# Memorandum of Understanding Between EPA AND NRC

John T. Greeves, Director Division of Waste Management, NMSS

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## Background

- 1983 Deferral Policy
- 1992 MOU
- NRC/EPA Controversy
- 1997 NRC License Termination Rule
- 1997 EPA Guidance
- Risk Management Differences
- 2000 GAO Report

## **Dual Regulation**

- Leads to Conflicts
- Inefficient Use of Resources
- Lack of Finality
- Erodes Public Confidence

#### **2002 MOU**

- Process to eliminate or mitigate dual regulation
- Congress directed language
- Success Between Agencies
- MOU does not relieve Licensees from meeting Part 20 Subpart E

# Principles and Implementation

- Establish a stable and predictable regulatory environment
- Implement NRC and EPA responsibilities in a coordinated and consistent manner
- Inform Congress and Stakeholders

## **Specific MOU Provisions**

- EPA agrees to defer to NRC
  - Vast majority of NRC terminated licenses will not invoke MOU
- NRC agrees to consult with EPA when:
  - Site groundwater contamination exceeds EPA MCLs
  - Site soil concentrations exceed levels defined in MOU
  - NRC contemplates restricted release or alternate use criteria
- License Termination rule continues a dose criterion that encompasses all pathways.

## COMPARISON OF MOU CONSULTATION VALUES TO NRC'S COMPLIANCE SCREENING CRITERIA

H-3	2.1	Co-57	5.8	Cs-137	0.55	U-234	31
C-14	3.8	Co-60	1.1	Eu-152	0,46	U-235	2.5
Na-22	2.1	Ni-59	3.8	Eu-154	0,63	U-238	5.3
S-35	73	Ni-63	4.5	Ir-192	8.2	Pu-238	120
Cl-36	17	Sr-90	14	Pb-210	17	Pu-239	110
Ca-45	240	Nb-94	0.34	Ra-226	7.1	Pu-241	560
Sc-46	7	Tc-99	1.3	Ac-227	20	Am-241	89
Mn-54	4.6	I-129	120	Th-228	3.2	Cm-242	200
Fe-55	27	Cs-134	2.8	Th-232	4.5	Cm-243	11

Values <1 = NRC's value is larger;

Values > 1 = MOU value is larger

## **Example 1**

- A site has Sr-90 in Soil
- Requesting License Termination
- Must show compliance with Part 20
- Coordination with EPA
  - Screening Criteria
    - No Consultation with EPA
  - Site-specific modeling
    - No Consultation with EPA if <23 pCi/g

	Sr-90+D
NRC Screening Value	1.7 pCi/g
MOU Residential Value	23 pCi/g

## **Example 2**

- A site has Cs-137 in Soil
- Requesting License Termination
- Must show compliance with Part 20
- Coordination with EPA
  - Screening Criteria
    - Consultation with EPA if ACTUAL concentrations >6 pCi/g
  - Site-specific modeling
    - Consultation with EPA if ACTUAL concentrations >6 pCi/g

	Cs-137
NRC Screening Value	11 pCi/g
MOU Residential Value	6 pCi/g

## **Example 3**

- Site has Sr-90 in ground water
- Current concentration is 12 pCi/l
- If concentration will be
  >8 pCi/l at time of
  license termination,
  NRC will consult with
  EPA.
- Must show compliance with Part 20

	Sr-90+D
EPA MCL	8 pCi/l

### **Path Forward**

- Each agency will revise its guidance to address consultation role
- NRC will continue to request legislation to eliminate dual regulation