



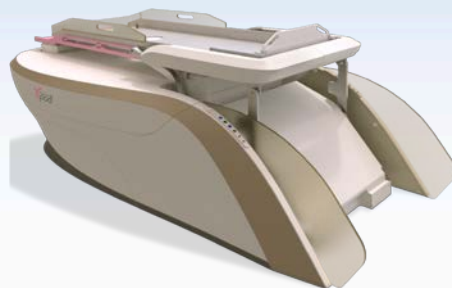
Industry Perspective on Import and Export of (Disused) Sealed Sources


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Beneficial Uses



Must never forget – sealed sources are vital to many aspects of our lives, whether we see it or not



40%
SINGLE-USE 
medical devices sterilized globally using Cobalt-60**



500,000 METRIC TONS
of food products are commercially irradiated each year** 

Shipment of Class 7 is Normal



- Across our members, there are tens of thousands of shipments a year of sealed sources
- Even for Cat 1 and Cat 2, thousands of shipments annually
- Eventually, these will all be classified as disused
- How to ensure safety and security without implementing a cumbersome framework



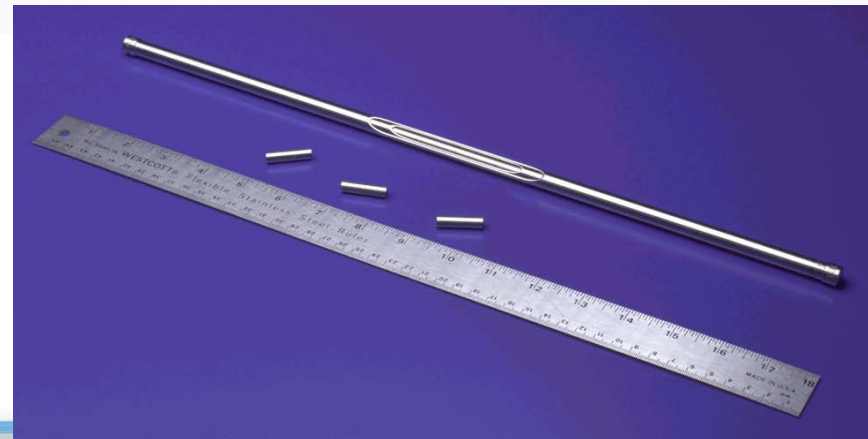
Shipment of Disused Sealed Source



From a transport of import/export perspective, the age of the source is irrelevant

What is important:

- 1) Category is the source
- 2) Condition of source (i.e. leaking)
- 3) Meets the conditions for transport



Shipment of Disused Sealed Source



Shipment of a disused sealed source is identical to a “new” sealed source.

A disused sealed source is a sealed source.

Code of Conduct



CODE OF CONDUCT ON
THE SAFETY AND SECURITY OF
RADIOACTIVE SOURCES

放射源安全和保安行为准则

CODE DE CONDUITE SUR
LA SÛRETÉ ET LA SÉCURITÉ
DES SOURCES RADIOACTIVES

КОДЕКС ПОВЕДЕНИЯ ПО
ОБЕСПЕЧЕНИЮ БЕЗОПАСНОСТИ И
СОХРАННОСТИ РАДИОАКТИВНЫХ
ИСТОЧНИКОВ

CÓDIGO DE CONDUCTA
SOBRE SEGURIDAD TECNOLÓGICA
Y FÍSICA DE LAS FUENTES
RADIATIVAS

مدونة قواعد السلوك بشأن أمن المصادر
المشعة وأمنها



GUIDANCE ON
THE IMPORT AND EXPORT
OF RADIOACTIVE SOURCES

放射源的进口和出口导则

ORIENTATIONS POUR
L'IMPORTATION ET L'EXPORTATION
DE SOURCES RADIOACTIVES

РУКОВОДЯЩИЕ МАТЕРИАЛЫ
ПО ИМПОРТУ И ЭКСПОРТУ
РАДИОАКТИВНЫХ ИСТОЧНИКОВ

DIRECTRICES SOBRE
LA IMPORTACIÓN Y EXPORTACIÓN
DE FUENTES RADIATIVAS

إرشادات بشأن
استيراد المصادر المشعة وتصديرها

2012 EDITION



Sets out standards for
import and export of Cat 1
and 2 sealed sources

- Request for Consent
- Export licenses
- Authorization of recipient
- Importing State has technical, administrative, and regulatory structure

Overall Experiences Code of Conduct Guidance



- Overall experience of implementation across member states has been positive
 - Provides consistency of regulations
 - Provides a framework for movement of sources that, at a high level, makes sense
- Good understanding of process with major regulators.

Import/Export Challenges



- non-Harmonized regulations
- Restrictive licenses
- Engagement with Regulators
 - Need to engage and work with all regulators



Prescriptive Return Locations



- Regulations require return to manufacturer
 - What if manufacturer no longer around?
 - Maybe not cost effective?
 - Maybe to another user for reuse?
- Shipment should be allowed to any authorized licensee.
- Safety/security of is part of the Import/Export license review

Sources as Waste



- Disused sealed sources should not be considered waste
 - Neglects reuse/recycling
- Labeling as waste can restrict movement of sources back to an appropriate licensee for end-of-life management.



Perception vs reality
of disused sealed
sources

Denial of Shipments



- May be connected to labeling as waste
- Misunderstanding on risks of Class 7 shipments
 - Often solved with better dialogue between port/carriers and consignors

Special Form Status



- Often confusion surrounding special form requirements
- Special Form seems to have become a de facto standard for sealed sources
- Special form is not a requirement for shipment or use, unless specified by the package or device approval/design.

There is nothing wrong with being normal

ISO2919 vs SSR-6



- “ISO 2919: Radiological protection — Sealed radioactive sources — General requirements and classification” sets out standards for source testing, classification, and labelling
- SSR-6 sets out requirements for special form testing, but not source labeling
- Special Form may be considered as part of the package containment system – this helps package design/approval, but is not a requirement.

Use of PSN/PSV, RfC



- What is the role of Pre-Shipment Notifications?
 - How do regulators use this information?
 - Should provide additional details of shipment (i.e. S/N, routes, etc)

- What is the role of Request for Consent (RfC)?
 - Does this supersede import permits?
 - Does this mean the regulator has no concerns with the import
 - Does the department performing RfC consult user licenses?
 - Industry takes this to mean the importing regulator has verified the end-user is able to accept the sources (has licenses, appropriate security, etc).

Prescriptive Returns



- Requirements for source returns sometimes come with prescriptive requirements
 - End-user export license might specify disposal
 - End-user undertakings won't allow for reexport – forcing source returns into the general export framework.
 - End-users require a disposal certificate once sources are returned.
- Reuse and recycling are viable end-of-life management options – but may not be known at time of return.
- Return approvals should consider only transfer to an authorized, licensed user and not prescribe usage.

Conclusions



- The import and export of disused sealed sources is covered under the IAEA Code of Conduct
- No different than import/export of new sources
- Import/export should be allowed to any competent end-user and not restrict end-of-life management options

Thank you



Questions?