

APPENDIX E4

TRAINING REQUIREMENTS AND QUALIFICATION JOURNAL FOR DECOMMISSIONING INSPECTORS

Note: The Decommissioning Inspectors 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 IX and Appendix B Section IX published on January 5, 2001. No changes were made to the training requirements or qualification journal since they were published on January 5, 2001.

APPENDIX E4
TRAINING REQUIREMENTS FOR
DECOMMISSIONING INSPECTORS

A. APPLICABILITY

The training described below is required for all decommissioning inspectors assigned to perform radiological safety inspection activities at material decommissioning facilities.

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/Regional Procedures
- (4) Regulatory Guidance
- (5) NRC Inspection Manual
- (6) Industry Codes and Standards
- (7) Inspection Accompaniments
- (8) NRC Management Directives
- (9) Review of significant events at facilities being decommissioned
- (10) Directed Review of Selected Inspection Case Work

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

- (1) Fundamentals of Inspection Course (G-101) or Inspection Procedures Course (G-108)
- (2) Root Cause/Incident Investigation Workshop (G-205)
- (3) Inspecting for Performance Course - Materials Version (G-304)
- (4) Effective Communications for NRC Inspectors
- (5) OSHA Indoctrination Course (G-111)
- (6) Site Access Training (H-100)

- (7) Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) Course (H-121)
 - (8) Health Physics Technology Course (H-201)
 - (9) Transportation of Radioactive Materials Course (H-308)
 - (10) Environmental Monitoring for Radioactivity Course (H-111)
- c. Specialized Training. Depending on the inspector's previous work experience and planned inspection activities, additional courses may be required in order to gain knowledge necessary for specialized inspection activities. Management will make this determination on an individual basis.
- (1) Environmental Transport (including groundwater transport) (368 training, specific course to be determined by supervisor)
 - (2) OSHA HAZWOPER Training (24 hour or 40 hour) (368)
 - (3) Workshop on Financial Assurance for Decommissioning (DWM)
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 inspection activities in specific areas.
3. Refresher Training. Refresher training will be conducted every three years following initial certification. Refresher training will include the following:
- (1) Fundamentals of Inspection Refresher Course (G-102)
 - (2) Health Physics Topical Review Course (H-401)

END

DECOMMISSIONING INSPECTOR NRC INSPECTOR QUALIFICATION JOURNAL

Applicability

This NRC Inspector Qualification Journal implements NRC Manual Chapter 1246, by establishing the minimum training requirements for personnel assigned to perform safety inspection activities at materials decommissioning facilities.

The NRC Inspector Qualification Journal serves as a guideline for the development of a Qualification Journal, and establishes the minimum training requirements consistent with NRC Manual Chapter 1246. The Qualification Journal must provide traceable documentation to show that minimum requirements are met for each inspector.

The NRC Inspector 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 inspector's qualification. The inspector 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 discipline. The inspector is expected to demonstrate detailed knowledge of the inspection discipline specific references.

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

INSPECTOR QUALIFICATION JOURNAL
Decommissioning Inspector

Name	Title	Branch	Section
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To complete your qualification as a Decommissioning Inspector 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 Inspector Qualification Journal.

	<u>Signature When Complete</u>	<u>Date</u>
1. NRC Orientation	_____ First Line Supervisor	_____
2. Code of Federal Regulations	_____ First Line Supervisor	_____
3. Office Instructions/Regional Procedures	_____ First Line Supervisor	_____
4. Regulatory Guidance	_____ First Line Supervisor	_____
5. NRC Inspection Manual Chapters (MC)	_____ First Line Supervisor	_____
6. Industry Codes and Standards	_____ First Line Supervisor	_____
7. Inspection Accompaniments	_____ First Line Supervisor	_____
8. NRC Management Directives	_____ First Line Supervisor	_____
9. Review of significant events at facilities being decommissioned	_____ First Line Supervisor	_____
10. Directed review of selected inspection casework	_____ First Line Supervisor	_____
11. Formal Training	_____ First Line Supervisor	_____

Qualification Board Requirement Met

Second Level Supervisor
or Board Chairman

Recommended as a qualified inspector

Second Level Supervisor

Certification Memo Issued

Second Level Supervisor

Qualification Card 1
NRC Orientation

A.	Site Orientation	<u>Initials</u>	<u>Date</u>
1.	New employee processing package completed	Employee	_____
2.	Facility tour and introduction	First Line Supervisor	_____
B.	NRC Organization		
1.	Review of NRC headquarters and regional organization	Employee	_____
2.	Discussion of NRC organization	First Line 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 completed on CFR parts related to the decommissioning inspection program	_____	_____
	First Line Supervisor	

Qualification Card 3
Office Instructions/Regional Procedures

Initials

Date

A. Familiarization with office/
regional policies and procedures

Employee

B. Discussion completed on office/
regional policies and procedures

First Line Supervisor

Qualification Card 4
Regulatory Guidance

		<u>Initials</u>	<u>Date</u>
A.	Review of regulatory guidance		
	1. Regulatory Guides	_____ Employee	_____
	2. Information Notices /Bulletins	_____ Employee	_____
	3. NUREGs	_____ Employee	_____
	4. Generic Letters	_____ Employee	_____
	5. Federal Register Notices	_____ Employee	_____
	6. NRC Branch Technical Positions	_____ Employee	_____
	7. Policy and Guidance Directives	_____ Employee	_____
	8. Technical Assistance Requests	_____ Employee	_____
B.	Discussion of regulatory guidance with application to the decommissioning inspection program	_____ First Line Supervisor	_____

Qualification Card 5
NRC Inspection Manual Chapters (MC)

	<u>Initials</u>	<u>Date</u>
A. Review of appropriate NRC MCs completed	_____	_____
	Employee	
B. Discussion of NRC MCs and their relation to the decommissioning inspection program	_____	_____
	First Line Supervisor	

Qualification Card 6
Industry Codes and Standards

	<u>Initials</u>	<u>Date</u>
A. Review of selected codes and standards completed	_____ Employee	_____
B. Discussion of the application of codes and standards in the decommissioning inspection program	_____ First Line Supervisor	_____

Qualification Card 7
Inspection Accompaniments

		<u>Initials</u>	<u>Date</u>
A.	Inspections completed		
1.	_____ Facility	_____ Employee	_____
2.	_____ Facility	_____ Employee	_____
3.	_____ Facility	_____ Employee	_____
4.	_____ Facility	_____ Employee	_____
B.	Discussion of inspection and employee's role		
1.	_____ Facility	_____ First Line Supervisor	_____
2.	_____ Facility	_____ First Line Supervisor	_____
3.	_____ Facility	_____ First Line Supervisor	_____
4.	_____ Facility	_____ First Line Supervisor	_____

Qualification Card 8
NRC Management Directives

	<u>Initials</u>	<u>Date</u>
A. Review of selected portions of the NRC Management Directives completed	_____	_____
	Employee	
B. Discussion of the application of the NRC Management Directives to the decommissioning inspection program	_____	_____
	First Line Supervisor	

Qualification Card 9
Review of Significant Events at Facilities Being Decommissioned

	<u>Initials</u>	<u>Date</u>
A. Review of selected significant historical decommissioning events	_____	_____
	Employee	
B. Discussion of the importance of these events and lessons learned	_____	_____
	First Line Supervisor	

Qualification Card 10
Directed Review of Selected Inspection Casework

	<u>Initials</u>	<u>Date</u>
A. Review of selected Inspection casework	_____ Employee	_____
B. Discussion by first line supervisor of directed review of the selected casework and its relation to the decommissioning inspection program	_____ First Line Supervisor	_____

Qualification Card 11
Formal Training

A. CORE TRAINING:	<u>Initials</u>	<u>Date</u>
1. Fundamentals of Inspection Course (G-101) or Inspection Procedures Course (G-108)	_____ Training Coordinator	_____
2. Root Cause/Incident Investigation Workshop (G-205)	_____ Training Coordinator	_____
3. Inspecting for Performance Course - Materials Version (G-304)	_____ Training Coordinator	_____
4. Effective Communications for NRC Inspectors	_____ Training Coordinator	_____
5. OSHA Indoctrination Course (G-111)	_____ Training Coordinator	_____
6. Site Access Training (H-100)	_____ Training Coordinator	_____
7. Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) Course (H-121)	_____ Training Coordinator	_____
8. Health Physics Technology Course (H-201)	_____ Training Coordinator	_____
9. Transportation of Radioactive Materials Course (H-308)	_____ Training Coordinator	_____
10. Environmental Monitoring for Radioactivity Course (H-111)	_____ Training Coordinator	_____

B. SPECIALIZED TRAINING

Other specialized training courses required for inspectors performing inspection activities in specific areas:

<u>Course Title</u>	<u>Course #</u>	<u>Initials</u>	<u>Initials</u>	<u>Date</u>
_____	_____	Supervisor	Training Coordinator	_____
_____	_____	Supervisor	Training Coordinator	_____
_____	_____	Supervisor	Training Coordinator	_____
_____	_____	Supervisor	Training Coordinator	_____

Qualification Guide 1 NRC Orientation

A. Site Orientation

1. The qualifying individual should read and complete, as appropriate, the following forms for processing into the NRC:
 - a. Personnel information
 - b. Health insurance elections
 - c. Retirement plan elections
 - d. Savings elections (e.g. U.S. Savings Bonds, TSP, etc.)
 - e. Fitness for Duty requirements and physical examination
 - f. Any other forms which may be required by NRC Office of Human Resources
 - g. Forms for issuance of tagged, controlled NRC equipment
 - h. Payroll forms and time cards
 - i. Regulatory Information Tracking System (RITS)
2. The First Line Supervisor should orient the qualifying individual to the facility as follows:
 - a. Tour the facility and introduce the qualifying individual to the staff
 - b. Indicate to the qualifying individual the location of controlled documents, reference material, supplies, office equipment, etc.

B. NRC Organization

1. The qualifying individual should review and become familiar with:
 - a. Organizational charts of region, NMSS, and headquarters and overall NRC organization (NUREG-0325)
 - b. Role of Headquarters in policy and interpretation of regulations
 - c. Role of NRC General Counsel
 - d. Role of NRC Inspector General
 - e. Role of NRC Public Affairs
 - f. Role of NRC Office of Investigations
 - g. Role of NRC Office of Enforcement

- h. Physical location of NRC offices and regions
 - i. Role of NRC as a regulatory agency
 - (1) 10 CFR Part 1 (Organization)
 - (2) Atomic Energy Act of 1954, as amended
 - (3) Energy Reorganization Act of 1954, as amended
 - (4) NRC Enforcement Policy (NUREG-1600)
 - (5) Incident Response Plan (NUREGs 0728 and 0845)
 - (6) Energy Policy Act of 1992
2. 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 inspector 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. 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.
1. 10 CFR Part 1 Statement of organization and general information
 2. 10 CFR Part 2 Rules of practice for domestic licensing proceedings and issuance of orders
 3. 10 CFR Part 9 Public Records
 4. 10 CFR Part 19 Notices, instructions and reports to workers; inspections
 5. 10 CFR Part 20 Standards for protection against radiation (includes selected Questions and Answers, Q & As)
 6. 10 CFR Part 25 Access authorization for licensee personnel
 7. 10 CFR Part 30 Rules of general applicability to domestic licensing of byproduct material
 8. 10 CFR Part 40 Domestic licensing of source material
 9. 10 CFR Part 50 Domestic licensing of production and utilization facilities
 10. 10 CFR Part 51 Environmental protection regulations domestic for licensing and related regulatory functions
 11. 10 CFR Part 61 Licensing requirements for land disposal of radioactive waste
 12. 10 CFR Part 70 Domestic licensing of special nuclear material
 13. 10 CFR Part 71 Packaging and transportation of radioactive material
 14. 10 CFR Part 150 Exemptions and continued regulatory authority in agreement states and in offshore waters under section 274
 15. 10 CFR Part 170 Fees for facilities, materials, import and export licenses and other regulatory services under the Atomic Energy Act of 1954, as amended
 16. 10 CFR Part 171 Annual fees for reactor operating licenses, and fuel cycle licenses and materials licenses, including holders of certificates of compliance, registrations, and quality assurance program approvals and government agencies licensed by NRC
 17. 29 CFR Part 1910 Occupational Safety and Health Standards
 18. 40 CFR Part 141 National Primary Drinking Water Regulations

19. 49 CFR Parts 171 Transportation
through 180

- B. Following completion of the qualifying individual's self study of the listed 10 CFR Parts, a discussion will be held with the qualifying inspector by the First Line Supervisor to test the qualifying inspector'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/Regional Procedures

- A. Office/Region Policies and Procedures
1. Read the Office/Region Policy and Procedures Manual
 2. The qualifying individual should review the region/NRC policies and practices on:
 - a. Travel, including Management Directive 14.1 Official Temporary Duty Travel
 - b. Telephone use
 - c. Policies on use of annual leave and sick leave and excused leave, including Bulletin 4135, Leave Administration.
 - d. Work schedule, including NRC Appendix 4136, Hours of Work and Premium Pay
 - e. Use of government equipment, including computers (NUDOCS & ADAMS) and Management Directive 13.1, Property Management
 - f. Union activities, including Management Directive 10.102, Labor-Management Relations Program for Federal Employees
 - g. Communications outside NRC
 - h. Policies on outside employment and acceptance of gifts
 - i. Participation in political activities
 - j. Routing of mail and procedures for sending mail and materials (via U.S. Mail, Federal Express, etc.), including Management Directive 3.23, Mail Management
 - k. Ordering of documents (e.g NUREGs)
 - l. Region emergency and evacuation procedures
 - m. Employee appraisal system and Individual Development Plan (IDP)
 - (1) Employee trial period (Management Directive 10.14 Employment and Staffing))
 - (2) Employee appraisals (Management Directive 10.67, Non-SES Performance Appraisal System)
 - n. Differing Professional Views or Opinions (Management Directive 10.159, General Personnel Management Provisions)

- B. The First Line Supervisor should discuss these policies and practices with the qualifying individual to ensure that the qualifying individual has a full and complete understanding.

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 a general knowledge of the topics addressed in the references. The review may be accomplished by self-study, study-quizzes, briefings, or discussions. Note that many Regulatory Guides reference or endorse industry codes and standards listed in Qualification Guide 6. Study of corresponding and subtier codes and standards is recommended.

1. Regulatory Guides (use latest revision)

- | | |
|------|--|
| 1.86 | Termination of Operating Licenses for Nuclear Reactors |
| 3.65 | Standard Format and Content of Decommissioning Plans for Licenses Under 10 CFR Parts 30, 40, and 70 |
| 3.66 | Standard Format and Content of Financial Assurance Mechanisms Required for Decommissioning Under 10 CFR Parts 30, 40, 70, and 72 |
| 4.15 | Quality Assurance for Radiological Monitoring Programs |
| 7.1 | Administrative Guide for Packaging and Transporting Radioactive Material |
| 8.1 | Radiation Symbol |
| 8.2 | Guide for Administrative Practices in Radiation Monitoring |
| 8.4 | Direct Reading and Indirect Reading Pocket Dosimeters |
| 8.6 | Standard Test Procedure for Geiger Muller Counters |
| 8.7 | Instructions for Recording and Reporting Occupational Radiation Exposure Data |
| 8.9 | Acceptable Concepts, Models, Equations and Assumptions for a Bioassay Program |
| 8.10 | Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As Is Reasonably Achievable |
| 8.11 | Applications of Bioassay for Uranium |
| 8.13 | Instruction Concerning Prenatal Radiation Exposure |
| 8.15 | Acceptable Programs for Respiratory Protection |
| 8.20 | Applications of Bioassay for I-125 and I-131 |
| 8.21 | Health Physics Surveys for Byproduct Material at NRC Licensed Processing and Manufacturing Plants |

- 8.24 Health Physics Surveys During Enriched Uranium 235 Processing and Fuel Fabrication
 - 8.25 Air Sampling in the Workplace
 - 8.28 Audible Alarm Dosimeters
 - 8.29 Instruction Concerning Risks from Occupational Radiation Exposure
 - 8.34 Monitoring Criteria and Methods to Calculate Occupational Radiation Doses
 - 8.35 Planned Special Exposures
 - 8.36 Radiation Doses to the Embryo/Fetus
 - 10.1 Compilation of Reporting Requirements for Persons Subject to NRC Regulations
 - DG-1006 Records Important for Decommissioning of Nuclear Reactors (Draft for Comment)
2. Information Notices (IN) and Bulletins (BL)
- IN 85-092 Surveys of Wastes Before Disposal From Nuclear Reactor Facilities
 - IN 91-060 False Alarms of Alarm Ratemeters Because of Radiofrequency Interference
 - IN 91-065 Emergency Access to Low-Level Radioactive Waste Disposal Facilities
 - IN 92-034 New Exposures Limits for Airborne Uranium and Thorium
 - IN 92-072 Employee Training and Shipper Registration Requirements for Transporting Radioactive Materials
 - IN 93-030 NRC Requirements for Evaluation of Wipe Test Results; Calibration of Count Rate Survey Instruments
 - IN 94-007 Solubility Criteria For Liquid Effluent Releases to Sanitary Sewerage Under the Revised 10 CFR Part 20
 - IN 94-081 Accuracy of Bioassay and Environmental Sampling Results
 - BL 79-019 Packaging of Low-Level Radioactive Waste for Transport and Burial
 - BL 79-020 Packaging, Transport and Burial of Low-Level Radioactive Waste
- Others as selected by the First Line Supervisor

3. NUREGs (latest revision, where applicable)

NUREG-0041	Manual of Respiratory Protection Against Airborne Radioactive Materials
NUREG-1101	On-site Disposal of Radioactive Waste: Vol. 1 - Guidance for Disposal by Subsurface Burial; Vol. 2 - Methodology for the Radiological Assessment of Disposal by Subsurface Burial; Vol. 3 - Estimating Potential Groundwater Contamination
NUREG-1444 Supplement 1	Site Decommissioning Management Plan
NUREG 1460 Rev 1	Guide to NRC Reporting and Recordkeeping Requirements
NUREG-1500	Working Draft Regulatory Guide on the Release Criteria for Decommissioning: NRC Staff's Draft for Comment
NUREG-1501	Background as a Residual Radioactivity Criterion for Decommissioning
NUREG-1507	Minimum Detectable Concentrations with Typical Radiation Survey Instruments for Various Contaminants and Field Conditions
NUREG 1575	Multi-Agency Radiation Site Survey and Investigation Manual(MARSSIM)
NUREG 1600	General Statements of Policy and Procedures for NRC Enforcement Actions
NUREG/BR 0195	NRC Enforcement Manual
NUREG/BR-0241	NMSS Handbook for Decommissioning Fuel Cycle and Materials Licenses
NUREG/CR-1496	Generic Environmental Impact Statement in Support of Rulemaking on Radiological Criteria for Decommissioning of NRC - Licensed Nuclear Facilities
NUREG/CR-4884	Interpretation of Bioassay Measurements
NUREG/CR-5512	Residual Radioactive Contamination from Decommissioning
NUREG/CR-5569	Health Physics Positions Data Base
NUREG/CR-5849	Manual for Conducting Radiological Surveys in Support of License Termination
NUREG/CR-6204	Questions and Answers Based on Revised 10 CFR Part 20

Others as selected by the First Line Supervisor.

4. Generic Letters (GL)

GL 80-009	Low Level Radioactive Waste Disposal
GL 80-051	On-Site Storage Of Low-Level Waste
GL 81-038	Storage of Low Level Radioactive Wastes at Power Reactor Sites
GL 83-007	The Nuclear Waste Policy Act of 1982
GL 85-014	Commercial Storage At Power Reactor Sites Of Low Level Radioactive Waste Not Generated By The Utility

Others as selected by the First Line Supervisor.

5. Federal Register Notices

U. S. Nuclear Regulatory Commission, "Radiological Criteria for Decommissioning", *Federal Register*, Vol. 59, No. 161, 43200-43232, August 22, 1994.

U. S. Nuclear Regulatory Commission, "Decommissioning, Recordkeeping and License Termination: Documentation Additions - Final Rule", *Federal Register*, Vol. 58, No. 141, 39628-39635, July 26, 1993.

U. S. Nuclear Regulatory Commission, "Order Establishing Criteria and Schedule for Decommissioning the Bloomsburg Site", *Federal Register*, Vol. 57, No. 34, 6136-6141, February 20, 1992.

U. S. Nuclear Regulatory Commission, "Action Plan to Ensure Timely Cleanup of Site Decommissioning Management Plan Sites", *Federal Register*, Vol. 57, No. 74, 13389-13392, April 16, 1992.

U. S. Nuclear Regulatory Commission, "General Requirements for Decommissioning Nuclear Facilities - Final Rule", *Federal Register*, Vol. 53, No. 123, 24018-24056, June 27, 1988.

U. S. Nuclear Regulatory Commission, "Disposal or Onsite Storage of Thorium or Uranium Wastes from Past Operations", *Federal Register*, Vol. 53, No. 205, 52061-52063, October 23, 1981.

U. S. Nuclear Regulatory Commission, "Clarification of Decommissioning Funding Requirements," *Federal Register* Vol. 60, 38235, July 26, 1995

Others as selected by the First Line Supervisor.

6. NRC Branch Technical Positions

When to Remediate Inadvertent Contamination of the Terrestrial Environment, October 1994.

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.

Disposal or Onsite Storage of Thorium and Uranium (Either as Natural Ores or

Without Daughters present) from Past Operations (SECY 81-576), dated October 5, 1981

Branch Technical Position on Site Characterization for Decommissioning, November 1994

7. Others as selected by the First Line Supervisor.
Policy and Guidance Directives

PG-8-08 "Scenarios for Assessing Potential Doses Associated with Residual Radioactivity", May 1994.

PG 8-01 Termination of Byproduct, Source and Special Nuclear Material Licenses, November 4, 1983.

Others as selected by the First Line Supervisor.

8. Technical Assistance Requests

As selected by the First Line Supervisor

9. Other Documents

National Environmental Policy Act of 1969

Qualification Guide 5
NRC Inspection Manual Chapters (MC)

- A. A selection of currently applicable NRC MC and Inspection Procedure (IP) references with direct application to the materials decommissioning inspection program should be identified by the First Line Supervisor. The application of the specific references to the materials decommissioning inspection program should be studied in detail by the qualifying individual.

1. REPORTS/COMMUNICATIONS/FOLLOW-UP

MC 0230	Morning Report
MC 0610	Inspection Reports
MC 0620	Inspection Documents and Records
MC 0720	NRC Bulletins and Information Notices
MC 0801	Inspector Feedback
MC 1120	Preliminary Notifications
IP 92701	Follow-up
IP 92703	Follow-up of Confirmatory Action Letters

2. INSPECTIONS

MC 0300	Announced and Unannounced Inspections
MC 0312	Technical Assistance for Radiation Safety Inspections at Nuclear Fuel Cycle Facilities and Materials Licensees' Sites
MC 1246	Formal Qualification Programs in Nuclear Material Safety and Safeguards Program Area
MC 2602	Decommissioning Inspection Program for Fuel Cycle Facilities and Material Licensees

3. INTERACTIONS WITH OTHER FEDERAL AGENCIES

MC 1007	Interfacing Activities between Regional Offices of NRC and OSHA"
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4. INCIDENT RESPONSE

MC 1300	Incident Response Actions - Responsibility and Authority
MC 1301	Response to Radioactive Material Incidents that Do Not Require Activation of the NRC Incident Response Plan
MC 1302	Action Levels for Radiation Exposures and Contamination Associated with Materials Events Involving Members of the Public
MC 1330	Response to Transportation Accidents Involving Radioactive Materials
IP 87103	Inspection of Material Licensees Involved in an Incident or Bankruptcy Filing

5. LOW-LEVEL WASTE/WASTE MANAGEMENT

MC 2401	Near-Surface Low-Level Radioactive Waste Disposal Facility Inspection Program
IP 84750	Radioactive Waste Treatment, and Effluent and

- IP 84900 Environmental Monitoring
 - IP 84900 Low-Level Radioactive Waste Storage
 - 6. MATERIALS SAFETY PROGRAM
 - MC 1220 Processing of NRC Form 241, Inspection of Agreement State Licensees Operating under the Reciprocity Provisions of 10 CFR 150.20
 - MC 2800 Materials Inspection Program
 - IP 87101 Performance Evaluation Factors
 - IP 87102 Maintaining Effluents from Materials Facilities As Low As Is Reasonably Achievable (ALARA)
 - IP 87103 Inspection of Materials Licensees Involved in an Incident or bankruptcy Filing

7. RADIATION PROTECTION

- MC 8300 Radiation Protection
- IP 83726 Control of Radioactive Materials and Contamination, Surveys, and Monitoring
- IP 83728 Maintaining Occupational Exposures ALARA
- IP 83750 Occupational Radiation Exposure
- IP 83822 Radiation Protection
- IP 83890 Closeout Inspection and Survey

8. TRANSPORTATION

- MC 1330 Response to Transportation Accidents Involving Radioactive Materials
- IP 86721 Transportation (Basic)
- IP 86740 Inspection of Transportation Activities
- IP 86750 Solid Radioactive Waste Management and Transportation of Radioactive Materials

OTHER

- TI 2800.026 Followup Inspection of Formerly-Licensed Sites Identified as Potentially Contaminated"
- MC 1010 Independent Assessment and Analysis
- MC 1100 Notification of Significant Meetings
- MC 1201 Conduct of Employees
- MC 2900 Performance Appraisal Program

- B. The First Line Supervisor will hold discussions, interviews, or oral quizzes to test the qualifying individual's knowledge and understanding of the application of the selected references to the materials decommissioning inspection program.

Qualification Guide 6
Industry Codes and Standards

A. A selection of currently applicable industry codes and standards 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.

1. American National Standards Institute (ANSI)

ANSI N13.1	Guide to Sampling Airborne Radioactive Materials in Nuclear Facilities
ANSI N13.2	Guide for Administrative Practices in Radiation Monitoring
ANSI N13.7	Criteria for Photographic Film Dosimeter Performance
ANSI N13.27	Performance Requirements for Pocket Sized Alarm Dosimeters and Alarm Ratemeters
ANSI N42.12	Calibration and Usage of Sodium Iodide Detection Systems
ANSI N42.14	Calibration and Use of Germanium Spectrometers for the Measurement of Gamma Ray Emission Rates of Radionuclides
ANSI N42.15	Performance Verification of Liquid Scintillation Counting Systems
ANSI N323	Radiation Protection Instrumentation Test and Calibration
ANSI Z88.2	Practices for Respiratory Protection
ANSI Standards as selected and documented by the First Line Supervisor	

2. NRC Accepted HP Computer Codes

RESRAD
PC-DOSE
RASCAL
D&D

3. National Council on Radiation Protection and Measurements (NCRP)

NCRP Reports No. 30, 46, 57, 58, 59, 65, 76, 77, 87, 93, 94, 106

4. Committee on the Biological Effects of Ionizing Radiation (BEIR)

BEIR Reports (As selected by Supervisor)

- B. The First Line Supervisor should test the qualifying individual's knowledge of application of these codes and standards to the materials inspection program by discussions, interviews, or oral quizzes.

Qualification Guide 7 Inspection Accompaniments

- A. Each inspector should accompany certified inspectors on at least four inspections.
- B. The following is a guide for material that should be studied and discussed with the inspector in charge during these inspection accompaniments. The First Line Supervisor will discuss these items, as appropriate, following each inspection accompaniment.
1. The Inspection Program
 - MC 2602 Decommissioning Inspection Program For Fuel Cycle Facilities and Materials Licensees
 2. Scheduling and Preparation for Inspections
 - MC 0300 Announced and Unannounced Inspections
 3. Scope of Inspection
 4. Entrance/Exit Interviews
 5. Conduct of Inspection, Accumulation of Data
 6. Post-inspection Activities of Inspectors
 - MC 0610 Inspection Reports
 - MC 1100 Notification of Significant Meetings
 7. Morning Reports
 - MC 0230 Morning Report
 8. Non-routine Licensee Events
 - MC 1110 Potential Abnormal Occurrences
 - Management Directive 8.3 NRC Incident Investigation Program
 - Management Directive 8.9 Accident Investigation
 9. Preliminary Notification
 - MC 1120 Preliminary Notifications
 10. Bulletins/Information Notices
 - MC 0720 NRC Bulletins and Information Notices

11. Allegations and Investigations

Management Directive 8.8 Management of Allegations

12. Communication outside NRC

NRC Management Directive 5.5 Public Affairs Program

NRC Management Directive 3.6 Distribution of Unclassified NRC Staff/Contractor-Generated Reports

Qualification Guide 8
NRC Management Directives

A. A selection of currently applicable NRC Management Directive (MD) references should be identified by the First Line Supervisor. These references should include those listed below and be documented. The qualifying inspector 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:

- | | |
|-------------------|--|
| 1. NRC MD 9.1 | Organization Management |
| 2. NRC MD 9.29 | Organization and Function of Regional Offices |
| 3. NUREG 0325 | USNRC Functional Organization Chart |
| 4. NRC MD 3.2 | Privacy Act |
| 5. NRC MD 3.1 | Freedom of Information Act |
| 6. NRC MD 10.130 | Safety and Health Program Under the Occupational Safety and Health Act |
| 7. NRC MD 10.131 | Protection of NRC Employees Against Ionizing Radiation |
| 8. NRC MD 14.1 | Official Temporary Duty Travel |
| 9. NRC MD 10.159 | Differing Professional Views or Opinions |
| 10. NRC MD 10.42 | Hours of Work and Premium Pay |
| 11. NRC MD 10.43 | Time and Attendance Reporting |
| 12. NRC MD 10.67 | Non-SES Performance Appraisal System |
| 13. NRC MD 10.101 | Employee Grievances |
| 14. NRC MD 8.3 | NRC Incident Investigation Procedures |
| 15. NRC MD 8.8 | Management of Allegations |
| 16. NRC MD 8.10 | NRC Medical Event Assessment Program |
| 17. NRC MD 4.6 | License Fee Program |

B. Application of the selected NRC Management Directives to the decommissioning inspection program will be discussed with the qualifying individual by the First Line Supervisor to test the qualifying individual's knowledge.

Qualification Guide 9
Review of Significant Events at Facilities Being Decommissioned

- A. A selection of significant historical materials related events should be identified by the First Line Supervisor. These events should be documented and studied in detail by the qualifying individual.

- B. The First Line Supervisor should discuss the selected events in detail with the qualifying inspector and go over recommendations made, lessons learned, and changes identified to prevent recurrence. The relevance of the event to the overall decommissioning inspection program should be stressed.

Qualification Guide 10
Directed Review of Selected Inspection Case Work

- A. The First Line Supervisor will select documents from the file of a licensed facility and direct their review by the qualifying individual. The qualifying individual will study in detail the selected documents. The selection should be documented. Such documents would include:
1. Initial license application and facility description
 2. Associated licensing correspondence (NRC staff comments and licensee responses)
 3. License renewal applications and associated NRC correspondence
 4. Copy of the license
 5. Inspection reports related to that licensee's activities
- B. The First Line Supervisor will discuss in detail with the qualifying individual the selected documents and their relation to the overall decommissioning inspection program.

Qualification Guide 11 Formal Training

The standards for each Training Course are provided in the NRC Technical Training Division Course Catalog and will not be duplicated in the Qualification Guide.

Attachment 1
Revision History for IMC 1246, Appendix E4

Commitment Tracking Number	Document Accession Number and Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	ML112351143 10/26/11 CN 11-022	Revision history sheet added. Combined Appendix A9 with Appendix B9 and renamed as Appendix E4. Added "training requirements" section from Appendix A9.	None	N/A	ML112351154