



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

October 28, 2022

MEMORANDUM TO: Hruta Virkar,
Assistant Inspector General for Audits
Office of the Inspector General

FROM: John W. Lubinski
Director, Office of Nuclear Material Safety
and Safeguards

A handwritten signature in blue ink, appearing to be "J. Lubinski", is written over the printed name of John W. Lubinski.

Signed by Lubinski, John
on 10/28/22

SUBJECT: STATUS OF RECOMMENDATIONS FOR THE AUDIT OF THE
U.S. NUCLEAR REGULATORY COMMISSION MATERIAL CONTROL
AND ACCOUNTING INSPECTION PROGRAM FOR SPECIAL
NUCLEAR MATERIAL (OIG-21-A-04)

The purpose of this memorandum is to provide the Office of the Inspector General (OIG) with a status update on the recommendations in OIG-21-A-04, "Audit of the NRC's Material Control and Accounting Inspection Program for Special Nuclear Material," dated March 9, 2021 (Agencywide Documents Access and Management System Accession No. ML21068A356).

Enclosure:
As stated

CONTACT: James Rubenstone, NMSS/DFM
301-415-7231

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REGULATORY COMMISSION MATERIAL CONTROL AND ACCOUNTING
INSPECTION PROGRAM FOR SPECIAL NUCLEAR MATERIAL (OIG-21-A-04),
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OFFICIAL AGENCY RECORD

**STATUS OF RECOMMENDATIONS FOR THE AUDIT OF THE U.S. NUCLEAR
REGULATORY COMMISSION MATERIAL CONTROL AND ACCOUNTING INSPECTION
PROGRAM FOR SPECIAL NUCLEAR MATERIAL (OIG-21-A-04)**

Status of Recommendations

<u>Recommendation 1:</u>	Develop and implement enhancements to the existing material control & accounting (MC&A) communications process to sustain recurring communications between headquarters Material Control and Accounting Branch (MCAB) and Region II Division of Fuel Facilities Inspection (DFFI).
Agency Response	<p>The OIG response to our May 25, 2022, status update noted that this recommendation will remain open until IMC 1247 revision is complete. The MC&A Community of Practice group holds periodic meetings on topics such as the results from recent MC&A inspections, upcoming inspections, and expected new fuel facility license applications and amendments. Additional communication and collaboration between DFFI and MCAB continue in the development of MC&A inspection procedures for Category II facilities, which will be needed when current Category II applications are approved and the facilities begin operations. These ongoing activities help to further promote and sustain communications between headquarters MCAB and Region II DFFI staff. Staff from the Division of Fuel Management (DFM) and DFFI has also completed the current revision to Inspection Manual Chapter (IMC) 1247, Appendix C5, "Fuel Facility Material Control and Accounting Inspector Technical Proficiency Training and Qualification Journal." The IMC 1247 revision is final and awaiting formatting and publication by the Office of Nuclear Reactor Regulation (NRR) in accordance with IMC 0040, "Preparing, Revising, and Issuing Documents for the NRC Inspection Manual."</p> <p>Based on these enhancements in communications and completion of the revision to IMC 1247, Appendix C5, staff actions for this recommendation are complete.</p> <p>Point of Contact: James Rubenstone, NMSS/DFM/MCAB (301) 415-7231</p>
<u>Recommendation 2:</u>	Develop and implement a strategy to get staff qualified for MC&A in a timely fashion.

Enclosure

Agency Response

As noted in the response to Recommendation 1, DFM and DFFI staff completed the revision to IMC 1247, Appendix C5, the MC&A Inspector Training and Qualification Journal. The IMC revision is final and awaiting formatting and publication by NRR in accordance with IMC 0040. This revision allows inspector candidates to complete equivalent material if specific courses from the U.S. Department of Energy (DOE) National Training Center (NTC) are not available.

The DOE NTC has recently restarted offering key courses for U.S. Nuclear Regulatory Commission staff. These courses were not offered or had limited access over the past few years, due to pandemic constraints. In September, one DFFI inspector training for MC&A completed MCA-110, "Basics of Nuclear Material Accountability," one of the required courses, and the other inspectors in training will attend the next offering. The staff member also completed a supplemental course at the NTC, MCA-113, "Inventory Difference Accounting." The NTC will offer the other required and supplemental courses over the coming months, including NMC-110, "Intermediate Statistics Application" (previously MCA-130, "Statistical Concepts in Nuclear Material Control and Accountability"); MCA-110, "Basics of Nuclear Material Accountability"; MCA-120, "Basics of Nuclear Material Control"; MCA-260, "Physical Inventory for NMC&A"; "Statistical Concepts in Nuclear Safeguards"; and "Fundamentals of Non-Destructive Assay (NDA)." DFFI has also scheduled inspectors in training to accompany qualified MC&A inspectors on MC&A inspections.

The staff developed a plan that allows the inspectors in training to gain the specific knowledge and skills needed for qualification while the NTC classes were not available. The plan calls for training through (1) completing online curricula from university programs, (2) conducting focused discussions with MC&A subject matter experts in the Office of Nuclear Material Safety and Safeguards (NMSS), (3) accompanying current experienced and qualified MC&A inspectors on inspections, and (4) completing refresher and supplemental training from the NTC as these become available. This plan will be held in reserve in case the NTC courses cannot be completed in a timely manner.

Based on completion of the revision to IMC 1247, Appendix C5, and reengagement with the DOE NTC courses, staff actions for this recommendation are complete.

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Recommendation 3:

Review and update the MC&A inspector qualification program guidance to include a strategy to address emergent MC&A inspection program needs.

Agency Response

As stated in the response to Recommendation 1, the staff completed the revision to IMC 1247, Appendix C5, the MC&A Inspector Training and Qualification Journal. The IMC 1247 revision is final and awaiting formatting and publication by NRR in accordance with IMC 0040. This revision allows inspector candidates to complete equivalent material if specific courses from the DOE NTC are not available.

As noted in the staff response dated May 25, 2022 (Agencywide Documents Access and Management System Accession No. ML22140A166), the staff's risk-informing of the fuel cycle inspection process, through implementation of the Smarter Inspection Program for fuel cycle facilities, resulted in changing the frequency of MC&A inspections from annual to biennial for Category III fuel facilities (four of the current six facilities). The current staff of inspectors is sufficient to cover the needs for all of the existing fuel cycle facilities. In addition, two new planned facilities, for gas centrifuge enrichment and medical isotope production, have experienced delays and are not expected to begin operations until calendar year 2023 at the earliest. As described in the response to Recommendation 2, the staff now has access to the DOE NTC course offerings, which provides a means to complete the qualification of the three additional inspectors so that MC&A inspection needs for all current and expected facilities are met. Together, the revision of IMC 1247, Appendix C5, to allow alternatives to DOE NTC courses and the alternative training plan developed by the staff if those courses again become unavailable provide sufficient flexibility to qualify MC&A inspectors to respond to emergent program needs.

Based on completion of the revision to IMC 1247, Appendix C5, and reengagement with the DOE NTC courses, staff actions for this recommendation are complete.

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