

APPENDIX E5

TRAINING REQUIREMENTS AND QUALIFICATION JOURNAL FOR DECOMMISSIONING PROJECT MANAGERS/TECHNICAL REVIEWERS

Note: The Decommissioning Project Managers/Technical Reviewers is a qualification in the Office of Federal and State Materials Environmental Management Programs. The contents of this Appendix were merged from Inspection Manual Chapter (IMC) 1246 Appendix A Section X and Appendix B Section X published on April 14, 2003. No changes were made to the training requirements or qualification journal since they were published on April 14, 2003.

APPENDIX E5

TRAINING REQUIREMENTS FOR DECOMMISSIONING PROJECT MANAGERS/TECHNICAL REVIEWERS

A. APPLICABILITY

The training described below is required for all decommissioning project managers and technical reviewers.

B. TRAINING

1. Required Initial Training

a. Self-Study and On-the-Job Training

- (1) NRC Orientation
- (2) Code of Federal Regulations
- (3) Office Instructions
- (4) Regulatory Guidance
- (5) NRC Inspection Manual
- (6) Inspection Accompaniments
- (7) NRC Management Directives
- (8) Directed Review of Selected Licensing Case Work

b. Core Training. These courses establish minimum formal classroom training requirements. Refer to Section 1246-08 for exceptions to these requirements.

- (1) Site Access Training (H-100); or NMSS Rad worker Training (H-102)
- (2) Basic Health Physics Course (H-122); Health Physics Technology (H-201); Applied Health Physics (H-109) or Initial Health Physics Course (H-117)
- (3) Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) (H-121)
- (4) Environmental Monitoring for Radioactivity (H-111)

2. Supplemental Training. Additional training beyond that identified as Core Training. This training will be determined by the individual's supervisor and will depend on the individual's previous work experience and planned activities in specific areas. Suggested courses follow. However, the list is not intended to be all-inclusive.

Title Availability

Root Cause/Incident Investigation (G-205)

TTC

RESRAD (H-410)

TTC

Public Outreach Meetings

PDC

Groundwater Hydrology

Commercial

Regulatory Process

PDC

NRC & Its Environment

PDC

MS Project

PDC

3. Refresher Training. Refresher training will be conducted every three years following initial certification. Refresher training will be determined by management on a case by case basis.

END

**DIVISION OF WASTE MANAGEMENT
DECOMMISSIONING PROJECT MANAGER/TECHNICAL REVIEWER
NRC DECOMMISSIONING PROJECT MANAGER/TECHNICAL REVIEWER
QUALIFICATION JOURNAL**

Applicability

This NRC Decommissioning Project Manager/Technical Reviewer Qualification Journal implements NRC Manual Chapter 1246, by establishing the minimum training requirements for Division of Waste Management personnel assigned to support decommissioning activities.

The NRC Decommissioning Project Manager/Technical Reviewer Qualification Journal serves as a guideline for the development of a Divisional Qualification Journal, and establishes the minimum training requirements consistent with NRC Manual Chapter 1246. The Division Qualification Journal must provide traceable documentation to show that minimum requirements are met for each project manager, and/or technical reviewer.

The NRC Decommissioning Project Manager/Technical Reviewer Qualification Journal consists of a series of qualification guides and signature cards. Each signature card is used to document task completion, as indicated by the appropriate signature blocks. The corresponding qualification guide establishes the minimum knowledge levels or areas of study that must be completed for each signature card.

Most of the qualification guides are divided into sections. The review sections of the qualification guides identify references with general application to the project manager/technical reviewer's qualification. The decommissioning project manager/technical reviewer is expected to have a general familiarity with these references. Other sections of the qualification guides identify specific references that have direct application to an inspection or licensing discipline. The decommissioning project manager/technical reviewer is expected to demonstrate detailed knowledge of the licensing discipline specific references.

In order to support the review of upper tier documents, programs, and policies, the project manager/technical reviewer's first line supervisor will assign one or more specific reactor facilities, fuel facilities, non-power reactor facilities and/or material licensees as reference facilities. The selection of a reference facility is intended to provide the decommissioning project manager/technical reviewer's management with the ability to tailor the qualification process to the experience and training level of the project manager/technical reviewer, and to meet the needs of the NRC. The use of specific real world material will reinforce the qualification process.

**DECOMMISSIONING PROJECT MANAGER/TECHNICAL REVIEWER
QUALIFICATION JOURNAL**

Name	Title	Branch	Section
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To complete your qualification as a Division of Waste Management Decommissioning Project Manager/Technical Reviewer you are to complete the following signature cards. All signoffs shall include the signature of the responsible reviewer and the date. Maintain these cards in a notebook along with any background or written material required by the program. This notebook will comprise your NRC Decommissioning Project Manager/Technical Reviewer Qualification Journal.

	<u>Signature When Complete</u>	Date
1.NRC Orientation	_____	_____
	First Line Supervisor	
2.Code of Federal Regulations	_____	_____
	First Line Supervisor	
3.Office Instructions	_____	_____
	First Line Supervisor	
4.Regulatory Guidance	_____	_____
	First Line Supervisor	
5.NRC Inspection Manual	_____	_____
	First Line Supervisor	
6.Inspection Accompaniments	_____	_____
	First Line Supervisor	
7.NRC Management Directives	_____	_____
	First Line Supervisor	
8.Directed Review of Selected Licensing Casework	_____	_____
	First Line Supervisor	
9.Formal Training	_____	_____
	First Line Supervisor	

Qualification Board Passed

Board Chair or Second Line
Supervisor

Recommended as a Qualified
Decommissioning Project Manager/
Technical Reviewer

Second Line Supervisor

Certification Memo Issued

Second Line Supervisor

**Qualification Card 1
NRC Orientation**

	<u>Initials</u>	<u>Date</u>
A. Review of NRC headquarters and NMSS organization completed	_____ Employee	_____
B. Discussion of NRC organization	_____ Supervisor	_____

Qualification Card 2
Code of Federal Regulations (CFR)

	<u>Initials</u>	<u>Date</u>
A. Familiarization with selected CFR parts completed	_____ Employee	_____
B. Discussion on CFR parts	_____ Supervisor	_____

**Qualification Card 3
Office Instructions**

	<u>Initials</u>	<u>Date</u>
A. Familiarization with office policies and procedures completed	_____ Employee	_____
B. Discussion on office policies and procedures	_____ Supervisor	_____

**Qualification Card 4
Regulatory Guidance**

	<u>Initials</u>	<u>Date</u>
A. Review of regulatory guidance		
1. Regulatory Guides	_____ Employee	_____
2. Information Notices	_____ Employee	_____
3. NUREGs	_____ Employee	_____
4. <u>Federal Register</u> Notices	_____ Employee	_____
5. Branch Technical Positions	_____ Employee	_____
6. SECY Paper	_____ Employee	_____
B. Discussion of regulatory guidance	_____ Supervisor	_____

Qualification Card 5
NRC Inspection Manual Chapters (MC)

	<u>Initials</u>	<u>Date</u>
A. Review of MCs completed	_____ Employee	_____
B. Discussion of MCs	_____ Supervisor	_____

Qualification Card 6
Inspection Accompaniments

		<u>Initials</u>	<u>Date</u>
A.	Inspection(s) Accompaniments [One required]		
1.	_____ Facility	_____ Employee	_____
2.	_____ Facility	_____ Employee	_____
3.	_____ Facility	_____ Employee	_____
B.	Discussion of inspection(s) and employee's role	_____ Supervisor	_____

Qualification Card 7
NRC Management Directives (MDs)

	<u>Initials</u>	<u>Date</u>
A. Review of selected MDs completed	_____ Employee	_____
B. Discussion of MDs	_____ Supervisor	_____

Qualification Card 8
Directed Review of Selected Licensing Casework

	<u>Initials</u>	<u>Date</u>
A. Review of selected licensing casework	_____ Employee	_____
B. Discussion of the licensing casework	_____ Supervisor	_____

Qualification Card 9 Formal Training

A.	CORE TRAINING:	<u>Initials</u>	<u>Date</u>
1.	Site Access Training (H-100), or NMSS Rad Worker Training (H-102)	_____ Supervisor	_____
2.	Introduction to Health Physics (H-117); Health Physics Technology (H-201); or Applied Health Physics (H-109)	_____ Supervisor	_____
3.	Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) (H-121)	_____ Supervisor	_____
4.	Environmental Monitoring for Radioactivity (H-111)	_____ Supervisor	_____

B. SPECIALIZED TRAINING

Others as determined by First Line Supervisor.

<u>Course Title</u>	<u>Initials</u>	<u>Date</u>
_____	_____ Supervisor	_____
_____	_____ Supervisor	_____
_____	_____ Supervisor	_____
_____	_____ Supervisor	_____

Qualification Guide 1 NRC Organization

- A. The qualifying individual should generally understand the role of NRC as a regulatory agency.

Selected References

- The U.S. Nuclear Regulatory Commission and How It Works, NUREG/BR-0256
- NRC - Regulator of Nuclear Safety, NUREG/BR-0164
- NRC Information Digest (Latest Edition), NUREG-1350

- B. The First Line Supervisor should discuss NRC organization and role with the qualifying individual to ensure the qualifying individual has a full understanding of NRC's organization and mission and the role of the project manager/technical reviewer in that mission.

Qualification Guide 2 Code of Federal Regulations (CFR)

A. A selection of currently applicable CFR Parts should be made by the First Line Supervisor. The selection should include the references listed below and be documented. When an entire part of the regulations is listed, the qualifying individual should focus on those Sections specifically identified under the title of the part. The focused sections are those with direct and frequent application to decommissioning. The qualifying individual should be expected to have a general knowledge of the topics addressed in the focused sections of these regulations. The qualifying individual is expected to know the public and occupational dose limits of Part 20 and the dose criteria of Subpart E of Part 20. This review may be accomplished by self-study, study-quizzes, briefings, or discussions.

1. 10 CFR 20 Standards for protection against radiation
[Focus on Sections 1001-1005 and Subparts C, D, E, F, and K]
2. 10 CFR 30 Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas (byproduct material)
[Focus on Sections 1, 4, 32, 35, & 36]
3. 10 CFR 40 Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas (source material)
[Focus on Sections 1, 2, 4, 13, 22, 31, 36, & 42]
4. 10 CFR 50 Termination of license (production and utilization facilities)
[Focus on Sections 1, 59, & 82]
5. 10 CFR 51 Environmental protection regulations domestic for licensing and related regulatory functions
[Focus on Sections 1, 22, 25-35, 45, & 70-73]
6. 10 CFR 61 Licensing requirements for land disposal of radioactive waste
[Focus on Sections 1, 50-53, 55, & Subpart G]
7. 10 CFR 70 Expiration and termination of licenses and decommissioning of sites and separate buildings or outdoor areas (special nuclear material)
[Focus on Sections 1, 2, 4, 22, 25, & 38]

8. 10 CFR 71 Packaging and transportation of radioactive material
[Focus on Subpart A]
9. 10 CFR 72 Licensing requirements for the independent storage of spent nuclear fuel and high-level radioactive waste
[Focus on Sections 1-3, 14, 18, 30, & 54]

B. Following completion of the qualifying individual's self study of the listed 10 CFR Parts, a discussion will be held with the qualifying individual by the First Line Supervisor to assess the qualifying individual's knowledge of these Parts. To the extent possible, recent application of various sections, new regulatory initiatives, and current industry issues should be emphasized.

Qualification Guide 3 Office Instructions

A. NMSS Office Policies and Procedures

1. Read the following NMSS Policy and Procedures Letters

- 1-3 Handling Request for 10 CFR 2.206 Action
- 1-8 Differing Professional Views and Opinions
- 1-11 Communications with Licensees
- 1-22 Quality Assurance
- 1-23 Open Meetings
- 1-24 Office of Investigation and the Release of Information on Investigations/Inspections
- 1-27 Management of Allegations
- 1-30 Ensuring the Availability, Security, and Integrity of Official Docket Files for Material Licenses
- 1-33 Responding to the Commission/OGC for Technical Assistance
- 1-46 Preparing Federal Register Notices for Site Decommissioning Management Plan Licensing Actions
- 1-48 Preparing Environmental Assessments
- 1-51 Policy and Criteria for Initial Processing of Incoming Licensing Actions

B. Other

The First Line Supervisor should identify applicable Division and/or Branch policies and procedures with which the qualifying individual should become familiar.

C. The First Line Supervisor should discuss these policies and practices with the qualifying individual to ensure that the qualifying individual has a working knowledge of these documents.

Qualification Guide 4 Regulatory Guidance

A. A selection of currently applicable regulatory guidance should be identified by the First Line Supervisor. These references should include those listed below and should be documented. The qualifying individual should be expected to have an understanding of the topics addressed in the references. A detailed knowledge of the criteria and procedures described in the guidance is not required. The review may be accomplished by self-study, study-quizzes, briefings, or discussions.

1. Regulatory Guides (use latest revision)

1.86 Termination of Operating Licenses for Nuclear Reactors

1.179 Standard Format and Content of License Termination Plans for Power Reactors

DG-1006 Records Important for Decommissioning of Nuclear Reactors (Draft for Comment)

2. Information Notices (IN)

IN 94-07 Solubility Criteria for Liquid Effluent Releases to Sanitary Sewage under the Revised 10 CFR 20

IN 96-047 Record keeping, Decommissioning Notifications for Disposals of Radioactive Waste by Land Burial Authorized Under 10 CFR 20.304, 20.302, 20, 2002

Others as selected by the First Line Supervisor

3. NUREGs (latest revision, where applicable)

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

NUREG-1549 Decision Methods for Dose Assessment to Comply with Radiological Criteria for License Termination

NUREG-1575 Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)

NUREG-1700 Standard Review Plan for Evaluating Nuclear Power Reactor License Termination Plans

NUREG-1727 NMSS Decommissioning Standard Review Plan

- NUREG/BR-0241 NMSS Handbook for Decommissioning Fuel Cycle and Materials Licenses
- NUREG/CR-5512 Residual Radioactive Contamination from Decommissioning (Volume 3)
- NUREG/CR-5849 Manual for Conducting Radiological Surveys in Support of License Termination

Others as selected by the First Line Supervisor

4. Federal Register Notices

“Action Plan to Ensure Timely Cleanup of Site Decommissioning Management Plan Sites,” April 16, 1992 (57 FR 13389)

“Disposal or Onsite Storage of Thorium and Uranium from Past Operations,” October 23, 1981 (46 FR 520)

Others as selected by the First Line Supervisor.

5. Branch Technical Positions

Fuel Cycle Policy and Guidance Directive FC 83-23 "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of Licenses for Byproduct, Source, or Special Nuclear Material," August 1987.

Others as selected by the First Line Supervisor.

6. SECY Paper

Most Recent Status of Decommissioning Program

Others as selected by the First Line Supervisor.

B. The First Line Supervisor will hold discussions, interviews, or oral quizzes to assess the qualifying individual's knowledge and understanding of the application of the selected references to the Decommissioning Program.

Qualification Guide 5
NRC Inspection Manual Chapters (MC)

- A. A selection of currently applicable MCs and Inspection Procedures (IPs) should be identified by the First Line Supervisor. These references should include those listed below and should be documented. The qualifying individual should be expected to have an understanding of the topics addressed in the references. A detailed knowledge of the criteria and procedures described in the guidance is not required. The review may be accomplished by self-study, study-quizzes, briefings, or discussions.

MC 0312	Technical Assistance for Radiation Safety Inspections at Nuclear Fuel Cycle Facilities and Materials Licensees' Sites
MC 1201	Conduct of Employees
MC 2561	Decommissioning Power Reactor Inspection Program
MC 2602	Decommissioning Inspection Program For Fuel Cycle Facilities and Materials Licensees
MC 2605	Decommissioning Procedures for Fuel Cycle and Materials Licensees
MC 2800	Materials Inspection Program

- B. The First Line Supervisor will hold discussions, interviews, or oral quizzes to assess the qualifying individual's understanding of the application of the selected references to the Decommissioning Program.

Qualification Guide 6 Inspection Accompaniment(s)

- A. Each qualifying individual should accompany certified inspectors on at least one inspection.

- B. The material referenced in Qualification Guide 5 should be studied and discussed with the inspector in charge during the inspection accompaniment. The First Line Supervisor will discuss these items, as appropriate, following each inspection accompaniment.

Qualification Guide 7 NRC Management Directives

- A. A selection of currently applicable NRC Management Directives (MDs) should be identified by the First Line Supervisor. These references should include those listed below and be documented. The qualifying individual should be expected to have a general knowledge of the topics addressed in the references. This review may be accomplished by self-study, study-quizzes, briefings, or discussions. The selection should include:

- MD 3.1 Freedom of Information Act
- MD 3.2 Privacy Act
- MD 8.8 Management of Allegations
- MD 9.1 Organization Management
- MD 9.29 Organization and Function of Regional Offices
- MD 10.130 Safety and Health Program Under the Occupational Safety and Health Act
- MD 10.131 Protection of NRC Employees Against Ionizing Radiation
- MD 10.159 Differing Professional Views or Opinions

- B. Application of the selected NRC Management Directives to the Decommissioning Program will be discussed with the qualifying individual by the First Line Supervisor to assess the qualifying individual's knowledge.

Qualification Guide 8
Directed Review of Selected Licensing Casework

- A. A selection of licensing casework should be identified by the First Line Supervisor. This information should be documented and studied in detail by the qualifying individual.

- B. The First Line Supervisor should discuss the licensing casework in detail with the qualifying individual. The relevance of the casework to the Decommissioning Program should be stressed.

Qualification Guide 9 Formal Training

The standards for each training course are provided in the NRC Technical Training Division Syllabus of Courses and will not be duplicated in the Qualification Guide.

Attachment 1
Revision History for IMC 1246, Appendix E5

Commitment Tracking Number	Document Accession Number and Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	ML11236A123 10/26/11 CN 11-022	Revision history sheet added. Combined Appendix B10 with Appendix A10 and renamed as Appendix E5. Added "Training Requirements" Section from Appendix A10.	None	N/A	ML11236A125