



Department of Energy

Washington, DC 20585

October 24, 2001

Mr. Martin Virgilio
Director
Office of Nuclear Materials
Safety and Safeguards
U.S. Nuclear Regulatory Commission
Mail Stop T8A-23
Washington, DC 20555

Dear Mr. Virgilio:

The Department of Energy (DOE) is conducting a confirmation of its nuclear material inventories at licensee facilities. Information obtained from this inventory review will be used to reconcile data inaccuracies in the Nuclear Materials Management and Safeguards System. These inaccuracies were identified during a recent audit by the Department's Office of Inspector General (IG).

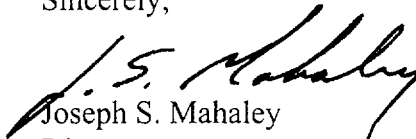
In response to the IG audit, representatives from our offices met on October 18, 2001, to discuss the need to confirm inventories of DOE-owned material, including sealed sources, at domestic licensee facilities. At that meeting, participants from your office agreed to conduct a one-time confirmation of all licensee facilities that possess DOE-owned nuclear material. Without this effort, the DOE will not be able to successfully reconcile its nuclear material inventory. This confirmation has been incorporated into the attached DOE action plan to IG's concerns. In order to complete the activities in this plan, we request that your office provide a schedule as to when confirmations will be completed.



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I would personally like to thank members of your staff for their enthusiastic response in helping DOE to resolve the IG finding. If you have any questions concerning this initiative, Ms. Carol Raeder of my staff may be contacted at (301) 903-5618 or e-mailed at carol.raeder@hq.doe.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "J.S. Mahaley", written over the printed name.

Joseph S. Mahaley
Director
Office of Security and
Emergency Operations

Attachment

cc w/attachment:

D. Crawford, SO-23

D. Wittenburg, IG-34

B. Uzzell, CR-20

**ACTION PLAN FOR ADDRESSING ISSUES IN THE
OFFICE OF INSPECTOR GENERAL (IG) AUDIT DRAFT REPORT, ENTITLED
“ACCOUNTING FOR NUCLEAR MATERIALS PROVIDED TO
NON-DEPARTMENTAL DOMESTIC FACILITIES” (A01CG022)**

Summary

The October 2001, IG Audit Draft Report concludes that the Department of Energy (DOE) cannot fully account for Government-owned nuclear materials at non-DOE domestic facilities, including sealed sources. Inaccuracies found in the Nuclear Materials Management and Safeguards System (NMMSS) data support this conclusion and are detailed in the IG report. The IG reports identifies these NMMSS inaccuracies as: (1) inventory data for facilities that have been decommissioned and no longer exist, (2) negative inventory balances, and (3) incomplete records for sealed source nuclear material on loan or lease to licensees. The Office of Security and Emergency Operations (SO) acknowledges agreement with the IG's conclusions and as stated in the IG report, has undertaken initial corrective actions. The purpose of this action plan is to identify ongoing and/or proposed additional required actions to address each of the three areas of NMMSS inaccuracies and the accompanying five IG recommendations. Included in this plan are schedules for the corrective actions necessary to respond to the IG's findings and recommendations. While minimal cost impacts may be realized, no major cost impacts to SO are anticipated at this time.

The successful implementation of actions in this plan to resolve NMMSS inaccuracies and improve the Department's accounting of Government-owned nuclear materials at non-DOE sites, is heavily dependent upon the coordination of efforts with the Nuclear Regulatory Commission (NRC), NRC licensees and Agreement State Licensees. The NRC has agreed to begin a timely inventory review with all licensee facilities to identify and confirm all Government-owned nuclear material at licensee facilities. Part of this confirmation process will be for each licensee facility to complete a material balance form (DOE/NRC M 742) to reconcile inventory data with NMMSS. This inventory confirmation action is included in the IG's second recommendation along with the need for future periodic confirmations that would include the full participation of the NRC. Since the IG finding and recommendations are so closely interrelated, SO has identified five proposed actions to successfully complete and respond to all of the IG's concerns. However, deliverables with completion dates have been developed to address specific actions.

IG Finding - NMMSS Inaccuracies. The three IG issues to support this finding are:

Issue 1 - Facilities No Longer in Existence. Inventory records in the NMMSS, the national database, indicate that significant quantities of Government-owned special nuclear material were held by at least two NRC licensees despite the fact that these facilities no longer existed.

Issue 2 - Negative Balances. Based upon an IG audit of DOE's Fiscal Year 2000 financial statements, it was noted that NMMSS contained a number of negative balances. Negative balances create issues concerning the accounting accuracy of DOE-owned nuclear material inventories and impact upon the Department's materials management and disposition planning activities. Based upon September 2000 NMMSS data, there are approximately 180 negative balance inventory records concerning 12 different Government-owned nuclear materials at 119 domestic licensee locations.

Issue 3 - Incomplete Records. NMMSS data does not contain information on all sealed sources. These sources contain nuclear material that has been packaged to be environmentally safe and are generally used for testing and calibration purposes. Since the mid-1960's, several instances were cited where information on sealed sources located at educational facilities did not appear in NMMSS.

IG RECOMMENDATIONS - The five IG recommendations are:

RECOMMENDATION 1: Direct that inventory data from the defunct Sealed Source Registry be removed and updated in cooperation with NRC and, where appropriate, merged with NMMSS.

RECOMMENDATION 2: Conduct a comprehensive confirmation of all balances of Government-owned nuclear materials held by domestic licensees and establish a schedule for future periodic confirmations that would include the full participation of the NRC. Resulting information should be reconciled with NMMSS data and necessary correcting entries made. Appropriate performance metrics should be established to control the process.

RECOMMENDATION 3: Develop and implement a process to periodically confirm the continuing need for Government-owned materials at licensees and, if needed, capture this information in NMMSS.

RECOMMENDATION 4: Enhance edit checks in NMMSS to immediately inform both Governmental sponsors and other users that erroneous or anomalous data entries have occurred.

RECOMMENDATION 5: In cooperation with NRC, develop and implement enhanced procedures for the accounting of Government-owned materials.

SO Proposed Actions:

1. DOE consolidate all Government-owned material into one project under the "G" ownership code in NMMSS.
2. NRC to conduct a timely review to confirm all balances of Government-owned nuclear materials, including sealed sources, held by domestic licenses.
3. DOE and NRC reconcile differences between NMMSS generated inventories and physical inventories..
4. DOE to establish enhanced edit checks in NMMSS to prevent these types of errors in the future.
5. DOE and NRC establish enhanced procedures to conduct routine inventory reviews to confirm accuracy of facility inventory information and reconcile with NMMSS.

Deliverables:

- a. DOE will transmit a letter requesting NRC to confirm nuclear material inventories, including sealed sources, at over 200 licensee facilities that have Government-owned nuclear materials by November 5, 2001.
- b. DOE will direct NAC International (NAC), the NMMSS operator, to consolidate all Government-owned nuclear materials at licensees under the "G" ownership code with project numbers to reflect DOE programmatic responsibility by November 16, 2001.
- c. DOE will direct NAC to provide the NRC with survey packages for those facilities that have Government-owned nuclear materials for use in inventory confirmation. As part of the confirmation process, each licensee will be asked to complete a material balance form (DOE/NRC M742) to reconcile the facility's physical inventory with NMMSS data. Schedule to be developed by the NRC.
- d. The NRC will conduct an on-site survey to confirm licensees' inventory of Government-owned nuclear material, including sealed sources. NRC will confirm that the material is still needed by the licensee. Sealed source information will be added to NMMSS. Schedule to be developed by the NRC.
- e. DOE and NRC will reconcile facility inventories with NMMSS. As differences are identified, DOE and NRC will establish metrics to track resolution of erroneous inventories. Schedule to be developed by the DOE/NRC.
- f. DOE will direct NAC to implement enhanced reporting procedures to identify when a facility with greater than 350 grams of fissile material has not reported. NAC will then notify the NMMSS program manager for further action. This procedure will be implemented by December 1, 2001.
- g. DOE will direct NAC to develop, by November 16, 2001, a standard monthly report that identifies those facilities that have negative inventories. NAC will notify the NMMSS program manager for further action.
- h. DOE will evaluate and incorporate new editing checks into the upgraded NMMSS as necessary.