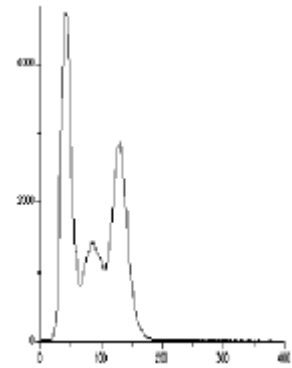




MIDWEST
CHAPTER

THE SPECTRUM

NEWSLETTER OF THE HEALTH PHYSICS
SOCIETY'S
MIDWEST CHAPTER
August 28, 2008
www.midwesthps.org



Fall Meeting, September 24, 2008

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Landauer, Inc.
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Dosimetry Division
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Will They Ever Learn? The Public Education Game

H. W. Dickson, MS, CHP, CIH, CSP
President-Elect, Health Physics Society

We as health physicists have much at stake in the public education arena. In spite of our efforts, the public has been slow to warm to the use of radiation and radioactive material, except perhaps for some medical applications. Recently we are beginning to see a trend toward greater acceptance of nuclear power, probably driven largely by the exorbitant cost of oil and the perception that we are being held hostage to foreign suppliers of same.

Now may be the time to strike with all deliberate haste with maximum use of available resources to educate the public about radiation risks. The specter of terrorist attacks using radiological or nuclear weapons resulted in a great dissemination of knowledge about radiation to emergency response personnel of all ilk around the country. The further prospects of a nuclear power renaissance should produce a thirst for additional knowledge by many other stakeholders.

The Health Physics Society (HPS) is well postured to deliver the credible, scientifically accurate information that the public seeks. Our recent restructuring efforts within the HPS have produced an organization that is more effective, efficient and productive than ever. We have made great strides in improving our responsiveness to educational gaps/needs through several current initiatives such as the Radiation Primer. Several other education initiatives are within our grasp. Allied with other organizations and agencies that share our interests and concerns, we have the opportunity to raise our public education profile even further. Your voluntary participation at both the national and the chapter levels will make a huge difference in just how successful we will be over the next few years.

H. W. Dickson, MS, CHP, CIH, CSP
President-Elect, Health Physics Society

Recently retired from EG&G Technical Services, Inc., Howard Dickson received his MS in physics from the University of Tennessee in 1967. He spent the first part of his career in Oak Ridge, working first at Oak Ridge Associated Universities, then at Oak Ridge National Laboratory in both research and operational health physics, and finally with Bechtel Construction where he became Vice President (VP) of Health Services. His next duty station was with EG&G/REECO at the Nevada Test Site where he was Deputy General Manager and Sr. VP. After a brief stint at Livermore National Lab, Howard completed his career as VP with EG&G supporting their homeland security business line.

Mr. Dickson is certified by the American Board of Health Physics, the Board of Certified Safety Professionals, and the American Board of Industrial Hygiene. Howard has served as a Director and Treasurer of HPS. Howard retains membership in the five Chapters that he joined along his career path – East Tennessee, Lake Mead, Northern California, Baltimore Washington, and Florida Chapters. He and his wife Rita live in Tampa and currently enjoy spending quality time with their 4 children and 2 grandsons.

President's Message

Welcome to a new year for the Chapter. We hope to build upon the success of the Chapter in 2007 – 2008 with a variety of technically enriching and socially-engaging opportunities for our members (and spouses/significant others), including a repeat of the popular Technical Symposium.

The success that the Chapter has experienced over the past few years has been a direct function of the involvement and participation of its members. As the Chapter becomes more successful (hopefully with more members), I suggest that we need to start to focus our involvement and participation outward to the beneficial impact that our profession and our Chapter can have on the public perception of radiation safety and risk.

As an example, the national HPS recently launched a Web-based “Radiation Primer” to address the challenge laid out in the report of Interagency Task Force on Radiation Source Protection and Security, “...that there be a coordinated public education campaign (Federal, State, and industry) to reduce fears of radioactivity” as related to a potential radiological attack by terrorists (www.RadiationAnswers.org).

While we probably will not develop an informational Web-site (besides, it's already been done), there will be other, more mundane, but just as important opportunities to leverage our knowledge and expertise for the greater good. But first, back to the present – we've got a great year planned, and encourage input, feedback, and participation from all of our members. Please feel free to send me an email or pick-up the phone (john.schrage@exeloncorp.com) (630-657-2821).

President-Elect & Program Chair's Message

As described earlier in the Newsletter, our first meeting will be in September hosting the HPS President-Elect Howard Dickson. Other enrichment opportunities will include a second technical dinner meeting sometime in January, followed by a full-day Technical Symposium in March. From a more social perspective (with a little bit of technical enrichment), we will host an informal discussion/cocktail session in early November, and a picnic/technical session in June to close out the year.

Possible ideas for technical topics at the January meeting and the Technical Symposium include Homeland Security/Customs, the Environmental Protection Agency's new Protective Action Guides, and the Nuclear Regulatory Commission's current revision of the Regulatory Guide Series # 8.

As always we welcome any ideas or suggestions for topics and speakers that our Chapter members may have. Please send your suggestions and ideas to Cindy Boggs, Chapter President- Elect. The email address is cboggs@anl.gov, and phone is 630-252-3701.

LEGISLATIVE AND REGULATORY NEWS

Reprinted from the August 2008 Health Physics News with permission from Cynthia G. Jones, PhD
Senior Technical Advisor for Nuclear Safety
U.S. Nuclear Regulatory Commission



The Nuclear Regulatory Commission (NRC) is planning on conducting a public meeting 29-30 September 2008, in Rockville, Maryland, to solicit early and active public input on major issues associated with use of cesium chloride (CsCl) sources currently used by NRC and Agreement State licensees. During this public meeting, there will be five roundtable sessions on the topics of: alternative cesium chloride sources, alternative technologies, phase out and transportation issues, additional enhanced security, and potential future requirements. For each roundtable session, five to seven panel members from the industry will be selected. The goal of the public meeting is to receive broad stakeholder perspectives on each of the five topics.

CsCl sources are used in many applications, most commonly in irradiators, calibrators, and in devices for biological and medical research. Certain radioactive sources have been identified by the International Atomic Energy Agency (IAEA) Code of Conduct on the Safety and Security of Radioactive (Code of Conduct), as sources that may pose a significant risk to individuals, society, and the environment if mishandled or used in a malicious act. Because of the continually challenging global security environment, federal agencies have performed risk and consequence studies which show that additional security features to licensed facilities that use certain radioactive material including CsCl sources are prudent. A recent National Academy of Sciences study has recommended the replacement or elimination of CsCl sources.

The NRC is seeking early public input on the major issues associated with any potential future actions involving CsCl to reduce the risk to individuals, society, and the environment if used in a malicious act. As a first step, the NRC is preparing an Issues Paper, which will soon be published in the Federal Register and describes issues and alternatives related to the overall concerns associated with IAEA Category 1 and 2 CsCl sources¹. The intent of this paper is to foster discussion about these issues and alternatives before any potential future actions by NRC or the Agreement States are initiated. To facilitate and encourage public comments, an email address has been established at cesiumcomments@nrc.gov for electronic receipt of comments and inquiries. More information is also available in the Federal Register, at <http://edocket.access.gpo.gov/2008/pdf/E8-17545.pdf>.

For further information, please contact NRC's John Jankovich, PhD, Office of Federal and State Materials and Environmental Management Programs, telephone 301-415-7904, email: john.jankovich@nrc.gov, or Cynthia Jones, PhD, Office of Nuclear Security and Incident Response, telephone 301-415-0298, email: cynthia.jones@nrc.gov, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001.

1. An IAEA Category 1 ¹³⁷Cs source contains a minimum of 3,000 Ci (100 TBq) and a Category 2 source contains a minimum of 30 Ci (1 TBq). See http://www-pub.iaea.org/MTCD/publications/PDF/Code-2004_web.pdf.

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 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.

RELATED GENERIC COMMUNICATIONS

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

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.

Robert J. Lewis, Director
Division of Materials Safety and State Agreements
Office of Federal and State Materials and
Environmental Management Programs

Enclosures: As Stated

Regional Contacts:

Michelle Beardsley, Region I
(610) 337-6942
Email: Michelle.Beardsley@nrc.gov

Kevin Null, Region III
(630) 829-9854
Email: Kevin.Null@nrc.gov

Roberto Torres, Region IV
(817) 860-8189
E-mail: Robertoj.Torres@nrc.gov

Technical Contacts:

Tomas Herrera, FSME
(301) 415-7138
E-mail: Tomas.Herrera@nrc.gov

John Jankovich, FSME
(301) 415-7904
E-mail: John.Jankovich@nrc.gov

Enclosure 1
RIS 2008-17
Page 1 of 1

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

Fall Meeting

Will they ever learn? The public education game

H. W. Dickson, MS, CHP, CIH, CSP

Date: Wednesday, September 24, 2008	Menu Grilled Steak, Breast of Chicken, Grecian Shrimp, or any combination – surrounded by Field Greens <ul style="list-style-type: none">▪ Traditional Caesar salad▪ Fresh spinach with mushrooms, hard boiled eggs, red onions, & a warm bacon dressing▪ Rosemary red potatoes▪ Seasonal fresh fruit▪ Orzo-Asparagus pasta with fresh mozzarella and diced plum tomatoes▪ Classic tossed pasta primavera▪ Antipasto salad▪ Grilled vegetables▪ Cobb salad▪ Mixed field greens with raspberries, bleu cheese crumbles & tossed walnuts with a raspberry vinaigrette dressing▪ Selection of dessert pastries
Time: 6:00 PM Social Hour 7:00 PM Dinner 7:45 PM Featured Speaker	
Location: Exelon Nuclear Offices 4300 Winfield Road (I-88 at Winfield Road) Warrenville, IL 60555 630-657-2821 or 630-244-8848 for directions	
Cost: \$22 per person for members & spouse; \$25 per person for non-members.	
Reservations: Phone or e-mail your reservation to John Schrage, at (630) 657-2821 or john.schrage@exeloncorp.com by 4 pm Monday September 22nd.	

Midwest Chapter Health Physics Society
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