

UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
OFFICE OF FEDERAL AND STATE MATERIALS  
AND ENVIRONMENTAL MANAGEMENT PROGRAMS  
WASHINGTON, DC 20555-0001

February 1, 2008

**NRC REGULATORY ISSUE SUMMARY 2008-02  
ACTIONS TO INCREASE THE SECURITY OF  
HIGH ACTIVITY RADIOACTIVE SOURCES**

**ADDRESSEES**

All U.S. Nuclear Regulatory Commission (NRC) Materials and Master Materials Licensees. All Agreement State Radiation Control Program Directors and State Liaison Officers.

**INTENT**

The NRC is issuing this Regulatory Issue Summary (RIS) to inform materials licensees of the latest developments in materials security, which may result in the issuance of new security requirements by the NRC and Agreement States. This RIS requires no specific action, or written response.

**BACKGROUND**

After the 9/11 attacks, the NRC and Agreement States issued additional security requirements to their materials licensees<sup>1</sup>. These requirements help to ensure that the radioactive materials possessed by these licensees are not used for malicious purposes. The NRC continues to work with its Federal and State partners, as well as with the international community, to develop additional requirements that increase the security of materials without discouraging their beneficial use.

**SUMMARY OF ISSUE**

The Energy Policy Act of 2005 established the Radiation Source Protection and Security Task Force and directed it to evaluate, and provide recommendations relating to, the security of radiation sources in the United States from potential terrorist threats, including acts of sabotage, theft, or use of a radiation source in a radiological dispersal device<sup>2</sup>. On August 15, 2006, the

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<sup>1</sup> These requirements, and additional information, can be found at: <http://www.nrc.gov/security/byproduct.html>.

<sup>2</sup> More information on the Task Force and its recommendations can be found at: <http://www.nrc.gov/security/byproduct/enhanced-security.html#recommend>.

Task Force submitted a report to the President and the U.S. Congress. Two subgroups of the Task Force are continuing to review alternatives to radioactive sources and the use of cesium chloride sources in particular. The subgroups expect to report their findings to the Task Force in late 2008. Additional recommendations regarding source security may result from these reviews.

The Energy Policy Act of 2005 also directed that the NRC enter into an arrangement with the National Academy of Sciences to conduct a study of industrial, research, and commercial (including medical) uses of radiation sources<sup>3</sup>. The purpose of the study is to identify uses for which sources can be replaced with sources of lower risk, or with an equivalent process that does not require the use of a radioactive source. The National Academy expects to release its study in February 2008. NRC will promptly review the report and its recommendations and initiate appropriate actions as necessary.

Most recently, as the result of a U.S. Government Accountability Office (GAO) report and subsequent U.S. Senate investigation, the Commission approved the staff's action plan to respond to both bodies' recommendations for addressing security issues associated with the NRC materials program<sup>4</sup>. Also, as a result of the GAO investigation, NRC issued Regulatory Issue Summary 2007-13, *Verification of the Authenticity of Materials Possession Licenses*<sup>5</sup>. RIS 2007-13 emphasized the importance of licensees maintaining situational awareness before and during all radioactive material transfers. NRC has initiated actions and plans to take additional steps to address the issues raised by the GAO and Senate investigations.

Currently, NRC and the Agreement States are working with the Department of Homeland Security (DHS), the Department of Energy (DOE) National Nuclear Security Administration (NNSA), and manufacturers to further enhance the security of dry, self-shielded irradiators containing cesium-137 sources. This effort includes meetings with the manufacturers of these devices to create low cost, easily implemented solutions to increase the physical security of these devices. Some licensees have been provided the details of these enhancements for testing purposes. If effective enhancements are developed, NRC and the Agreement States, in coordination with DHS and NNSA, will work towards enhancing security, as appropriate, of self-shielded irradiators containing cesium-137.

Licensees are reminded that they are responsible for the security of sources and devices containing sealed sources. In particular, as specified by the current requirements, licensees must control access to radioactive materials and develop a prearranged plan with the local law enforcement authorities to respond to an actual or attempted theft of radioactive materials or devices. Licensees should be alert to the rapidly changing requirements and be ready to work with manufacturers, regulators, and other Federal, state and local authorities to improve the security of their sources and devices.

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<sup>3</sup> See the National Academies' website at: <http://www8.nationalacademies.org/cp/projectview.aspx?key=48677>.

<sup>4</sup> See (<http://www.nrc.gov/reading-rm/doc-collections/commission/srm/2007/2007-0147srm.pdf>).

<sup>5</sup> See ([http://adamswebsearch2.nrc.gov/idmws/doccontent.dll?library=PU\\_ADAMS^PBNTAD01&ID=072530434](http://adamswebsearch2.nrc.gov/idmws/doccontent.dll?library=PU_ADAMS^PBNTAD01&ID=072530434)).

**FEDERAL REGISTER NOTIFICATION**

A notice of opportunity for public comment on this RIS was not published in the *Federal Register* because this RIS is informational and does not represent a departure from current regulatory requirements.

**CONGRESSIONAL REVIEW ACT**

This RIS is not a rule as designated by the Congressional Review Act (5 U.S.C. §§ 801-808) and, therefore, is not subject to the Act.

**PAPERWORK REDUCTION ACT STATEMENT**

This RIS does not contain any information collections and, therefore, is not subject to the requirements of the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)

**CONTACT**

This RIS requires no specific action or written response. If you have any questions about this summary, please contact one of the individuals listed below or the appropriate regional office.

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