


RIC 2012
DECOMMISSIONING PLANNING
INCLUDING FUNDING ASSURANCE

REG GUIDE 4.22 (DG-4014)

14 Mar 12 J. C. Shepherd
 Reactor Decommissioning Branch



ESSENCE OF
DECOMMISSIONING PLANNING

- APPLIES DURING **OPERATIONAL PHASE**
- MONITOR AND SAMPLE TO DEFINE EXTENT OF CONTAMINATION
- ESTIMATE COST TO REMEDIATE AFFECTED AREA
- THEN EITHER:
 - REMEDIATE SOON TO LIMIT FINANCIAL ASSURANCE
 - INCREASE FINANCIAL ASSURANCE PER REGULATIONS TO REMEDIATE LATER

DECOMMISSIONING
PLANNING RULE

- EFFECTIVE DECEMBER 17, 2013
- MINIMIZE INTRODUCTION OF CONTAMINATION
- MONITOR SITE INCLUDING SUBSURFACE
- KEEP IN DECOMMISSIONING RECORDS
- UPDATE FINANCIAL ASSURANCE

MINIMIZE CONTAMINATION

- ADDS §20.1406(c)
 - OPERATE TO MINIMIZE INTRODUCTION OF CONTAMINATION TO THE ENVIRONMENT
 - > PROCEDURES TO REDUCE LEAKS AND SPILLS
 - > SURVEILLANCE TO FIND THEM PROMPTLY

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MINIMIZE CONTAMINATION

- FACILITATE DECOMMISSIONING
 - > REDUCE WASTE GENERATION AS PRACTICAL
 - > DISPOSE EARLY WHEN PRACTICAL

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DPR SURVEYS AND RECORDS

- MODIFIES §20.1501(a) SURVEYS
 - EXPLICITLY INCLUDES SUBSURFACE
 - DOES NOT CHANGE “NECESSARY [AND] REASONABLE” SURVEYS

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DPR SURVEYS AND RECORDS

- ADDS NEW §20.1501(b)
 - RECORD SIGNIFICANT CONTAMINATION IN RECORDS IMPORTANT TO DECOMMISSIONING
 - CONSIDER KEEPING MORE FOR HISTORIC SITE ASSESSMENT

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DPR GUIDANCE

- NUREG-1757 V. 3 R. 1
 - ISSUED FEBRUARY, 2012
 - COMMENTS TO BE INCLUDED WITH THOSE ON DG-4014
 - PLAN TO PAY FOR ACTUAL REMEDIATION
 - CHANGES TO REPORTING REQUIREMENTS AND TO FINANCIAL INSTRUMENTS

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DPR GUIDANCE

- DRAFT REGULATORY GUIDE DG-4014 (RG-4.22)
 - ISSUED FOR COMMENT 13 DEC 2011;
 - COMMENTS DUE **MARCH 30, 2012**
 - MINIMIZE NEW CONTAMINATION
 - CONDUCT SURVEYS OF SITE
 - RETAIN RECORDS OF SURVEYS

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RG-4.22: CONDUCT SURVEYS

- SURVEYS PER § 20.1501(a)
 - SURFACE
 - ACCESSIBLE AREAS
 - NOT READILY ACCESSIBLE
 - SUBSURFACE IS EXPLICIT REQUIREMENT
 - NEAR TO POTENTIAL SOURCES
 - IN GW FLOW PATHS (DOWNSTREAM)
 - NEI-07-07 OBJECTIVES MEET RULE INTENT

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RG-4.22: KEEP RECORDS


- RECORDKEEPING PER § 20.1501(b)
 - RETAIN SURVEY RESULTS WITH "RECORDS IMPORTANT TO DECOMMISSIONING"
 - SIGNIFICANT RESIDUAL RADIOACTIVITY REQUIRES REMEDIATION AT TIME OF LICENSE TERMINATION FOR UNRESTRICTED RELEASE
 - BASES FOR CHARACTERIZATION SURVEYS AT LICENSE TERMINATION

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RG-4.22: FINANCES

- UPDATE FINANCIAL ASSURANCE
 - DETAILS IN RG-1.159 & NUREG-1757 V. 3 R. 1
 - ESTIMATE COST TO REMEDIATE
 - SUITABLE REMEDIATION SCHEDULE
 - ARRANGE FOR SUFFICIENT FUNDS
 - §50.75: major factors that could affect the cost
 - §50.82: site-specific cost estimate


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GUIDANCE SCHEDULE

- DG-4014 ISSUED FOR 60-DAY PUBLIC COMMENT PERIOD DECEMBER 13, 2011
- COMMENT PERIOD EXTENDED TO MARCH 30, 2012
- PUBLIC WORKSHOP SPRING 2012
- FINAL GUIDE, RG-4.22, SUMMER 2012

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REFERENCES

- LICENSE TERMINATION RULE:
62_FR_39058, July 21, 1997
- DECOMMISSIONING PLANNING RULE:
76_FR_35512, June 17, 2011
- DRAFT REGULATORY GUIDE 4014:
76_FR_77431, DECEMBER 13, 2011
- NUREG-1757 VOL. 3 REV. 1: MLO90850301

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QUESTIONS ??

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Protecting People and the Environment

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PROMPT REMEDIATION

J. C. Shepherd
Reactor Decommissioning Branch

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PROMPT REMEDIATION ?

- STAFF REQUIREMENTS MEMO FOR DPR:
TECHNICAL BASIS FOR NEW RULE TO MANDATE
PROMPT REMEDIATION
 - ADDRESS REMEDIATION DURING OPERATIONS
 - SEEK PUBLIC COMMENT, HOLD WORKSHOP
 - DEFINE CRITERIA TO REQUIRE ACTION

SCHEDULE: SRM RESPONSE

- PUBLIC INPUT (WEBINAR) JULY 2011
 - PUBLIC COMMENT PERIOD CLOSED SEP. 16
 - INTERNAL REVIEW FALL-WINTER 2011-2012
- REPLY TO SRM WITH RECOMMENDATION APRIL 2012
- PROCEED WITH RECOMMENDED ACTION ~2014

PROMPT REMEDIATION ALTERNATIVES (1/2)

- REQUIRE REMEDIAL ACTION BASED ON
 - CALCULATED DOSE > PART 20 EXPOSURE LIMITS
 - MEASURED CONCENTRATION > 100 MREM/YR
- REQUIRE ANALYSES AND REMEDIATION PLAN
 - MEASURED CONCENTRATION EXCEEDS
 - SOIL SCREENING VALUES OR MCLs
 - EFFLUENT DISCHARGE LIMITS OR 2X SOILS SCREENING

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PROMPT REMEDIATION ALTERNATIVES (2/2)

- POLICY TO ADDRESS SPECIFIC SITE CONDITIONS
 - ORDER
 - AMEND LICENSE
- KEEP CURRENT PRACTICE – CASE-BY-CASE

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REFERENCES

- SRM-SECY-07-0177: ML073440549
- "WEBINAR": 76 FR 42074
- DRAFT PROPOSED TECHNICAL BASIS: ML111580353

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QUESTIONS

J. C. Shepherd, Project Engineer
Reactor Decommissioning Branch
Division of Waste Management and
Environmental Protection
US NRC
301-415-6712
james.shepherd@nrc.gov

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