



Decommissioning in New Jersey Under Agreement State Status

Jenny Goodman, Supervisor
Diffuse NARM, Decommissioning & General Licensing
609-984-5498
jenny.goodman@dep.state.nj.us







Both Sides Now

- Complex cleanups under ISRA
- Routine decommissioning under NJ Radioactive Materials License
- Sometimes both will apply





NJ Legislature

- Adopted ISRA on March 15, 1993
- Adopted the Brownfields and Contaminated Site Recovery Act January 6, 1998





ISRA Triggers

- North American Industry Classification System (NAICS) Code
 - Site Remediation Rule N.J.A.C. 7:26B Appendix C
- Operated in New Jersey on or after December 31, 1983
- Use or store hazardous substances as defined at N.J.A.C. 7:1E.
 - Radionuclides are on the list
- Cessation, Sale, significant stock change, significant change in ownership



General Approach

- ISRA and Brownfields and Contaminated Site Remediation Act
 - 10^{-6} or background
 - “consistently” present = one standard deviation over background
- Total Dose Increment = 15 mrem/yr;
Radon Concentration Increment = 3 pCi/L
- Generic soil concentration increments as function of vertical extent and clean cover



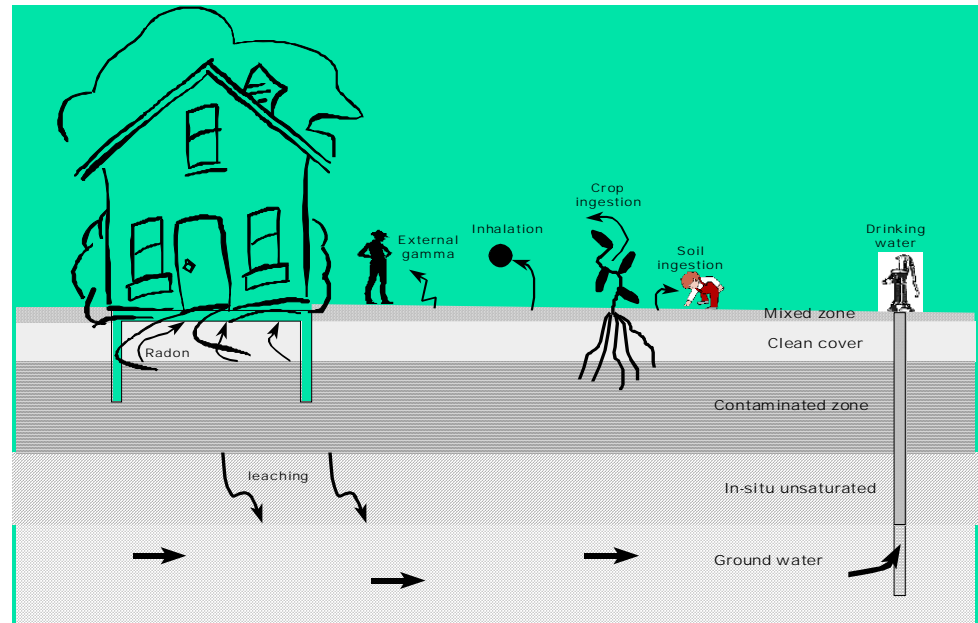
Quick Overview of Subchapter 12

- Promulgated August 7, 2000
 - intended to make cleanups quicker
- Unrestricted Use Standards for TENORM
- Limited Restricted Use Standards for TENORM
- Restricted Use Standards for TENORM
- Alternative Standards
- 100 mrem/yr "All Controls Fail"
- Sampling, Analysis, and Compliance
 - MARSSIM methodology
 - DEP Sampling Manual



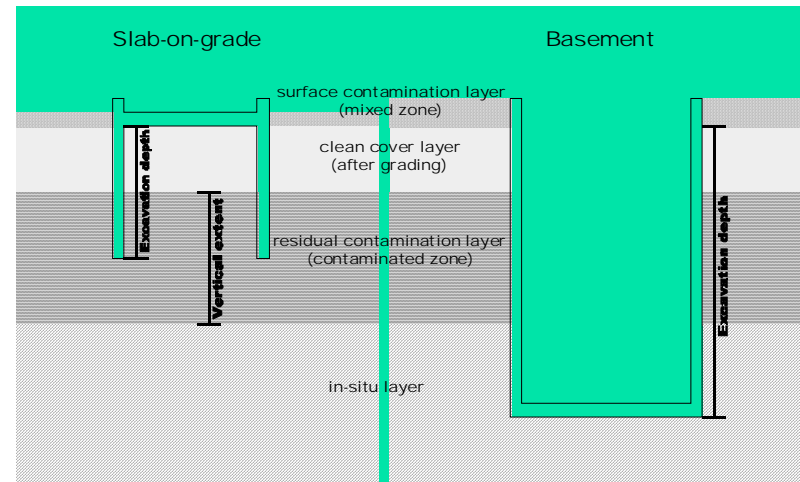
Pathways Analysis

- Dose Pathways
 - External Gamma
 - Soil Ingestion
 - Inhalation
 - Drinking Water
 - Crop Ingestion
- Radon Pathway



Site Use Scenarios

- Unrestricted
 - based on residential building construction
- Restricted
 - based on commercial building construction
- Construction Scenarios
 - basement
 - slab-on-grade





Subchapter 12

- Did not incorporate NRC's Subpart E
 - Compatibility category C
- Not changing dose criteria
 - Or would have one cleanup criterion for ISRA cases and a different one for licensees
- NRC staff has agreed that Subchapter 12 is adequate and compatible





Fundamental Differences

	New Jersey	NRC
Cleanup Criteria	15 mrem/y	25 mrem/y
Water	EPA MCL	All pathways
Radon	3 pCi/L	
Controls	All controls fail: Institutional and Engineering	Institutional controls fail, engineering controls degrade
All controls dose	100 mrem/y	100 or 500 mrem/y
Scenario	Suburban Resident with garden	Most probable in 100 yrs
Restricted Use	Anytime No ALARA provisions	Only if unrestricted would result in net public or env harm or the residual levels are ALARA



Adopted Changes to Subchapter 12



Requirements Pertaining to Engineering or Institutional Controls

- A person responsible for conducting the remediation or the licensee shall conduct public outreach if the Department determines that outreach is needed, or when the Department determines that there is substantial public interest in activities concerning restricted or limited restricted release license termination.



Requirements Pertaining to Engineering or Institutional Controls

- Department determines substantial public interest by:
 - petitions
 - written request by municipal official
- Licensee develops and implements enhanced public notice
 - Publicizing and hosting public meeting
 - Publishing information in local newspaper
 - Establishing a local repository



Under Agreement State Authority

NUREG-1757
Vol. 1, Rev. 2



Consolidated Decommissioning Guidance



Decommissioning Process
for Materials Licensees

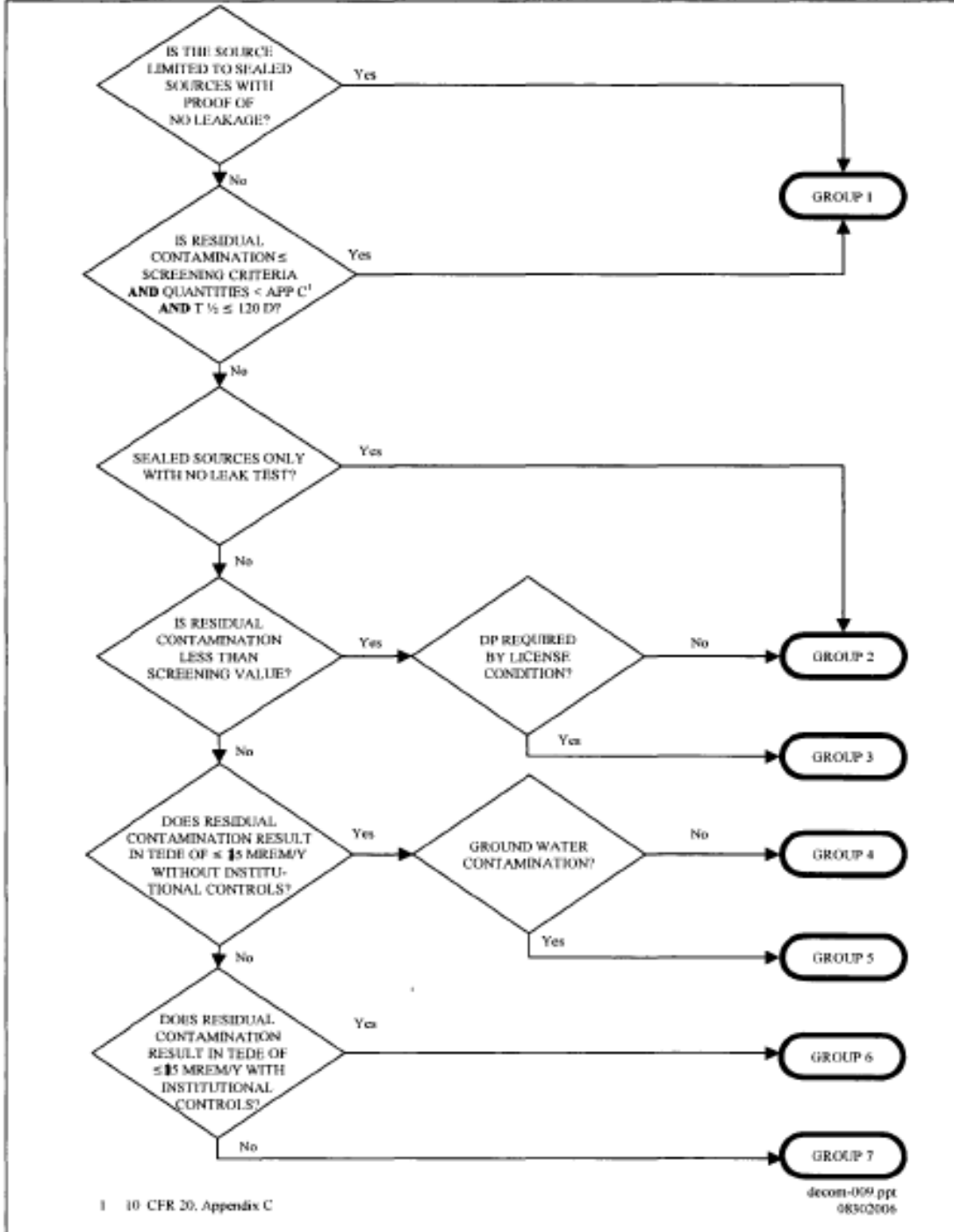
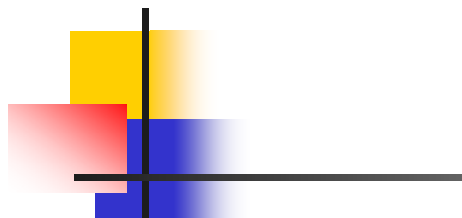


Final Report



U.S. Nuclear Regulatory Commission
Office of Nuclear Material Safety and Safeguards
Washington, DC 20555-0001







Graded Approach

- Group 1
 - Only sealed sources used such as irradiators and radiographers
 - But only if they didn't leak
- Group 7
 - Large releases occurred
 - Restricted Release
 - Groundwater contamination





Graded Approach

- Group 1
 - No decommissioning plan required
 - Unrestricted use
 - Survey or demonstration of no contamination
 - No closeout inspection
 - No confirmatory surveys
 - DEP Form 314





Graded Approach

- Group 7
 - Alternate Release Criteria
 - Restricted Use
 - Decommissioning Plan required
 - Confirmatory or Side by Side Survey
 - Closeout inspection
 - DEP Form 314





NEPA Requirements

- For each license termination, the NRC has to write a Finding of No Significant Impact or FONSI.
- New Jersey does not have such a requirement.





Talk to Your Regulator

- Contractors
 - MARSSIM
 - NJDEP Sampling Procedures Manual
 - MARSAME
- Characterization Survey
- DCGLs
- Final Status Survey





Conclusion

- Decommissioning under Agreement State will not be much different than it is now for most licensees





Questions?

Jenny Goodman

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