March 27, 2008

MEMORANDUM TO: Chairman Klein
Commissioner Jaczko
Commissioner Lyons

FROM: Luis A. Reyes ***/RA/***
Executive Director for Operations

SUBJECT: PERIODIC UPDATE ON THE TECHNOLOGICAL DEVELOPMENTS CONCERNING THE NATIONAL SOURCE TRACKING SYSTEM

The purpose of this memo is to inform the Commission of recent technological developments related to the National Source Tracking System (NSTS).

The Staff Requirements Memorandum to SECY-06-0080, "Final Rule: National Source Tracking of Sealed Sources (RIN 3150-AH48)," dated May 25, 2006 (M060525A), included the following direction:

> As part of its interagency activities, the staff should keep abreast of technological developments and the efforts of other federal agencies involved in tracking radioactive materials on the ability to provide for real time tracking of nationally tracked sources in the future. The staff should periodically update the Commission on this aspect of source tracking.

The staff last updated the Commission in a memorandum, dated September 25, 2007 (ML072550579). The technological developments related to tracking radioactive materials are being explored through the Working Group on Vision of Technology (WG) as part of the Interagency Coordinating Committee (ICC) for the NSTS.

The WG, and its parent group, the ICC, have surveyed the tracking and tagging technologies currently in use or under development in the commercial and government sectors and continue to monitor the state of development of the relevant technologies. The Access Procedures Working Group for NSTS, also a subgroup of the ICC, is developing procedures for providing information from NSTS to other Federal agencies.

The WG and Access Control Working Group plan to survey Federal agencies to determine their evolving information needs with respect to radioactive sources. The WG will also consider the costs and benefits of any further development or application of tracking technology. The ICC discussed the survey at its November 30, 2007, meeting. The survey will be sent out in May 2008 and the results will be analyzed by staff and discussed by the two Working Groups and the ICC.

CONTACT: Paul F. Goldberg, FSME/DMSSA
(301) 415-7842

The WG will then examine the capabilities of the various systems and components in use or under development and determine their relevance to NSTS. Among the issues are the risks, costs, and benefits of the systems; the feasibility of tagging or tracking sources; the types of information the various agencies need; and the needs of NRC and other agencies for reporting on a more frequent basis than the transaction reporting now planned for NSTS.

Related to this work on tagging and tracking techniques, the staff has considered a petition from Christine O. Gregoire, Governor, State of Washington, dated January 25, 2007 regarding the use of global positioning technology tracking for vehicles transporting highly radioactive mobile or portable radioactive devices. The staff determined that the issues and concerns raised in the petition merit further consideration and inclusion into the ongoing rulemaking effort on the security requirements for the transportation of Radioactive Material in Quantities of Concern.

Staff is also arranging a briefing by staff of Oak Ridge National Laboratory (ORNL) on ORNL's expansion of its current project for the U.S. Environmental Protection Agency and U.S. Department of Energy (DOE) to examine the feasibility of tracking radioactive isotopes in domestic commerce through radiofrequency identification technology to an international public-private program to track isotopes in transatlantic commerce.

Staff is also exploring with agency partners in the Department of Homeland Security's Nuclear Government Coordinating Council the feasibility of using the Transcom system that DOE now uses to track transuranic waste shipped to the Waste Isolation Pilot Plant.

cc: SECY
OGC
OCA
OPA
CFO

The WG will then examine the capabilities of the various systems and components in use or under development and determine their relevance to NSTS. Among the issues are the risks, costs, and benefits of the systems; the feasibility of tagging or tracking sources; the types of information the various agencies need; and the needs of NRC and other agencies for reporting on a more frequent basis than the transaction reporting now planned for NSTS.

Related to this work on tagging and tracking techniques, the staff has considered a petition from Christine O. Gregoire, Governor, State of Washington, dated January 25, 2007 regarding the use of global positioning technology tracking for vehicles transporting highly radioactive mobile or portable radioactive devices. The staff determined that the issues and concerns raised in the petition merit further consideration and inclusion into the ongoing rulemaking effort on the security requirements for the transportation of Radioactive Material in Quantities of Concern.

Staff is also arranging a briefing by staff of Oak Ridge National Laboratory (ORNL) on ORNL's expansion of its current project for the U.S. Environmental Protection Agency and U.S. Department of Energy (DOE) to examine the feasibility of tracking radioactive isotopes in domestic commerce through radiofrequency identification technology to an international public-private program to track isotopes in transatlantic commerce.

Staff is also exploring with agency partners in the Department of Homeland Security's Nuclear Government Coordinating Council the feasibility of using the Transcom system that DOE now uses to track transuranic waste shipped to the Waste Isolation Pilot Plant.

cc: SECY
OGC
OCA
OPA
CFO

DISTRIBUTION: WITS200600281/EDATS: SECY-2007-0491/FSME200800073
DMSSA r/f RidsFsmeOd RidsSecyCorrespondenceMailCenter
FSME r/f RidsEdoMailCenter CPoland EDO r/f MFreeland, NSIR

ML080640490

OFC	DMSSA/SSSB	DMSSA/SSSB	FSME/DMSSA
NAME	PGoldberg:tyh	AMauer	TReis (RLewis for)
DATE	03/05/08	03/05/08	03/07/08
OFC	TechEd	FSME	EDO
NAME	CPoland	CMiller (GPangburn for)	LAReyes
DATE	03/11/08	03/24/08	03/27/08

OFFICIAL RECORD COPY