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

July 18, 2008

NRC REGULATORY ISSUE SUMMARY 2008-17 VOLUNTARY SECURITY ENHANCEMENTS FOR SELF-CONTAINED IRRADIATORS CONTAINING CESIUM CHLORIDE SOURCES

ADDRESSEES

U.S. Nuclear Regulatory Commission (NRC) Materials Licensees Authorized to Possess Self-Contained Irradiators Containing Cesium Chloride (CsCl). All Agreement State Radiation Control Program Directors and State Liaison Officers. Members of the Advisory Committee on the Medical Uses of Isotopes.

INTENT

The NRC is issuing this Regulatory Issue Summary (RIS) as an update to RIS 2008-02, "Actions to Increase the Security of High Activity Sources," dated February 1, 2008, to inform select materials licensees of the latest developments in materials security. This RIS requires no specific action, or written response.

BACKGROUND

Since the fall of 2007 the NRC and Organization of Agreement States, Inc. (OAS) have been coordinating with the Department of Homeland Security's (DHS) Domestic Nuclear Detection Office (DNDO) and the Department of Energy's (DOE) National Nuclear Security Administration (NNSA), regarding the security of self-contained irradiators containing CsCl sources. This effort has included meetings with the manufacturers of these devices to consider the possibilities of low cost, easily implemented solutions to harden these devices against unauthorized access to the source.

SUMMARY OF ISSUE

The federal government has started a voluntary pilot program with the goal of providing physical security enhancements for self-contained irradiators which contain CsCl sources. The NRC supports this voluntary program, and has coordinated with the OAS. The voluntary security enhancements are complementary to the NRC or Agreement State required Increased Controls, and do not replace any current controls. The objective of this initiative is to implement security enhancements that do not affect normal operation, use, maintenance, and servicing of the

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self-contained irradiators. These irradiators are used for a variety of applications in medical research and industrial activities. As the issuing agencies of the affected Sealed Source and Device registrations the NRC and the Agreement States of California and Massachusetts have reviewed the proposed enhancements against the registrations and have determined that the enhancements would not adversely affect safety or performance of the devices. Installation of the physical security enhancements developed by DHS\DNDO and DOE\NNSA for self-contained irradiators will consist of two phases. A pilot program will begin shortly, and will involve a limited number of NRC and Agreement State licensees, who volunteered for installation of the security upgrade.

The intent of this RIS is to make licensees aware of this physical security enhancement program. Irradiator licensees will not bear any of the installation costs for the upgrades associated with the material and labor for the security enhancements. The installation of these security enhancements will be conducted by the manufacturers and distributors of the devices. NRC does not expect that an amendment to your license will be necessary to have the enhancement installed in your licensed devices if you choose to do so. If you have questions regarding your license in this regard, please contact the appropriate NRC Regional contact listed at the bottom of this RIS. Enclosed with this RIS is a document entitled, “Cesium Irradiator Security Enhancements”, which provides additional information about the initiative. It is envisioned that following the pilot, the program will be made available nationwide on a voluntary basis. Future announcements on this program will be disseminated.

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.

RELATED GENERIC COMMUNICATIONS

RIS 2008-02, “Actions to Increase the Security of High Activity Sources.”

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

Specific questions regarding the upgrades can be directed to the DHS\DNDO point of contact in the enclosure for J.L. Shepherd & Associates or CIS-US devices and questions regarding MDS Nordion/Best Theratronics devices can be directed to the DOE\NNSA point of contact in the enclosure.

This RIS requires no specific action or written response. For licensing questions please contact the appropriate regional office listed below. For other NRC related questions, please contact one of the individuals from my office as listed below.

/RA/

Robert J. Lewis, Director
Division of Materials Safety
and State Agreements
Office of Federal and State Materials
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Enclosures:
As Stated

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NAME	MSmith for TRothschild	GMizuno for BJones	RLewis		
DATE	07/03/08	07/03/08	07/18/08		

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Cesium Irradiator Security Enhancements

Purpose
To announce a cooperative program to enhance security of cesium irradiators sponsored by federal and state agencies and cesium irradiator vendors.

Why Cesium Irradiators and Why Now?
Cesium irradiators are used world-wide for vital academic and medical research, medical treatments, and other activities. Because of the continually changing global security environment, federal agencies have performed risk and consequence studies which show that cesium-137 in irradiators pose relatively higher security risks when compared to other forms of radioactive materials. Based on these studies, adding security features to cesium irradiators is prudent. Therefore, a consortium of federal and state agencies and irradiator manufacturers are sponsoring a security enhancement program beginning in fall 2008. The security enhancements consist of adding a set of protection hardware to the irradiators which would not affect normal operation, use, maintenance, and servicing. The security enhancements are consistent with and complementary to the Nuclear Regulatory Commission or Agreement State required Increased Controls, and do not replace any current controls. The objective is to implement security enhancements that minimize impact to the user community.

Costs
Costs for the equipment and installation of these security enhancements will be borne by the federal government as part of its ongoing program to improve security of cesium-137 irradiators. There is no cost to the owner of the cesium irradiator. Access to the irradiator is needed so the security enhancements can be installed, thus the Radiation Safety Officer or designate for the licensees should be available during installation activities by the licensed manufacturer's service provider. Approaches are being explored to minimize disruption. Irradiator downtime is expected to be less than one day.

Voluntary Enhancement Program
This program is an enhancement to and not a replacement of the Nuclear Regulatory Commission or Agreement State required increased controls. This is a voluntary program that the Nuclear Regulatory Commission supports and has been coordinated with the Organization of Agreement States. There are currently no plans for orders or legally binding requirements for those licensees who do not volunteer for these security enhancements.

Implementation and Points of Contact
Installation of security enhancements are planned to begin in the Fall of 2008. Program logistics are currently being developed and will be provided in future announcements. In the meantime, if you have questions please contact:

Cindy Cardwell, OAS, 512-834-6888, cindy.cardwell@dshs.state.tx.us
Robert Lewis, NRC, 301-415-3340, robert.lewis@nrc.gov
John Zabko, DHS, 202-254-7416, john.zabko@dhs.gov
Craig Johnson, NNSA, 202-586-3755, craig.johnson@nnsa.doe.gov

List of Recently Issued Office of Federal and State Material and Environmental Management Programs Generic Communications

Date	GC No.	Subject	Addressees
03/24/08	RIS-2008-09	Notice of Revision to Criteria for Nominating Materials Licensees for Discussion at the Agency Action Review Meeting	All U.S. Nuclear Regulatory Commission materials licensees, master material licensees, Agreement State Radiation Control Program Directors, and State Liaison Officers
05/13/08	RIS-2008-10	Notice Regarding Forthcoming Federal Firearms Background Checks	All U.S. Nuclear Regulatory Commission licensees, certificate holders, and applicants for a license or certificate of compliance who use armed security personnel as part of their physical protection system and security organization. All Radiation Control Program Directors and State Liaison Officers.
05/12/08	RIS-2008-11	Precautions to Protect Children Who May Come in Contact with Patients Released After Therapeutic Administration of Iodine-131	All U.S. Nuclear Regulatory Commission medical-use licensees, master material licensees, Agreement State Radiation Control Program Directors, and State Liaison Officers
05/09/08	RIS-2008-12	Considerations for Extended Interim Storage of Low-level Radioactive Waste by Fuel Cycle and Materials Licensees	All holders of U.S. Nuclear Regulatory Commission fuel cycle and materials licenses. All Radiation Control Program Directors and State Liaison Officers
06/16/08	RIS-2008-13	Status And Plans for Implementation of NRC Regulatory Authority for Certain Naturally Occurring and Accelerator-Produced Radioactive Material	All U.S. Nuclear Regulatory Commission materials licensees, Radiation Control Program Directors, State Liaison Officers, and the NRC's Advisory Committee on the Medical Uses of Isotopes
05/16/08	IN-2008-03	Precautions to Take Before Sharing Sensitive Security-Related Information	All U.S. Nuclear Regulatory Commission licensees who are implementing U.S. Nuclear Regulatory Commission's Order Imposing Increased Controls (IC Order) or implementing IC requirements by license condition; all Agreement State Radiation Control Program Directors and State Liaison Officers

Note: This list contains the six most recently issued generic communications, issued by the Office of Federal and State Materials and Environmental Management Programs (FSME). A full listing of all generic communications may be viewed at the NRC public website at the following address: http://www.nrc.gov/reading-rm/doc-collections/gen-comm/index.html