



# **Blending of Low-Level Radioactive Waste**

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# Purpose

- Address pros and cons of blending
- Allow ample time for views
- Obtain information for consideration in developing Commission paper



## Background

- Limited disposal options since closure of Barnwell
- Scale of proposed blending has expanded
- Definition of blending



## Current NRC Position on Blending

- Recent NRC staff letters
- Blending -- not in NRC regulations
- NRC guidance – both discourages and acknowledges as appropriate at times
- Waste classification related to disposal



## Chairman's Direction

- Issues related to intentional changes in waste classification
- Protection of public and environment
- Technical considerations (concentration averaging and physical mixing)
- Practical considerations in operating a waste treatment facility, disposal facility, or other facilities
- Recommendations for revisions to existing guidance, or oversight related to blending of LLW

## Some Issues

- 1981 Volume Reduction Policy Statement
- Risk-informed, Performance-based regulation
- 10 CFR 61.55 Tables

Radionuclide	Concentration, Ci/m <sup>3</sup>		
	Col. 1	Col. 2	Col. 3
Total of all radionuclides with < 5 yr half-life	700	n/a	n/a
H-3	40	n/a	n/a
Co-60	700	n/a	n/a
Ni-63	3.5	70	700
Ni-63 in activated metal	35	700	7000
Sr-90	0.04	150	7000
Cs-137	1	44	4600

If concentration does not exceed column 1, waste is Class A. If concentration is > col. 1 and < col. 2, waste is Class B. If concentration is > col. 2 and < col. 3, waste is Class C. If > col. 3, waste is not acceptable for near-surface disposal



**Questions?**

