

September 18, 2006

MEMORANDUM TO: Luis A. Reyes
Executive Director for Operations

FROM: Stephen D. Dingbaum **/RA/**
Assistant Inspector General for Audits

SUBJECT: STATUS OF RECOMMENDATIONS: AUDIT OF THE
DEVELOPMENT OF THE NATIONAL SOURCE TRACKING
SYSTEM (OIG-06-A-10)

REFERENCE: DEPUTY EXECUTIVE DIRECTOR FOR MATERIALS,
RESEARCH, STATE AND COMPLIANCE PROGRAMS
MEMORANDA DATED MARCH 30, 2006, AND
JULY 18, 2006

Attached is the Office of the Inspector General (OIG) analysis and status of recommendations as discussed in the agency's responses dated March 30, 2006, and July 18, 2006. Based on these responses, recommendation 1 remains unresolved and recommendation 2 is resolved. Please provide an updated response regarding this memo by November 30, 2006.

If you have questions or concerns, please call me at 415-5915 or Tony Lipuma at 415-5910.

Attachment: As stated

cc: M. Johnson, OEDO
M. Malloy, OEDO
P. Tressler, OEDO

Audit Report
Audit of the Development of the National Source Tracking System
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Status of Recommendations

Recommendation 1: Before the NSTS rulemaking is finalized, conduct a comprehensive regulatory analysis for NSTS that explores other viable options, such as those in the Code of Conduct. The regulatory analysis should include an assessment of expanding materials tracked in NSTS to contain categories 3, 4, and 5; aggregation of sources; and bulk material.

Response Dated
March 30, 2006:

The staff disagrees with the recommendation. The rule on National Source Tracking (NST) is implementing current U.S. and Commission policy, which is to have a national source tracking system for Category 1 and Category 2 sources, which serves as a national registry. That policy is codified in the Energy Policy Act of 2005. The rule on NST is also consistent with the scope of the Code of Conduct, which refers to three categories of radioactive sources, but directs that a national registry include, at a minimum, sources of Categories 1 and 2. At this time the Commission has not committed to the inclusion of Category 3 sources. If the Commission decides to evaluate the inclusion of Category 3 sources, then the staff would conduct an analysis of Category 3 costs and benefits.

The staff is currently preparing a paper for the Commission's consideration on whether to expand the interim database to collect information on the number of Category 3 sources and the licensees that possess them. This could provide part of the information necessary to conduct a regulatory analysis of expanding materials tracked in the NSTS in the future.

The issues of covering sources below the Category 2 level, aggregation, and including unsealed material were considered prior to enactment of the Energy Policy Act. These issues were discussed with decisionmakers from NRC and other agencies in the NSTS Working Groups, Steering Group, and Interagency Coordination committee.

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The issues of aggregation and inclusion of sources below Category 2 were also dealt with at some length and in detail in SECY-05-0092, "Proposed Rule: National Source tracking of Sealed Sources (RIN 3150-AH48)," (ML051100211) as well as in the *Federal Register* Notice (70 FR 43646, July 28, 2005) that accompanied the proposed rule. For example, SECY-05-0092 contains the following language:

Some members of the Working Groups have expressed concern over aggregation. They are concerned that licensees may possess enough Category 3 sources to cause security concerns. There have also been indications that licensees are requesting manufacturers to make sources just below the Category 2 threshold. Aggregation cannot be addressed in an item-level tracking system because the sources would move in and out of the system with changes in ownership; the information would quickly become unreliable. The best way to address the issue is to lower the reporting threshold.

The staff's decision to exclude bulk material is consistent with the guidance in the IAEA Code of Conduct.

We consider this recommendation closed.

Response Dated
July 18, 2006:

My March 30, 2006, memorandum responded to the recommendation to include bulk material and aggregation of sources in the NSTS. On the issue of conducting a comprehensive regulatory analysis that explores expanding NSTS to include smaller sources (Categories 3, 4, and 5), the staff agrees in part with the recommendation, to the extent of analyzing the costs and benefits of including Category 3 sources in the NSTS. In a recent paper, "Tracking or Providing Enhanced Controls for Category 3 Sources" (SECY-06-0094, April 24, 2006), the staff recommended the performance of an inventory and an

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analysis of the sources below Category 2 for the purposes of informing the decision on expanding the NSTS. The Commission approved and expanded upon the staff's recommendation in its staff requirements memorandum dated June 9, 2006, on SECY-06-0094. The staff will perform a one-time data collection on "Category 3.5" sources (those with an activity greater than one-tenth the Category 3 threshold). One purpose of this one-time survey is to collect data necessary to conduct a regulatory analysis of expanding sources tracked in the NSTS down to Category 3. The staff, therefore, agrees with the recommendation to analyze Category 3 sources. However, further analysis of Category 4 and Category 5 sources is not planned. The one-time data collection and proposed rule is expected to be completed by February 2008, and the expansion of the NSTS is planned to be completed within three years.

OIG Analysis:

Although the agency's proposed action is a step in the right direction, overall it does not fully address the intent of OIG's recommendation. OIG recommended that NRC conduct a comprehensive regulatory analysis of a much broader group of materials, including aggregation of sources and bulk material. NRC's proposal is limited to a one-time data collection and analysis of "Category 3.5" sources. Therefore, it appears that only half of Category 3 sources will be considered for inclusion in the National Source Tracking System. Furthermore, NRC's effort will not be completed in a reasonable period of time. NRC's proposed action is less than satisfactory in responding to OIG's recommendation.

Status:

Unresolved

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Recommendation 2: Validate the existing data in the Interim Database to ensure that reliable information is used in the NSTS regulatory analysis.

Response Dated
March 30, 2006:

The staff agrees with the recommendation. Efforts to validate the interim database have focused on the FY 2005 data and the staff has made significant improvements in the process for performing the inventory for FY 2005. The improvements, coupled with the enhanced contact staff made with the licensees during the FY 2005 inventory, provide greater confidence in the accuracy of the data. The FY 2005 inventory data have been thoroughly broken down into individual sources, and grouped back to the major devices or facilities. They were then compared with other data, such as the number of devices or facilities of a particular type to verify their accuracy. Other cross-checks, both external like that one, and internal to the data set (such as cross-referencing source model numbers, isotopes and activities to designed source use versus the licensees' reported business activity) were performed. The cross-checks demonstrated that the FY 2005 data are both highly internally consistent and accurate when compared with other known data measure such as the number of panoramic irradiator facilities or gamma-knife units in use in the U.S.

This analysis has been presented to all levels of management within the Office of Nuclear Material Safety and Safeguards, the Deputy Executive Director for Operations for Materials, Research, State, and Compliance Programs, and to Commissioners McGaffigan, Lyons and the Technical Assistants for Chairman Diaz and Commissioners Merrifield and Jaczko. The discussions that followed provided the Commissioners and senior management a chance to test the analysis against their perceptions of the Category 1 and Category 2 source population. All seem satisfied that the FY 2005 inventory is an accurate representation of the U.S. population of these

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sources. Additionally, the analysis compares favorable with the estimates used to design the NSTS. Based on this, the staff believes the quality of the FY 2005 interim database can serve as a reliable bases for decisionmaking with respect to control of Category 1 and Category 2 sources at NRC and Agreement State licensees. Of course, the interim database reflects only those sources possessed at a particular point in time. The staff believes that the only way to gather more complete and reliable data on Category 1 and Category 2 sources beyond the data in the Interim Inventory is to make licensee reporting mandatory, as the NST rulemaking does.

We consider this recommendation to be closed.

OIG Analysis:

NRC's response meets the basic intent of OIG's recommendation. As such, the recommendation is resolved. OIG will close the recommendation upon NRC presenting to OIG its analysis of the interim database and how the numbers validated in that analysis compare to the estimates used to design the NSTS.

Status:

Resolved.