous chemicals that would affect the safety of licensed material, and that the applicant has confirmed that this category of chemical hazards will be analyzed as part of the Independent Safety Analysis (ISA).

Please advise me of the results of your review.

cc: A. Murray, FCSS