

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001



June 7, 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

A handwritten signature in dark ink, appearing to read "M. Virgilio", is written over the printed name of Martin J. Virgilio.

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

Attached is a copy of the 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. The panel found merit in the views expressed in the DPV.

As is more fully set forth in the attachment, the panel recommends that:

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 (SER).
2. NMSS should consider developing guidance for inclusion in the SRP that addresses processing a construction application that does not include the ISA.
3. Actions should be taken to ensure that the applicant and relevant NRC staff understand the "facility conditions which affect the safety of licensed material" provision in 10 CFR 70.64(a)(5) as well as "Facility hazards that could affect the safety of licensed materials and thus present an increased radiological risk" provision in Section 70.62(c)(1)(iii).

The panel stated the view that distribution of the March 10, 2003, memorandum from Robert C. Pierson, Director, Division of Fuel Cycle Safety and Safeguards, NMSS,

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through Martin J. Virgilio, Director, NMSS, to Carl J. Paperiello, Deputy Executive Director for Materials, Research and State Programs, titled "Regulatory Authority over Chemical Hazards at Fuel Cycle Facilities," and applicable Federal Register Notice sections, could be an efficient method to accomplish this recommendation.

4. NMSS management should determine why Item CS-5 was closed during the public meeting when the technical reviewer continued to have questions about the issue.

I have reviewed the DPV and the findings and recommendations of the review panel, and I agree with Panel Recommendations 3 and 4. With regard to Recommendation 1, since this DPV deals 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 am deferring a decision and action on this recommendation until I have had an opportunity to evaluate and consider the implications of the possible interrelationships between the recommendations of the other DPV panel and this recommendation. With regard to Recommendation 2, although I recognize that processing a construction application that does not include the ISA could benefit from guidance, I decline to adopt and implement Recommendation 2 at this time because the resources required to develop an SRP would be substantial and, since no other such facility application is expected to be submitted for the foreseeable future, little or no benefit would be derived from its development. Should an occasion arise in the future in which a construction application is to be processed that does not include the ISA, then appropriate staff training would be conducted. You have separately been provided with a copy of my final decision on this DPV.

Accordingly, I request that the Division of Fuel Cycle Safety and Safeguards take the following actions:

1. Distribute the March 10, 2003, memorandum from Robert C. Pierson, Director, Division of Fuel Cycle Safety and Safeguards, NMSS, through Martin J. Virgilio, Director, NMSS, to Carl J. Paperiello, Deputy Executive Director for Materials, Research and State Programs, titled "Regulatory Authority over Chemical Hazards at Fuel Cycle Facilities," and applicable Federal Register Notice sections to the appropriate staff. This should be completed by July 8, 2003.
2. Conduct a lessons-learned review of the closure of Item CS-5 during the public meeting to determine whether all relevant staff views about the issue were appropriately considered and addressed before the item was closed, and conduct staff training consistent with the lessons learned. Please advise me of the results of that review. This should be completed by September 5, 2003.

Attachment: DPV Panel Report dated May 9, 2003

cc: A. Murray, FCSS

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DISTRIBUTION:

R. O'Connell

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