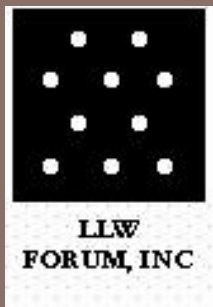


# LOW-LEVEL RADIOACTIVE WASTE FORUM, INC.

## Disused Sources Working Group



## Implementation Phase

# Working Group Members

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- **Kathy Davis** – Southwestern Compact
- **Leo Drozdoff** – Nevada Department of Conservation and Natural Resources
- **Ray Fleming** – Texas Department of State Health Services (**Chair**)
- **Mike Garner** – Northwest Compact
- **Leigh Ing** – Texas Compact
- **Rich Janati** – Pennsylvania Department of Environmental Protection
- **Susan Jenkins** – South Carolina Department of Health and Environmental Control
- **Rusty Lundberg** – Division of Radiation Control, Utah Department of Environmental Quality
- **Mike Mobley** – Southeast Compact
- **Leonard Slosky** – Rocky Mountain Compact

# Working Group Goals

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- ❑ Perform educational outreach to licensees, regulators and other stakeholders on the life-cycle costs of sources and reuse, recycle and disposal opportunities.
- ❑ Reach out to regulatory agencies, private organizations and stakeholders who have the ability to implement the recommendations.
- ❑ Help implement the recommendations.



# Source Disposal is Important

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**No matter how you reach that conclusion sources eventually need to be buried.**



# Reasons for Legal Disposal

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- ❑ Prevent the public from getting possession of potentially dangerous sources.
- ❑ Prevent sources from falling into the hands of terrorists and made into “dirty bombs” or exposure devices, particularly category 1, 2 and 3 sources.
- ❑ Prevent sources from being melted and made into commercial products.
- ❑ Prevent unlawful disposal that may contaminate the environment or be accidentally found in the future.
- ❑ Not sticking the public with the disposal bill.

# Licensees Resist Disposal

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- ❑ Increased disposal access has not translated into actual disposal.
- ❑ Many Licensees do not plan for disposal or do not dispose of sources in a timely manner.
- ❑ Excuses - “planned” reuse, disposal too costly, shipping problems, procrastination



# Life Cycle Cost Education

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- **Ask questions when licensing or inspecting.**
  - **What waste do they have?**
  - **Who receives their waste?**
  - **How much does disposal cost?**
  - **What is the funding source?**
  - **When will it happen?**
  - **What happens with the last sources that they cannot exchange 1-for-1?**



# Identify, Document, Follow-up

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- **Regulators need to:**
  - **Identify which licensees have sources in storage during inspections or while licensing.**
  - **Document where sources are being stored.**
  - **Follow-up with licensees storing sources to encourage disposal.**
  - **Obtain written licensee acknowledgement.**  
**(Particular attention needs to be paid to higher-risk category 1, 2 and 3 sources.)**



# Life Cycle Cost Outreach

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- **An organized outreach program by:**
  - ▣ **NRC, NNSA, LLRW compacts, OAS and states**
  - ▣ **CRCPD or HPS**
- **Topics**
  - ▣ **Why is disposal necessary**
  - ▣ **Costs of disposal – Some realistic numbers would be great**
  - ▣ **Disposal Choices - Manufacturers, Brokers, OSRP, SCATR**
  - ▣ **Encourage Disposal**



# OSRP and SCATR



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- Continue to support and use both programs .
- Find ways to make them even more successful.
- Work to keep the disposal timelines short.
- Transition to 100% of the costs being paid by licensees who can afford it.
- Should provide more life-cycle cost education



# Add New Disposal Funding Options

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- ❑ **Manufacturer/Waste Broker Pre-Payment Plans**
- ❑ **State Pre-Payment Plans or per source financial assurance like in Illinois**
- ❑ **State Disposal Funds such as in Texas**
- ❑ **State Orphaned Source Recovery Programs**
- ❑ **Other Ideas?**



# Reassess Financial Assurance

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- ❑ **\$113,000 will not cover every licensee with sealed sources above financial assurance activity limits. (10 CFR §30.35(d))**
- ❑ **\$113,000 may not even cover licensees who do not need financial assurance by rule. (ex. 100,000 Curies Cs-137)**
- ❑ **Financial assurance must accurately reflect disposal costs.**



# Fees to Encourage Disposal

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- **Licensing Fees Per Source such as in Oregon**
- **Storage Fees**
- **Other Ideas?**





# Storage Time Limits

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- Appropriate now that all states have Class A, B and C disposal access
- **Make a 2-year disposal time limit the rule.**
- Make it 1 year for manufacturers, distributors, service companies and brokers.
- **Enforce the two year limit for GLs.**
- Require formal plans of reuse or recycling for those who seek to avoid the time limits.

# Improve Source Accountability

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- ❑ Licensees should update the "date last used" field in NSTS as recently requested by the NRC.
- ❑ **All category 3 sources should be specifically licensed.**
- ❑ **Add category 3 sources to the National Source Tracking System (NSTS).**



# Support Reuse and Recycling

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- ❑ A formal study of reuse and recycling opportunities should be performed.
- ❑ **Allow individual licensees to reuse and recycle when they have an approved plan.**
- ❑ Promote the exchange of usable sources intended for reuse and recycle.
- ❑ **Promote an active Source Exchange Program when one becomes available.**





# States with Waste Disposal Sites

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- ❑ Implement the revised concentration averaging BTP when it becomes official.
- ❑ Consider new higher limits under site specific criteria.



# Alternatives to Sources

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- **Government agencies led by the NNSA should encourage, promote, and help fund where necessary the development of alternative technologies for category 1, 2 and 3 sources.**
- **Licensees should implement new alternative technologies to replace sources that are a potential security and health and safety risk.**
- **The government should provide incentives where possible to encourage timely adoption of new technologies.**

# Grant Initiatives

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- ❑ Agencies issuing grants should give preference to applicants using alternative technologies.
- ❑ Applicants should be required to consider all life-cycle costs for any radioactive sources acquired through the grant.



# Type B Container Availability

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- **To improve the availability of Type B containers used to ship higher activity disused sources:**
  - **A market study should be performed to determine the nation's needs**
  - **Agencies should expedite the review and approval process**
  - **Several existing foreign packages should be identified and approved for US use**
  - **Licensees should be given advance notice when a container's certification is about to expire**

# What we ask is:

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- ❑ **Please read the disused source working group recommendations with an open mind.**
- ❑ **Support the ones you agree with.**
- ❑ **Coordinate with the DSWG on ways to facilitate those recommendations.**
- ❑ **Take actions to implement those within your control.**

**For additional information, contact  
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