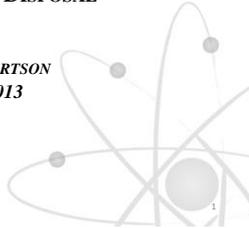




IMPACTS OF REVISED CONCENTRATION AVERAGING AND ENCAPSULATION BRANCH TECHNICAL POSITION ON SEALED SOURCE DISPOSAL

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Draft Revised Concentration Averaging BTP and Sealed Sources



- The "Branch Technical Position on Concentration Averaging and Encapsulation" (CA BTP) is the NRC's primary guidance for LLRW disposal limits that ensure protection in the future of an inadvertent intruder
- Revision of the CA BTP has the potential to significantly increase the number of dangerous sealed sources commercially disposed
- The draft revised CA BTP (May 2012) utilizes a revised intruder scenario for sealed sources, which results in:
 - Increased Cs-137 sealed source limit, from 30 Ci to 130 Ci
 - Increased Class B Co-60 limit, from 700 Ci to no limit
- The draft also includes important guidance on 'alternative approaches' to facilitate disposal of higher activity sources within the current Part 61 class limits
- The draft explicitly recognizes the national security benefits of the increased sealed source disposal limits

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Draft Revised CA BTP and GTRI/OSRP



- The DOE/NNSA Global Threat Reduction Initiative Offsite Source Recovery Project (GTRI/OSRP) facilitates sealed source recovery in the interest of national security, public health, and safety
- GTRI/OSRP encourages disused sealed source generators to register their sources at osrp.lanl.gov for possible recovery support (directly or via CRCPD's Source Collection and Threat Reduction Project – SCATR)
- Currently registered Cs-137 sealed sources:
 - 16 sources from 30Ci – 130Ci (generic limits, current and draft revised)
 - 222 sources from 130Ci – to 960Ci Class C limit (potential for alternative approaches)

Note: GTRI/OSRP voluntarily-registered, sealed sources represent only a portion of the total disused source population and does not include the many such sources currently in use

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Sealed Sources and



Revised CA BTP Implementation

- Stakeholder comments on increased sealed source disposal have been mixed
- Several sited state regulators suggest that implementation of the revised CA BTP will require further consideration/deliberation
- These states may vary in their ultimate ability/willingness to adopt the revised guidance
- Washington
 - State law/regulation authorizes use of the CA BTP without specifying version or date, so the revised CA BTP will likely be adopted automatically
 - Regulators have expressed willingness to facilitate the use of the increased limits and approaches in the revised BTP
 - Regulators have commented that implementation of the revised BTP may require NRC input/collaboration to ensure consistent understanding and application



Sealed Sources and



Revised CA BTP Implementation

- Texas
 - The Texas Compact Commission has been very attentive to the national security concerns surrounding disused sealed sources
 - Texas regulators have suggested that consideration of revised CA BTP implementation may not be an immediate priority as it attends to issues surrounding the initiation of WCS facility operations
 - Stakeholders have suggested that WCS site characteristics may be conducive to the alternative approaches for sealed source disposal described in the draft revised CA BTP
- Utah
 - An EnergySolutions license amendment “at minimum” would be required for implementation of the revised CA BTP
 - Utah regulators have expressed concern regarding the increased sealed source disposal limits



Sealed Sources and



Revised CA BTP Implementation

- South Carolina (SC)
 - Barnwell sealed source disposal limits are currently below the 1995 CA BTP generic guidance and SC regulators have indicated that they do not intend to increase them
- All of the sited states considering its implementation have indicated a need for NRC educational/informational support
- The NRC has pledged to participate in public meetings upon request of the sited States, consistent with available resources



Revised CA BTP –



Alternative Approaches for Sealed Source Disposal

- **The draft revised CA BTP 'alternative approaches' are significant**
 - The new 'alternative approaches' would allow for higher activity sealed sources to be disposed based on site-specific characteristics
 - These approaches would not require approval under 10 CFR 61.58, which is the only option referenced in the 1995 CA BTP (and has only been used once)
 - Subject to state regulator approval; no NRC involvement is required
- **Implementation of the revised CA BTP will be a significant change and will take time and resources**
 - The ongoing Part 61 rulemaking on site-specific performance assessments may result in delayed implementation of the alternative approaches
 - The potential for higher activity sealed source disposal may also require time and resources to clarify issues pertaining to waste preparation and packaging
 - Sites may look to NRC for support with stakeholders and technical issues
