

## NUCLEAR REGULATORY COMMISSION

### Plan for Updating and Consolidating the Decommissioning Policy and Guidance of the Nuclear Regulatory Commission's Office Nuclear Material Safety and Safeguards, and Notice of Public Meeting

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Publication of Plan and Notice of Public Meeting.

**SUMMARY:** The Office of Nuclear Material Safety and Safeguards (NMSS) intends to consolidate and update the policy and guidance for NMSS's decommissioning program. This endeavor is in response to the NMSS performance goals, in the NRC's Strategic Plan, of:

- 1) making NRC activities and decisions more effective, efficient, and realistic; and 2) reducing unnecessary regulatory burden on stakeholders.

**DATES:** Comments on this plan should be submitted by [insert date 45 days from the date of publication in the Federal Register]. The comments will be considered by NRC in the process of updating and consolidating the policy and guidance for NMSS's decommissioning program.

**ADDRESSES:** Submit written comments to: Jack D. Parrott, Project Scientist, Office of Nuclear Material Safety and Safeguards, Mail Stop T-7F27, U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Hand-deliver comments to: 11555 Rockville Pike, Rockville, MD,

between 7:30 a.m. and 4:15 p.m., Federal workdays. Copies of comments received may be examined at the NRC Public Document Room, 11555 Rockville Pike, Room O-1F21, Rockville, MD 20852. The NRC Public Document Room is open from 7:45 a.m. to 4:15 p.m., Monday through Friday, except on Federal holidays.

**FOR FURTHER INFORMATION, CONTACT:** Jack D. Parrott, Mail Stop T-7F27, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Telephone: (301) 415-6700; Internet: JDP1@NRC.GOV.

**SUPPLEMENTARY INFORMATION:** The initial scope of this effort covers all of the decommissioning policies and guidance that implement the NMSS decommissioning regulations. Three NUREG volumes have been identified for development which would update/consolidate all existing NMSS decommissioning guidance documents to the extent practicable. Also reviewed will be decommissioning technical assistance requests, decommissioning licensing conditions, and all decommissioning generic communications issued over the past several years. For the purposes of this project, the NMSS decommissioning policy and guidance documents will be grouped into the functional categories of: 1) The General Materials Decommissioning Process, 2) Characterization, Survey, and Determination of Radiological Criteria, and 3) Financial Assurance, Recordkeeping, and Timeliness. The three NUREG volumes will follow these functional categories. The documents that will be considered in this consolidation/updating project are identified in Table 1.

Table I.--DOCUMENTS FOR CONSIDERATION IN THE DECOMMISSIONING GUIDANCE  
CONSOLIDATION PROJECT

Guidance documents to be consolidated

NUREG-1727, "NMSS Decommissioning Standard Review Plan," September 2000.

NUREG/BR-0241, "NMSS Handbook for Decommissioning Fuels Cycle and Materials Licensees," March 1997.

Information Notice 90-16, "Compliance with New Decommissioning Rule," March 1990.

"Draft Branch Technical Position on Site Characterization for Decommissioning,"  
November 1994.

NRC Regulatory Issue Summary 2000-09, "Standard Review Plan for Licensee Requests to Extend the Time Periods Established for Initiation of Decommissioning Activities," June 2000.

NRC Administrative Letter 96-05, Revision 1, "Compliance with the Rule 'Timeliness in Decommissioning of Material Facilities,'" July 1998.

Information Notice 96-47, "Record-keeping and Decommissioning Notifications for

Disposals of Radioactive Waste by Land Burial Authorized under Former 10 CFR 20.304, 20.302, and Current 20.2002," August 1996.

Information Notice 90-38, Supplement 1, "License and Fee Requirements For Processing Financial Assurance Submittals for Decommissioning," November 1990.

Information Notice 90-38, "Requirements for Processing Financial Assurance Submittals for Decommissioning," May 1990.

Information Notice 90-16, "Compliance with New Decommissioning Rule," March 1990.

Records Management Guide 93-03, "Final Criteria for Determining That Records Should be Retained Permanently Because of Significant Historical Value," 1993.

Records Management Guide 92-01, "Plan for Decommissioning Records," 1992.

Other documents for reference/consideration

NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), Rev. 1," August 2000.

NUREG/CR-5512, Volume 1, "Residual Radioactive Contamination from Decommissioning: Technical Basis for Translating Contamination Levels to Annual Total

Effective Dose Equivalent," October 1992.

Draft NUREG/CR-5512, Volume 2, "Residual Radioactive Contamination from Decommissioning: User's Manual," May 1999.

Draft NUREG/CR-5512, Volume 3, "Residual Radioactive Contamination From Decommissioning: Parameter Analysis," October 1999.

Draft NUREG/CR-5512, Volume 4, "Comparison of the Models and Assumptions used in the DandD 1.0, RESRAD 5.61, and RESRAD-Build Computer Codes with Respect to the Residential Farmer and Industrial Occupant Scenarios Provided in NUREG/CR-5512," October 1999.

NUREG/CR-5621, "Groundwater Models in Support of NUREG/CR-5512," December 1998.

Draft NUREG-1549, "Decision Methods for Dose Assessment to Comply with Radiological Criteria for License Termination," July 1998.

NUREG/CR-6692, "Probabilistic Modules for the RESRAD and RESRAD-Build Computer Codes," November 2000.

Draft NUREG-1505, Rev. 1, "A Nonparametric Statistical Methodology for the Design and Analysis of Final Status Decommissioning Surveys," June 1998.

NUREG-1506, "Measurement Methods for Radiological Surveys in Support of New Decommissioning Criteria," August 1995.

NUREG-1507, "Minimum Detectable Concentrations with Typical Radiation Survey Instruments for Various Contaminants and Field Conditions," August 1995.

Manual Chapter 2605, "Decommissioning Procedures for Fuel Cycle and Materials Licensees," November 1996.

Manual Chapter 2602, "Decommissioning Inspection Program for Fuel Cycle Facilities and Materials Licensees," June 1997.

Inspection Procedure 87104, "Decommissioning Inspection Procedure for Materials Licensees," June 1997.

Inspection Procedure 88104, "Decommissioning Inspection Procedure for Fuel Cycle Facilities," June 1997.

Inspection Procedure 83890, "Closeout Inspection and Survey," March 1994.

Temporary Instruction 2800/026, "Follow-up Inspection of Formerly Licensed Sites Identified as Potentially Contaminated", July 2000.

Background/Bases documents -

Atomic Energy Act of 1954, as amended

National Environmental Policy Act

10 CFR 20, Subpart E--Radiological Criteria for License Termination

10 CFR 30.35--Financial assurance and recordkeeping for decommissioning

10 CFR 30.36--Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas

10 CFR Part 30, Appendix A--Criteria Relating to Use of Financial Tests and Parent Company Guarantees for Providing Reasonable Assurance of Funds for Decommissioning

10 CFR Part 30, Appendix C--Criteria Relating to Use of Financial Tests and Self Guarantees for Providing Reasonable Assurance of Funds for Decommissioning

10 CFR Part 30, Appendix D--Criteria Relating to Use of Financial Tests and Self-Guarantee for Providing Reasonable Assurance of Funds for Decommissioning by Commercial Companies That Have no Outstanding Rated Bonds

10 CFR Part 30, Appendix E--Criteria Relating to Use of Financial Tests and Self-Guarantee For Providing Reasonable Assurance of Funds For Decommissioning by Nonprofit Colleges, Universities, and Hospitals

10 CFR 40.36--Financial assurance and recordkeeping for decommissioning

10 CFR 40.42--Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas

10 CFR 70.25--Financial assurance and recordkeeping for decommissioning

10 CFR 70.38--Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas

10 CFR 72.30--Financial assurance and recordkeeping for decommissioning

10 CFR 72.54--Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas

10 CFR 72.130--Criteria for decommissioning

62 FR 39058, "Radiological Criteria for License Termination," July 1997.

53 FR 24018, "General Requirements for Decommissioning Nuclear Facilities,"



June 1988.

64 FR 68395, "Supplemental Information on the Implementation of the Final Rule on Radiological Criteria for License Termination," December 1999.

63 FR 64132, "Supplemental Information on the Implementation of the Final Rule on Radiological Criteria for License Termination," November 1998.

62 FR 39058, "Radiological Criteria for License Termination," July 1997.

53 FR 24018, "General Requirements for Decommissioning Nuclear Facilities,"  
June 1988.

61 FR 24669, "Termination or Transfer of Licensed Activities: Recordkeeping Requirements," May 1996.

60 FR 38235, "Clarification of Decommissioning Funding Requirements," July 1995.

59 FR 36026, "Timeliness in Decommissioning of Materials Facilities," July 1994.

58 FR 39628, "Decommissioning Recordkeeping and License Termination:  
Documentation Additions," July 1993.

53 FR 24018, "General Requirements for Decommissioning Nuclear Facilities,"

June 1988.

NUREG-1496, "Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for License Termination of NRC-Licensed Nuclear Facilities,"

July 1997.

NUREG-0586, " Final Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities," August 1988.

NUREG/CR-1754, "Technology, Safety and Costs of Decommissioning Reference Non-Fuel-Cycle Nuclear Facilities," February 1981.

NUREG/CR-1754, "Technology, Safety and Costs of Decommissioning Reference Non-Fuel Cycle Nuclear Facilities," Addendum 1, October 1989.

NUREG/CR-0129, "Technology, Safety and Costs of Decommissioning a Reference Small Mixed Oxide Fuel Fabrication Plant," February 1979.

NUREG/CR-1266, "Technology, Safety and Costs of Decommissioning a Reference Uranium Fuel Fabrication Plant," October 1980.

NUREG/CR-1757, "Technology, Safety and Costs of Decommissioning a Reference Uranium Hexafluoride Conversion Plant," October 1981.

NUREG/CR-2210, "Technology, Safety and Costs of Decommissioning a Reference Independent Spent Fuel Storage Installation," January 1984.

NUREG/CR-2241, "Technology and Costs of Termination Surveys Associated with Decommissioning of Nuclear Facilities," February 1982.

NUREG/CR-3293, "Technology, Safety and Costs of Decommissioning Reference Nuclear Fuel Cycle and Non Fuel Cycle Facilities Following Postulated Accidents," May 1985.

NUREG/CR-6280, "Technology, Safety, and Costs of Decommissioning a Reference Large Irradiator and Reference Sealed Sources," January 1996.

NUREG/CR-6477, "Revised Analyses of Decommissioning Reference Non-Fuel-Cycle Facilities," July 1998.

NUREG/CR-6656, "Information on Hydrologic Conceptual Models, Parameters, Uncertainty Analysis, and Data Sources for Dose Assessments at Decommissioning Sites," November 1999.

#### Licensing documents to be considered

Post License Termination Rule decommissioning technical assistance requests

Post License Termination Rule license amendments

Site specific decommissioning Environmental Assessments/Environmental Impact Statements

Site specific decommissioning Safety Evaluation Reports

Results of decommissioning financial assurance reviews

Site specific submittals of Form NRC-314, "Certificate of Disposition of Materials."

Other documents for possible reference

Other agencies' documents - e.g., U.S. Department of Energy, U.S. Environmental Protection Agency, U.S. Geological Survey, Council on Environmental Quality

Consensus standards - American Nuclear Society, American Society of Mechanical Engineers, American Society for Testing and Materials, Health Physics Society

International guidance - International Atomic Energy Agency, Nuclear Energy Agency

The implementation of the consolidation and updating of the decommissioning policy and guidance documents will be conducted using the Business Process Reengineering (BPR)

techniques established for the NRC's materials licensing policy and guidance consolidation and updating efforts (NUREG-1556 series). The BPR approach will be used to both develop the product, and manage the review and concurrence process, using self-managed teams consisting of NRC headquarters and regional resources. The goal is to produce consolidated NMSS decommissioning guidance that allows the NRC staff to evaluate information submitted by licensees in a timely, efficient, and consistent manner that protects public health and safety.

The development of each NUREG volume will follow a standardized BPR team model to facilitate overall project management. Teams will consist of a team leader and three or four team members, representing headquarters and regional staff, and possibly Agreement State participation.

The goal is to commence the first NUREG volume project in the June/July 2001 time frame, the second NUREG volume in the January 2002 time frame, and the third NUREG volume in the June/July 2002 time frame. The BPR model uses a one year schedule that contains two periods of document production for each volume. The first phase of document production lasts five months during which the teams work together at NRC headquarters during much of this time to focus their efforts on the guidance document, and to take advantage of the facilitation services provided by the NRC's Regulatory Product Development Center. At the end of the first phase a draft NUREG volume is produced which is released to the public for review and to solicit public input. After a 90-day comment period, the teams reconvene periodically over approximately four months to consider public input and revise the document. The NUREG volume is then published in final.

The overall project is scheduled to be completed by the end of fiscal year 2003 with the publication of the final version of the third NUREG volume. The end result will be a streamlined multi-volume NUREG grouped into the decommissioning functional categories described above, with the goal of making decommissioning activities licensed by NRC more effective and efficient while reducing unnecessary regulatory burden on stakeholders. Further ease of use will be realized by making this a web-based document. Note also that the BPR model establishes a 3-year review cycle for updating the guidance.

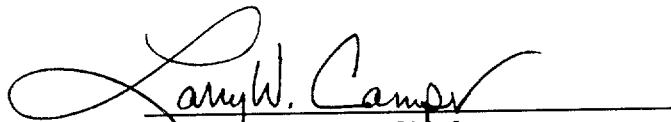
The updated, consolidated guidance will be provided to all users, both NRC and licensee, in hardcopy and/or electronic media. Since each group will have access to the same guidance, the expected results are more complete license documents that will expedite the approval process for both applicants and reviewers. As a result, the resource expenditure for this project will serve to improve the overall decommissioning process. Successful completion of this project is an integral component of the effort to meet NMSS' performance goals in the NRC's Strategic Plan. This will be done by developing decommissioning guidance that ensures that NRC's decommissioning activities and decisions are more effective, efficient, and realistic; and that they reduce unnecessary regulatory burden on stakeholders through, for example, the application of risk insights and performance-based methods, and the use of a consistent decommissioning regulatory basis.

**Public Meeting:** NRC will conduct a public meeting in the auditorium of the NRC's headquarters office, Two White Flint North, 11545 Rockville Pike, Rockville, MD, on June 1, 2001, to discuss this plan for updating and consolidating the decommissioning policy and guidance of the NRC's Office Nuclear Material Safety and Safeguards with interested members

of the public. The meeting is scheduled for 9:00 a.m. to 2:00 p.m. There will be an opportunity for members of the public to ask questions of NRC staff and make comments related to the plan. The meeting will be transcribed. For more information on the public meeting, please contact Jack D. Parrott, Project Scientist, Office of Nuclear Material Safety and Safeguards, Mail Stop T-7F27, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001; 301-415-6700; Internet: JDP1@NRC.GOV.

Dated at Rockville, MD, this 20<sup>th</sup> day of Apr., 2001.

For the Nuclear Regulatory Commission

A handwritten signature in black ink, reading "Larry W. Camper". The signature is written over a horizontal line.

Larry W. Camper, Chief  
Decommissioning Branch  
Division of Waste Management  
Office of Nuclear Material Safety  
and Safeguards