

**PANORAMIC IRRADIATOR
INDUSTRY WORKSHOP
SAFEGUARDS INFORMATION
FOR IRRADIATOR LICENSEES**

April 7, 2003 Rockville, MD

April 9, 2003 Atlanta GA & Lisle IL

April 10, 2003 Arlington TX & Corona CA

C-16

Office of Nuclear Security and Incident Response

- Director: Roy P. Zimmerman
- Deputy Director: Michael F. Weber

- Provides policy, evaluation and assessment of issues involving security at nuclear facilities

- Agency safeguards and security interface with:
 - Department of Homeland Security,
 - Intelligence and law enforcement communities,
 - Department of Energy (DOE), and other agencies.

- Directs the NRC program for response to incidents

- Incident response interface with the Federal Emergency Management Agency (FEMA) and other Federal agencies.

Division of Nuclear Security

- Director: Glenn M. Tracy
- DD Nuclear Security Operations: C. Haney
 - Threat Assessment
 - Security Oversight
 - Security Performance Evaluations
 - Information Security
 - Classified information
 - **Safeguards Information**

Division of Nuclear Security

- **DD Nuclear Security Policy: J. Shea**
 - Evaluation and assessment of security at nuclear facilities and for nuclear materials
 - Technical support for licensing
 - Review activities to deter and protect against
 - Threats of radiological sabotage
 - Theft & diversion of
 - special nuclear material
 - Radioactive material of Concern

Nuclear Security Policy

- Reactor Security Section
- Fuel Cycle & Special Programs
- Licensee Personnel Security Programs
- Materials, Transportation & Waste Security

Compensatory Measures

- July 02 SRM to begin interactions with Agreement States & Licensee
- Sept. - Meeting with Irradiator licensees
- Oct. - OAS meeting
- Oct. - NRC/OAS/Industry Working Group
- Oct. - Conference call with OAS Board
- Jan. 03 – Orders, ICMs, Implementing Guidance, RIS to Commission

Compensatory Measures

(continued)

- March 12, 2003 Final ICMs for Irradiator Licensees
 - Common Defense and Security Authority
 - Safeguards Information pursuant to section 147 of the AEA. – by Order
 - Safeguards Information protection requirements modified or relaxed to a limited extent to be more appropriate for these types of licensees (Not Reactor Safeguards)

Compensatory Measures

(continued)

- March 17, 2003 – Liberty Shield
- Safeguards Advisory
 - Radionuclides & Quantities of Concern
 - Recommended Actions
 - Two tiers
 - Based on quantity of RAM possessed
 - Facility security
 - Transportation security

Safeguards Information

- **Authority**

The Atomic Energy Act of 1954, as amended (Section 147) grants NRC authority to prohibit the unauthorized disclosure of safeguards information.

Safeguards Information

- **Definition**

Information specifically identifying a licensee's or applicant's detailed security measures (including security plans, procedures, and equipment) for the physical protection of source material or byproduct material in quantities significant to the public health and safety or the common defense and security.

Safeguards Information

- **Modified**

- Establishes modified protection requirements from reactors and fuel cycle facilities.
- Requires the establishment and maintenance of an information protection system for those possessing SGI-M.
- Information protection procedures employed by state and local police forces are deemed to meet these requirements.

Safeguards Information

- **Criminal and Civil Sanctions**

- The Atomic Energy Act provides that **any person**, "whether or not a licensee of the Commission, **who violates any regulations** adopted under this section **shall be subject to the civil monetary penalties** of section 234 of this Act."
- Section 147a of the Act states that **willful violation ...is a felony** subject to criminal penalties in the form of fines or imprisonment, or both.

Safeguards Information

- **Conditions for Access**

- No personnel security clearances required for SGI-M.
- However, access to SGI-M requires both need-to-know as well as a determination concerning the trustworthiness of individuals having access to the information.

Safeguards Information

- **Need-to-Know**

- Determination by a person having responsibility for protecting SGI that a proposed recipient's access to SGI-M is necessary in the performance of official, contractual, or licensee duties of employment.
- The recipient should be made aware that the information is SGI-M and those having access to it are subject to these requirements and criminal and civil sanctions for mishandling the information.

Safeguards Information

- **SGI-M Protection Requirements**

- While in Use**

- Under the control of an authorized individual
- Satisfied if the SGI-M is attended by an authorized individual even though the information is, in fact, not constantly being used

Safeguards Information

- **SGI-M Protection Requirements**

While in Storage

- Stored in a locked file drawer or container
- Knowledge of lock combinations or access to keys protecting SGI-M limited to a minimum number of authorized personnel with "need-to-know"
- Access to lock combinations or keys strictly controlled to prevent disclosure to an unauthorized individual

Safeguards Information

- **Transportation of Documents and Other Matters**

Outside of facility (authorized place of use or storage)

- enclosed in two sealed envelopes or wrappers
- Inner envelope or wrapper contains:
 - name and address of the intended recipient,
 - marked both sides, top and bottom with the words "**Safeguards Information- Modified.**"
- Outer envelope or wrapper addressed to the intended recipient, address of the sender, not bear any markings or indication that the document contains SGI-M.

Safeguards Information

- **Transportation of Documents and Other Matters** (continued)

Outside of facility (authorized place of use or storage)

- Transported by commercial delivery company providing nation-wide overnight service with computer tracking features, US first class, registered, express, or certified mail, or by any individual authorized access

Safeguards Information

- **Transportation of Documents and Other Matters** (continued)

Within a facility

- Transmitted using a single opaque envelop.
- May also be transmitted without single wrapping provided adequate measures are taken to protect against unauthorized disclosure

Safeguards Information

- **Preparation and Marking of Documents**
 - Marked "**Safeguards Information - Modified**"
 - in a conspicuous manner
 - top and bottom of to indicate the presence of protected information
 - Must also contain:
 - (i) the name, title, and organization of the individual authorized to make a SGI-M determination, and who determined the document contains SGI-M;
 - (ii) the date the document was originated or the determination made;
 - (i) an indication that the document contains SGI-M; and
 - (i) an indication that unauthorized disclosure subject to civil and criminal sanctions.

Safeguards Information

- **Preparation and Marking of Documents**
(continued)
- Additional pages marked in a conspicuous fashion at the top and bottom with letters denoting:
"Safeguards Information- Modified."
- Transmittal letters or memoranda which do not contain SGI-M marked to indicate that attachments or enclosures contain SGI-M but transmittal does not (e.g., "When separated from SGI-M enclosure(s), this document is decontrolled").

Safeguards Information

- **Preparation and Marking of Documents** (continued)
 - Each item of correspondence will clearly indicate which contain SGI-M and which do not. Portion marking is not required for physical security and safeguards contingency plans.

 - Exception - documents in possession of contractors and agents of licensees produced more than one year prior to the effective date of the order

 - Such documents need not be marked unless they are removed from file drawers or containers.

 - State and local police force documents in the possession of these agencies need not be marked

Safeguards Information

- **Removal from SGI-M Category**
 - Removed from SGI-M category (decontrolled) only after NRC determines information no longer meets the criteria of SGI-M

 - Licensees have authority to make determinations on specific documents they created which no longer contain SGI-M information

 - Authority to determine document removal exercised only by, or with permission of, the individual (or office) making original determination

Safeguards Information

- **Removal from SGI-M Category**

(continued)

- Indicate name and organization of individual removing document from SGI-M category and date of removal

- Other persons who have the document in their possession should be notified of the downgrading.

Safeguards Information

- **Reproduction and Destruction of Matter Containing SGI-M**

- Reproduced to the minimum extent necessary consistent with need without permission of the originator.
- Destroyed when no longer needed.
 - tearing into small pieces,
 - burning,
 - shredding or
 - any other method precluding reconstruction
 - (piece sizes one half inch or smaller composed of several pages or documents and thoroughly mixed would be considered completely destroyed).

Safeguards Information

- **Use of Computers**

- Processed or produced on computers provided system is self-contained within the licensee's or contractor's facility and require use of entry code/pass word
- SGI-M files labeled "**Safeguards Information- Modified**" and saved to removable media stored in locked file drawer or cabinet
- Specific files containing SGI-M password protected

Safeguards Information

- **Use of Computers** (continued)

- If SGI-M is produced on a typewriter, the ribbon must be removed and stored in the same manner as other SGI-M information
- SGI-M files may be transmitted over a network if the file is encrypted
- (Federal Information Processing Standards (FIPS) 140-1 and 140-2.)
- NIST listing of validated encryption systems at <http://csrc.nist.gov/cryptval/140-1/1401val.htm>

Safeguards Information

- **Telecommunications**

- No transmission by unprotected telecommunications circuits except under emergency conditions
- Routine telephone or radio transmission limited to message formats or codes that do not disclose facility security features or response procedures.
- Similarly, call-ins during transport should not disclose the point of transmission or schedule information.

Safeguards Information

- **Telecommunications** (continued)

- Infrequent or non-repetitive telephone conversations regarding a physical security plan or program are permitted provided discussion is general in nature.
- Individuals should use care when discussing SGI-M at meetings or in the presence of others to insure that the conversation is not overheard by persons not authorized access.
- Transcripts, tapes or minutes of meetings or hearings that contain SGI-M should be marked and protected in accordance with these requirements.

Order Imposing Compensatory Measures & SGI-M

- Panoramic & Underwater Irradiators
- licensees possessing > 10KCi in sealed sources
- CM Implementation complete by 180 days
- Respond in 20 days
 - If unable to comply
 - If compliance is unnecessary in your specific circumstance
 - If the Order causes a violation NRC or AS license
 - Provide justification for seeking relief

Order Imposing Compensatory Measures & SGI-M

- Respond to Order within 20 days
 - If Order cause adverse impacts on safe operations
 - Provide your basis
 - Proposed alternative or schedule to achieve the same objectives
- Submit a schedule for completion within 20 days
- Report when full compliance is achieved

Order Imposing Compensatory Measures & SGI-M

- Notice of intent to treat CMs, & RIS Table as Safeguards Information
- Access determinations by licensee
 - Need-to-know
 - Trustworthiness
- Protection requirements as specified in enclosure

Order Imposing Compensatory Measures & SGI-M - Attachments

1. List of Irradiator licensees (sensitive information – OOU)
2. Compensatory Measures (SGI-M)
3. Regulatory Issue Summary
 - Homeland Security Advisory System
 - Threat Conditions & Specific Actions (SGI-M)
4. Protection Requirements for Safeguards Information- Modified Handling (OUO)

Plan Forward

- Licensees respond to Apr 3, 2003 letter
 - provide initial list of those individuals authorized to receive SGI-M
 - Affirm capability to protect SGI-M
- NRC issues letter of authorization
- NRC issues Orders
- Temporary Instruction for inspection provided to AS for comment
- Licensees respond to Order accordingly
- Inspect for compliance

Plan Forward

- Draft CMs & RIS HSAS Table for other groups of Materials Licensees
- Based on Liberty Shield Advisories
- Authorize access for SGI-M (~2100 Licensees)
- Stakeholder meetings
- Commission approval of final CMs
- Issue Orders

Plan Forward Long-Term

- Continue Vulnerability Assessments (VAs)
- Rulemaking
 - Codify CMs
 - Enhanced protective measures based on VAs
- Continue interactions with DHS, DOE, EPA, FEMA, Customs, DOT
- Continue interactions with IAEA

Questions?

- Is it possible for individuals to communicate directly with the USNRC and other Government Agencies in a secured format?
- If yes, can you provide a minimum specification (Overall Level No. or FIPS Approved Algorithms) which would be required in order to do so?