



# The Problem of B/C LLW – A Better Solution Than Dilution

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# NRC No Dilution Policy



## *Closure of Barnwell to Non-Regional Waste Generators is the Driver to Potential NRC Policy Reversal*

- NRC is considering to reverse an existing policy allowing waste generators to dilute Class B/C Low-Level Radioactive Waste (LLW) for the purpose of reclassification and disposal as Class A LLW
- Reversal of existing policy would allow dilution/mixing of LLW for the sole purpose of changing waste classification as defined in 10 CFR §61.55

## NRC No Dilution Policy (Cont.)

- Reversal of existing policy may significantly impact sister agencies, states, regional compacts and other important stakeholders
  - Existing policy is well established in past rulemaking initiatives, regulatory guidance and NRC correspondence with licensees (e.g., Letter from NRC to ALARON, ADAMS Accession # ML062900166)
  - Allowing intentional dilution for the purpose of changing waste classification should be undertaken by rulemaking and not by a policy reversal

# Existing Policy Tied to Past Rulemaking

## *Proposed Rulemaking of Unimportant Quantities of Source Material Issued August 28, 2002 (67 FR 167, pp. 55175 – 55179)*

### **NUCLEAR REGULATORY COMMISSION**

**10 CFR Part 40**

**RIN 3150-AG64**

### **Transfers of Certain Source Materials by Specific Licensees**

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Proposed rule.

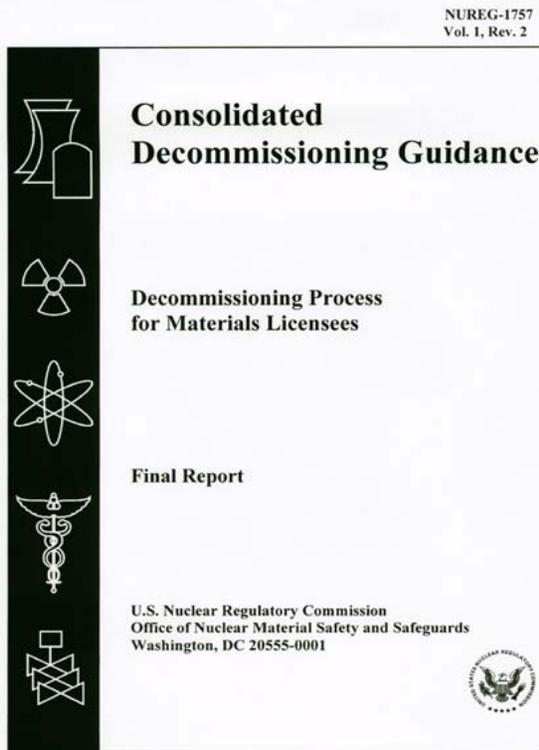
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**SUMMARY:** The Nuclear Regulatory Commission (NRC) is proposing to amend its regulations to require NRC approval for transfers from licensees of low-concentrations of source material

- NRC stated that “intentional dilution” to meet exemption level is not acceptable without prior approval
- In response to public comment, NRC considered defining “dilution”
- Unfortunately, proposed rule was not finalized

# Commissioners Reiterate Policy

## *NUREG-1757, Volume 1, Rev. 2, Section 15.13.1*



- NRC commissioners approved use of intentional mixing of homogenous waste streams for meeting WAC of offsite disposal facilities, as long as the classification of the waste, as determined by requirements of 10 CFR 61.55, is not altered
- During deliberation of policy, Commissioner Merrifield stated dilution of waste for the sole purpose of altering waste classification was unacceptable (SECY-04-0035)

# Other Key Stakeholders' Positions

## *Results of the License Termination Rule Analysis of the Use of Intentional Mixing of Contaminated Soil (Table 2.1, SECY-04-0035)*

- NRC Not for Changing Waste Classification
- DOE Not to be used to change waste classification (similar to NRC)
- EPA Dilution forbidden as sole remedy for some hazardous wastes and PCBs
- CRCPD Advises that dilution should not be used, but if it is, it is approved by regulator
- International Sources Dilution for the purpose of circumventing regulatory requirements is inappropriate

## Other Key Stakeholders' Position (Cont.)

- Conclusions Evaluations and Other Considerations (SECY-04-0035)
  - Allowing intentional mixing could be viewed as a change in NRC policy and inconsistent with that of other U.S. Agencies and the International Community
  - Could decrease public confidence [in License Termination Rule cleanup decisions]

# Conflicts with State Regulations

## ***State of Texas Rule Prohibits Dilution***

### 30 TAC §336.229 Prohibition of Dilution

- *No person shall reduce the concentration of radioactive constituents by dilution to meet exemption levels established under the Texas Health & Safety Code, or change the waste's classification or disposal requirements.*
- *Radioactive material that has been diluted as a result of stabilization, mixing, or treatment, or for any other reason, shall be subject to the disposal regulations it would have been subject to prior to dilution*
- Texas rulemaking intended to codify and ensure consistency with existing policy and hazardous waste regulations
- Reversal of NRC Policy would conflict with regulations in the State of Texas

# Conflicts with State Regulations (Cont.)

## *Policies Do Not Require Action by Agreement States*

- NRC did not require Agreement States to promulgate regulations consistent with 10 CFR §61.58, *Alternative Requirements for Waste Classification and Characteristics*
  - *Compatibility Categories and Health and Safety Identification for NRC Regulations and Other Program Elements-SA-200*
    - *Compatibility Category D – Not required for purposes of Compatibility*
  - Accordingly, Texas and Utah do not currently have a 10 CFR §61.58-like regulation
  - Implementing reversal of NRC policy may be problematic and require rulemakings by affected Agreement States

# Rulemaking In Lieu of Policy Reversal

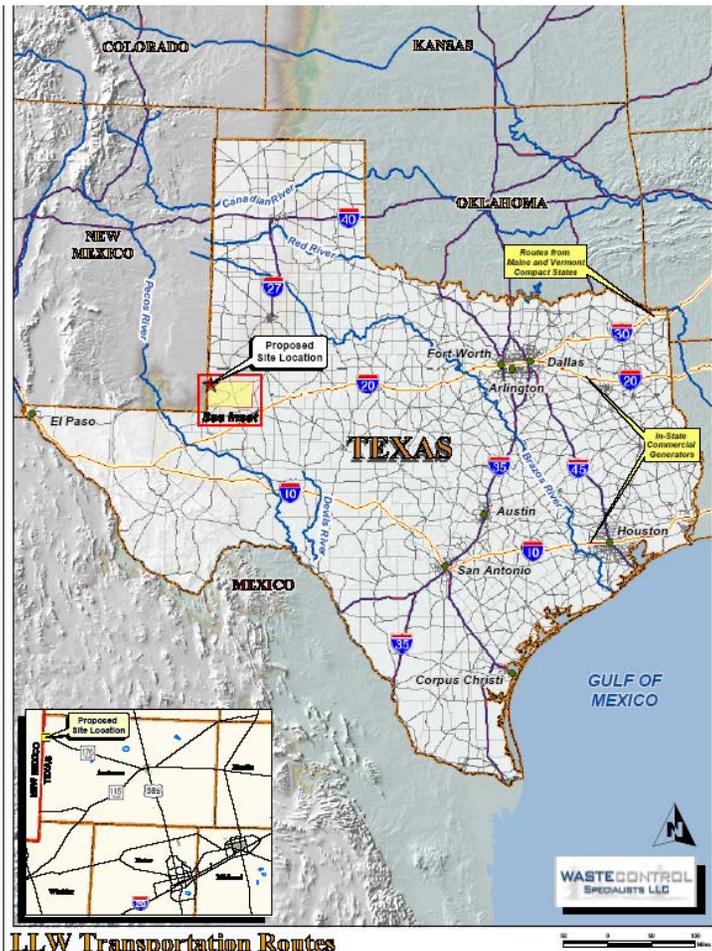
## *States Ultimately Are Long-Term Custodians*

- Rulemaking may be needed for a reversal of policy that significantly impacts States
- Reversal of existing NRC policy may be interpreted as a “major federal action” requiring an environmental review under the National Environmental Policy Act (NEPA)
  - Same Class B/C radioactive source term may be transported across and disposed of within State’s boundary
  - More shipments and larger waste volumes may necessitate assessing environmental impacts

# Texas Presents the Preferred Solution.

## Draft LLW License Issued to WCS on August 11, 2008

- Texas is demonstrating that new disposal facilities can be licensed
- Texas statutes allow importation of LLW into the compact by any person, state, regional body, or group of states and requires a majority vote from the Commissioners of the Texas LLW Compact (Tex. Health & Safety Code, Sec. 403.006, Art. 3.05(6))



# Conclusions

- NRC should carefully weigh decision to reverse existing policy and allow dilution for the purpose of re-classifying Class B/C LLW into Class A LLW
  - States may be required to repeal existing or enact new regulations for policy to become effective
  - For success, policy reversal may likely need a rulemaking with wide stakeholder involvement in accordance with the Administrative Procedures Act
- Reversal of policy may significantly impacts States and LLW Compacts
  - May appropriately be interpreted as a “major federal action” requiring an environmental review under NEPA

# Conclusions (Cont.)



- Texas Legislature enacted a process allowing import of Class A, B and C LLW
  - Texas is a solution for all LLW generated/owned by the federal government
  - May provide relief to commercial waste generators in 36 states should the final license be granted to WCS
  - Maintains the existing framework without need for new regulations or reversal of well-established policy
- Waste that is diluted may not be acceptable for disposal under Texas rules