

November 16, 1995

MEMORANDUM TO: Russell L. Anderson, Chief
Specialized Technical Training Branch
Technical Training Division
Office for Analysis and Evaluation of
Operational Data

FROM: Joseph J. Holonich, Chief (Original Signed By)
High-Level Waste and Uranium Recovery
Projects Branch
Division of Waste Management
Office of Nuclear Material Safety
and Safeguards

SUBJECT: INPUT TO NRC INSPECTION MANUAL CHAPTER 1246

The purpose of this memorandum is to provide the enclosed High-Level Waste and Uranium Recovery Projects Branch (HLUR) input to the Nuclear Regulatory Commission Inspection Manual Chapter (MC) 1246, "Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area." General comments concerning the draft MC 1246 are provided in Enclosure 1. Revisions to the draft MC 1246 are provided in Enclosure 2. Text marked with a line through it is proposed for deletion, while text that is highlighted is proposed for addition to the final MC 1246.

Enclosures: As stated

CONTACT: Robert D. Carlson, DWM/HLUR
415-8165

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HIGH-LEVEL WASTE AND URANIUM RECOVERY PROJECTS BRANCH
GENERAL COMMENTS TO DRAFT INSPECTION MANUAL 1246

Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area:

1. **Section 1246-04, DEFINITIONS** - The term "Supplemental Training" should be deleted from this section and throughout the manual. The given definition is ambiguous, and is basically the same as that for "Specialized Training."
2. **Section 1246-11, EXCEPTIONS** - This section makes reference to prospective inspectors or license reviewers having the ability to validate specific courses through taking "equivalency examinations." However, no detail is provided as to who will develop and administer these equivalency examinations if utilized.

Appendix B - Division of Waste Management (DWM) Inspectors Qualification Journal:

1. **Applicability, 2nd para.** - The portion of the sentence stating that the Qualification Journal "... establishes the minimum training requirements consistent with NRC Manual Chapter 1246." should be deleted from this section. This statement conflicts with a previous sentence in the 1st para. of this section, where it states that Appendix A "... establishes the minimum training requirements" for DWM.
2. **Inspector Qualification Journal** - An additional line item entry, "Interim Inspector Certification ("Only if required")" should be added to the existing journal list since it states in MC Section 1246-09, "Interim Inspector Qualification," that "Approval of interim qualification will be documented and a record kept in the individual's training file." Also, there should be a date and signature space for the approving authority - which is either the Office Director or Regional Administrator. Regarding the signature lines, consistency should be used throughout the qualification journal in terms of proper title capitalization (ie., "First line supervisor" and "Second Level Supervisor," etc.).
3. **Qualification Cards 1-6, and 8-10** - A sentence should be placed at the end of each of these qualification cards stating: "For a complete list of _____ (state specific reference(s)) review references, see Qualification Guide ____." This will help direct the reviewer to the appropriate MC section to find the stated references.

NRC INSPECTION MANUAL

NMSS

MANUAL CHAPTER 1246

FORMAL QUALIFICATION PROGRAMS IN THE
NUCLEAR MATERIAL SAFETY AND SAFEGUARDS PROGRAM AREA

1246-01 PURPOSE

01.01 To define training and qualification requirements for personnel in the Nuclear Material Safety and Safeguards (NMSS) program area. Initial qualification is achieved through self-study, formal classroom, and on-the-job training.

01.02 To define additional training to maintain and enhance the effectiveness of experienced personnel in identified specialty areas.

1246-02 OBJECTIVES

02.01 To ensure that NMSS program area personnel meet minimum knowledge and qualification standards ~~to become a certified inspector~~.

02.02 To provide a standardized methodology for determining that NMSS program area personnel have met the established qualification requirements ~~to become a certified inspector~~.

1246-03 POLICY

NMSS program area personnel must understand the facilities, equipment, processes, and activities of the programs they inspect or license, as well as the criteria, techniques, and mechanics of inspection and licensing. The qualification process is intended to provide inspectors ~~and license reviewers~~ with sufficient information to conduct inspections and license reviews that are technically correct and in accordance with NRC regulations, policies and procedures.

Personnel assigned as inspectors ~~or license-reviewers~~ in the NMSS program area must successfully complete the requirements for their individual inspection or licensing areas, as listed in Appendix A and the appropriate Qualification Journal described in Appendix B. In addition to the formal requirements of this document, other training may be necessary to supplement or enhance inspector ~~or license-reviewer~~ development. Exemption from specific training topics may be granted in accordance with Section 1246-11 of this chapter.

The appropriate Qualification Journal~~s~~ described in Appendix B specify the minimum inspector or reviewer qualification requirements. Regions and Headquarters Offices may customize specific Qualification Journals to add other requirements as appropriate.

Upon completion of the training identified in the Qualification Journal, the inspector's ~~or license-reviewer's~~ understanding of the material will be evaluated by an oral qualification board (Board). Boards for this purpose will be convened using the guidance in Section 1246-08.

Inspectors ~~or license-reviewers~~ undergoing qualification may perform inspections or license application reviews under the direction of a qualified inspector ~~or license-reviewer~~. In situations where qualification is delayed as a result of the unavailability of required formal training courses, or for other compelling reasons, the Regional Administrator (or designee) or Office Director (or designee) may provide interim ~~license-reviewer or inspector~~ qualification under the provisions of Section 1246-09 for those categories in which the inspector ~~or license-reviewer~~ is considered qualified. Interim ~~license-reviewer~~ **inspector** qualification includes license signature authority for select categories in accordance with a written delegation.

An individual who changes disciplines must meet or complete the training and qualification requirements for the new discipline. In such cases, previous equivalent training requirements in common between the two disciplines need not be repeated, and credit for the previous similar training will be indicated in the current qualification journal. An oral qualification board will be utilized unless waived in accordance with the provision of Section 1246-11.

Special circumstances (e.g., budget reductions, delays in establishing replacement contracts, or unavailability of critical instructors) may result in the temporary unavailability of courses required for formal qualification. In this case, the Director, Technical Training Division (TTD) will communicate with the cognizant NMSS program area division directors explaining the situation. This does not remove the need for the qualifying employee to attend the required course. It is expected that employee schedules will be adjusted as necessary to allow and require the employee to attend the required training when it is made available.

Temporary Instructions (TIs) or Policy and Guidance Directives (P&GDs) that focus on a specific area may necessitate inspectors or reviewers receiving special training before performing inspections or license reviews. The NMSS program area division having lead responsibility for preparing the TI or P&GD will identify these special training requirements, and communicate the training needs to the TTD as necessary. The schedule for preparation of any special training should allow enough advance time for the lead NMSS division, in coordination with the TTD, to prepare the required training course and implement it, before inspection or licensing is performed using the TI or P&GD.

1246-04 DEFINITIONS

Equivalency Examination. An examination administered through the TTD or its contractors, in lieu of specific course attendance.

Category. An area or class of activity for which a license may be issued, such as medical, academic, irradiators, well logging, and so on.

Core Training. Minimum formal classroom and on-the-job training required for a specific inspector discipline ~~or license reviewer.~~

Specialized Training. Additional training beyond that identified as Core Training. The additional training will be determined by the individual's supervisor and will depend on the individual's previous work experience and planned inspection or licensing activities in specific areas.

Required Initial Training. Minimum core and specialized training necessary for qualification as an inspector ~~or license reviewer.~~

Supplemental Training. Additional training beyond that identified as required initial training to enhance an inspector's ~~or license reviewer's~~ technical expertise. The additional training will be determined by the individual's supervisor.

Refresher Training. Training designed to update and maintain qualification.

Qualification Journal. The document that establishes the minimum training requirements for formal classroom instruction, on-the-job training, local training sessions, and self-study.

Oral Qualification Board. Board, consisting of management and either inspection ~~or license reviewer~~ personnel, established to assess the qualifications of an individual to conduct the prescribed NRC inspection or licensing program.

Interim Qualification. Qualification of an inspector ~~or license reviewer~~ to conduct independent inspections or reviews in specified areas before completion of all qualification journal requirements.

1246-05 RESPONSIBILITIES AND AUTHORITIES

05.01 Director, Technical Training Division. Administers and implements the formal technical training programs for NMSS program area inspectors and license reviewers. Develops and maintains, in conjunction with NMSS and the Regions, the Qualification Journals found in Appendix B of this chapter.

05.02 Director, Office of Personnel. Administers and implements the programs of non-technical training as well as individual training opportunities through the use of the Training Request and Authorization (NRC Form 368) process.

05.03 Director, Office of Nuclear Materials Safety and Safeguards (or designee). Establishes the training requirements needed for NMSS program area personnel to qualify to perform inspection and licensing activities. Ensures that headquarters inspectors and reviewers achieve and maintain qualifications in accordance with the guidelines provided in this chapter. Develops procedures for the implementation of this chapter for NMSS inspectors ~~and license reviewers~~. Certifies that headquarters inspectors and reviewers are qualified under this chapter.

05.04 Regional Administrator (or designee). Ensures that regional inspectors ~~and license reviewers~~ achieve and maintain qualifications in accordance with the guidelines provided in this chapter. Develops procedures for the implementation of this chapter for regional inspectors and license reviewers. Certifies that regional inspectors and reviewers are qualified under this chapter.

05.05 Directors, NMSS and Regional Divisions. Assist the TTD in developing, monitoring and reviewing training courses for NMSS program area qualification program. Identify and document in an individual's Qualification Journal specialized training activities necessary to supplement core training requirements.

1246-06 TRAINING ACTIVITIES

06.01 Personnel assigned as inspectors ~~or license-reviewers~~ in the NMSS program area must successfully complete the requirements for their individual inspection or licensing areas, as listed in Appendix A and the appropriate Qualification Journal.

- a. Written examinations will be used for designated courses to evaluate the candidate's understanding of the material. The passing grade for most examinations is 70 percent.**
- b. Not all courses have formal examinations. In these cases, satisfactory course completion is determined by attendance and completion of class activities.**
- c. Individuals who fail examinations may be given the opportunity to review the material through self-study and may then be reexamined. If deemed desirable, individuals who fail a course may also repeat the course in accordance with established TTD policy.**
- d. In all cases, completion of formal training courses will be documented by official correspondence from the provider of the training (normally TTD or OP) and will be documented in the agency wide training tracking system.**

1246-07 QUALIFICATION JOURNAL COMPLETION

07.01 Newly assigned inspectors ~~or license-reviewers~~ will be assigned a Qualification Journal. The journal contains a detailed series of activities and study areas as assigned by line management to be completed in a specific period, usually within the first 2 years of assignment.

1246-08 ORAL QUALIFICATION BOARD

The Board assesses the qualifications of an individual to conduct the prescribed NRC inspection or licensing program. The Board will recommend to the Regional Administrator, Office Director or their designee whether or not the individual should be certified as a qualified inspector ~~or license-reviewer~~.

The Regional Administrator's or Office Director's certification will be documented in the inspector's ~~or license-reviewer's~~ official personnel file (OPF) and the date entered in the agency wide training tracking system. This date determines when refresher training is due for each qualified individual.

08.01 Board Members. The minimum number of personnel required to constitute a Board will be three. A cross-section of qualified personnel should be included and can range from a peer-level inspector ~~or license reviewer~~ to a Division Director. Management of at least the branch chief level should be included on each Board.

08.02 Board Conduct. The Regions/Headquarters should develop a list of questions, or question bank, that include all areas of the Qualification Journal. These questions should allow and encourage the individual to answer in such a way as to demonstrate a depth of knowledge and understanding of a given area, rather than to simply answer "yes" or "no". Questions should focus on those situations that require the inspector or reviewer to demonstrate a knowledge of NRC policy and philosophy, as they relate to the licensee and the implementation of the nuclear materials inspection or licensing program. Questions of a technical nature should not be excluded; however, they should not represent a major area of Board questioning.

1246-09 INTERIM INSPECTOR AND LICENSE REVIEWER QUALIFICATION

An inspector ~~or license reviewer~~ who has not completed all requirements for final certification in one of the areas listed in Appendix A may obtain interim qualification to independently perform inspections or conduct license reviews in specified areas for which prescribed training has been completed. To establish an interim certification, the individual's supervisor will evaluate the individual's qualifications and identify the categories for which interim qualification is appropriate. A request will then be generated through the individual's management for interim qualification in the identified areas. The request should be approved by the Regional Administrator, Office Director, or their designee. Approval of interim qualification will be documented and a record kept in the individual's training file.

1246-10 PROGRAM REVISIONS

This manual chapter and qualification journals are periodically (approximately every 3 years) revised to reflect the training needs of inspectors ~~and license reviewers~~ as determined by changes to the inspection ~~and license reviewer~~ procedures. An inspector ~~or license reviewer~~ who is qualified prior to the time any revisions are made to MC 1246, will continue to remain qualified. Applicability of new requirements to previously qualified personnel will be specified when the revision is issued.

1246-11 EXCEPTIONS

11.01 Inspectors ~~or license reviewers~~ who, through prior experience and education, possess sufficient knowledge to meet minimum requirements, may validate specific courses through satisfactory completion of equivalency examinations. Requests for equivalency examinations

should be made from the individual's supervisor to the Director, TTD and should consider the candidate's ability to conduct inspections or licensing activities without the benefit of the additional knowledge and regulatory perspective which would be gained by attending the course. Use of these examinations is generally expected to be a rare occurrence.

11.02 The Regional Administrator or Office Director or their designee has the authority to waive any requirement listed for an inspector or reviewer in this MC. Justification for the waiver will be documented, and entered into the individual's training file.

1246-12 POST QUALIFICATION TRAINING

This MC ~~also~~ identifies training requirements beyond those that are required for initial qualification for the experienced inspector ~~or license reviewer~~. For inspectors or reviewers who have received certification of initial qualification, additional training is identified in the sections entitled "Supplemental Training" and "Refresher Training." Refresher training is required as specified in Appendix A. This additional training recognizes that inspector or reviewer training does not stop with initial qualification, but that training should be made available for experienced inspectors or reviewers on the basis of need, special circumstances, and the necessity of keeping current with inspection and licensing programs.

END

Appendices:

1. Appendix A, Training Activities
2. Appendix B, Training and Qualification Journal

APPENDIX A
TRAINING ACTIVITIES

Each section of this appendix provides the training requirements for a particular inspection or license-reviewer activity as indicated below.

<u>Section</u>	<u>Position</u>
I	Materials License Reviewer
II	Materials Radiation Specialist Inspector
III	Fuel Cycle Safety Inspector
IV	Fuel Cycle Safeguards Inspector - Physical Security
V	NMSS Headquarters Fuel Cycle Safeguards Inspector - Material Control and Accounting
VI	NMSS Headquarters Transportation Packaging and Dry Storage Supplier Safety Inspector
VII	Fuel Cycle License Reviewer
VIII	Division of Waste Management Inspectors and License Reviewers

Section VIII

TRAINING REQUIREMENTS FOR DIVISION OF WASTE MANAGEMENT
INSPECTORS AND LICENSE REVIEWERS

A. APPLICABILITY

The training described below is required for all inspectors assigned to perform Division of Waste Management (DWM) inspections and license reviews.

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) Industry Codes and Standards
- (7) Inspection Accompaniments
- (8) NRC Management Directives
- (9) Review of significant events involving either licensees or sites for which DWM has regulatory responsibility
- (10) Directed Review of Selected Licensing Case Work

- b. **Core Training** These courses establish minimum formal classroom training requirements. Refer to Section 1246-11 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 (OP)
 - (5) OSHA Indoctrination Course (G-111)
 - (6) NMSS Radiation Worker Training (H-102) or Site Access Training (H-100)
 - (7) Introduction to Health Physics Course (H-117) or Health Physics Technology Course (H-201)
 - (8) Licensing Practices and Procedures Course (G-109)
 - (9) NRC Inspection Team Leader Workshop (OP)
 - (10) The Regulatory Process Course (OP)
 - (11) Confident Public Speaking
- c. **Specialized Training** Depending on the employee's previous work experience and planned activities, additional courses **and training** may be required in order to gain knowledge necessary for specialized inspection or licensing activities. Management will make this determination on an individual basis.

High Level Waste (HLW):

- (1) Leading NRC Work Teams
- (2) Lead Auditor Training

- (3) General Underground Training (GUT), including First Aid and CPR
- (4) General Employee Radiological Training (GERT)
- (5) General Employee Training (GET)

Uranium Recovery:

- (1) Uranium Program Policy and Guidance Directives
- (2) Uranium Mill Tailings Remedial Action (UMTRA) Project Information Package (Vol. I - III)

Decommissioning:

- (1) Environmental Transport (including groundwater transport)
- (2) Radiological Surveys in Support of Decommissioning (H-120)
- (3) Environmental Monitoring for Radioactivity (H-111)
- (4) Finance for Nonfinancial Professionals

~~2. Supplemental Training Additional training beyond that identified as Core Training. This training will be determined by the supervisor and will depend on the individual's previous work experience and planned inspection or licensing activities in specific areas.~~

~~3.~~ Refresher Training Refresher training will be conducted every three years following initial certification. Refresher training will include the following courses and other courses as determined by management:

- (1) Fundamentals of Inspection Refresher Course (G-102)

END

APPENDIX B

SECTION VIII
Division of Waste Management Inspectors and ~~License Reviewers~~
Qualification Cards and Guides

SECTION VIII

DIVISION OF WASTE MANAGEMENT INSPECTORS AND LICENSE REVIEWERS

NRC INSPECTOR AND LICENSE REVIEWER QUALIFICATION JOURNAL

Applicability

This NRC Inspector and License Reviewer Qualification Journal implements NRC Manual Chapter 1246, Appendix A, section VIII, by which establishing the minimum training requirements for Division of Waste Management personnel assigned to perform safety inspections of waste management activities.

The NRC Inspector and License 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 inspector or license reviewer.

The NRC Inspector and License 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 will identify references with general application to the inspector's or license reviewer's qualification. The inspector or license reviewer should be expected to have a general familiarity with these references. Other sections of the qualification guides will identify specific references that have direct application to an inspection or licensing discipline. The inspector or license reviewer should be expected to demonstrate detailed knowledge of the inspection or licensing discipline specific references.

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

**INSPECTOR AND LICENSE REVIEWER QUALIFICATION JOURNAL - Division of Waste Management
Inspectors and License Reviewers**

<u>(Name)</u>	<u>(Title)</u>	<u>(Branch)</u>	<u>(Section)</u>
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To complete your qualification as a Division of Waste Management Inspector or License 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 Inspector or License Reviewer Qualification Journal.

	<u>Signature When Complete</u>	<u>Date</u>
1. NRC Orientation	<u>(First line supervisor)</u>	_____
2. Code of Federal Regulations	<u>(First line supervisor)</u>	_____
3. Office Instructions	<u>(First line supervisor)</u>	_____
4. Regulatory Guidance	<u>(First line supervisor)</u>	_____
5. NRC Inspection Manual	<u>(First line supervisor)</u>	_____
6. Industry Codes and Standards	<u>(First line supervisor)</u>	_____
7. Inspection Accompaniments	<u>(First line supervisor)</u>	_____
8. NRC Management Directives	<u>(First line supervisor)</u>	_____
9. Review of significant events involving either licensees or sites for which the Division of Waste Management has regulatory responsibility	<u>(First line supervisor)</u>	_____
10. Directed Review of selected licensing casework	<u>(First line supervisor)</u>	_____

	Signature When Complete	Date
11. Required Formal Training (and other specialized training and/or courses)	_____ (First line supervisor)	_____
12. Qualification Board Requirement Met	_____ (Second Level Supervisor or Board Chairman)	_____
13. Recommendation as a qualified inspector or license reviewer	_____ (Second Level Supervisor)	_____
14. Certification Memo Issued	_____ (Second Level Supervisor)	_____
15. *Interim Inspector Certification	_____ (Office Director or Regional Administrator)	_____

*Only if required

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 NMSS organization	_____ Employee	_____
2.	Discussion of NRC organization	_____ First Line Supervisor	_____

(List references here, or add statement such as: "For a complete list of site orientation and NRC Organization review references, see Qualification Guide 1, pgs. xx.")

Qualification Card 2
Code of Federal Regulations

	<u>Initials</u>	<u>Date</u>
A. Familiarization with selected CFR parts completed	_____ Employee	_____
B. Discussion completed on CFR parts related to transportation packaging or dry storage suppliers waste management	_____ First Line Supervisor	_____

(List references here, or add statement such as: "For a complete list of applicable code of federal regulations review references, see Qualification Guide 2, pgs. xx.")

Qualification Card 3
Office Instructions

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

(List references here, or add statement such as: "For a complete list of office policies and procedures review references, see Qualification Guide 3, pgs. xx.")

**Qualification Card 4
Regulatory Guidance**

	<u>Initials</u>	<u>Date</u>
A. Review of <u>selected</u> regulatory guidance		
1. Regulatory Guides	_____ Employee	_____
2. Information Notices/ Bulletins	_____ Employee	_____
3. NUREGs	_____ Employee	_____
4. Generic Letters	_____ Employee	_____
5. Federal Register Notices	_____ Employee	_____
6. Policy and Guidance Directives	_____ Employee	_____
7. Branch Technical Position	_____ Employee	_____
8. SECY Papers	_____ Employee	_____
 B. Discussion of regulatory guidance with application to the Division of Waste Management Inspectors and License Reviewers program	 _____ First Line Supervisor	 _____

(List references here, or add statement such as: "For a complete list of applicable regulatory review references, see Qualification Guide 4, pgs. (x).")

Qualification Card 5
NRC Inspection Manual (IM)

	<u>Initials</u>	<u>Date</u>
A. Review of appropriate NRC IM chapters completed	<u>Employee</u>	<u> </u>
B. Discussion of NRC IM chapters and their relation to the Division of Waste Management Inspectors and License Reviewers program	<u>First Line Supervisor</u>	<u> </u>

(List references here, or add statement such as: "For a complete list of applicable inspection manual review references, see Qualification Guide 5, pgs. xx.")

**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 to the Division of Waste Management Inspectors and License Reviewers program	_____ First Line Supervisor	_____

(List references here, or add statement such as: "For a complete list of applicable industry codes and standards review references, see Qualification Guide 6, pgs. xx.")

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 Division of Waste Management Inspectors and License Reviewers program	_____ First line supervisor	_____

(List references here, or add statement such as: "For a complete list of applicable NRC management directives review references, see Qualification Guide 8, pgs. xx.")

Qualification Card 9
Review of significant events involving either licensees or sites for which the
Division of Waste Management has regulatory responsibility

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

(List references here, or add statement such as: "For a complete list of selected historical review events, see Qualification Guide 9, pgs. xx.")

Qualification Card 10
Directed Review of Selected Licensing Casework

	<u>Initials</u>	<u>Date</u>
A. Review of selected licensing casework	_____ Employee	_____
B. Discussion of the importance of these licensing caseworks	_____ First Line Supervisor	_____

(List references here, or add statement such as: "For a complete list of selected licensing casework, see Qualification Guide 10, pgs. xx.")

Qualification Card 11
Formal Training

<u>CORE TRAINING:</u>	<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 (OP)	Training Coordinator	_____
5. OSHA Indoctrination Course (G-111)	Training Coordinator	_____
6. NMSS Radiation Worker Training (H-102) or Site Access Training (H-100)	Training Coordinator	_____
7. Introduction to Health Physics Course (H-117) or Health Physics Technology Course (H-201)	Training Coordinator	_____
8. Licensing Practices and Procedures Course (G-109)	Training Coordinator	_____
9. NRC Inspection Team Leader Workshop	Training Coordinator	_____
10. The Regulatory Process (OP)	Training Coordinator	_____
11. Confident Public Speaking (A-230)	Training Coordinator	_____

12. Other specialized training ~~and/or~~ courses required for inspector ~~or~~ license reviewers performing inspection or licensing activities in specific areas:

<u>Course Title</u>	<u>Course or Training</u>	<u>Initials</u>	<u>Initials</u>	<u>Date</u>
_____	_____	Supervisor	Training Coord	_____
_____	_____	Supervisor	Training Coord	_____
_____	_____	Supervisor	Training Coord	_____
_____	_____	Supervisor	Training Coord	_____

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 Personnel
 - g. Forms for issuance of tagged, controlled NRC equipment
 - h. Payroll forms and time cards
 - i. Government driver's license, as appropriate
 - j. 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. Physical location of NRC offices and regions
 - g. 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 (10 CFR 2, Appendix C)
 - (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 ~~or license reviewer~~ in that mission.

**Qualification Guide 2
Code of Federal Regulations**

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 0 | Conduct of employees |
| 2. | 10 CFR Part 1 | Statement of organization and general information |
| 3. | 10 CFR Part 2 | Rules of practice for domestic licensing proceedings and issuance of orders |
| 4. | 10 CFR Part 9 | Public Records |
| 5. | 10 CFR Part 19 | Notices, instructions and reports to workers; inspections |
| 6. | 10 CFR Part 20 | Standards for protection against radiation (includes selected Questions and Answers, Q & As) |
| 7. | 10 CFR Part 21 | Reporting of defects and noncompliance |
| 8. | 10 CFR Part 30 | Rules of general applicability to domestic licensing of byproduct material |
| 9. | 10 CFR Part 40 | Domestic licensing of source material |
| 10. | 10 CFR Part 50 | Domestic licensing of production and utilization facilities |
| 11. | 10 CFR Part 51 | Environmental protection regulations for domestic licensing and related regulatory functions |
| 12. | 10 CFR Part 60 | Disposal of high level radioactive wastes in geologic repositories |
| 13. | 10 CFR Part 61 | Licensing requirements for land disposal of radioactive waste |
| 14. | 10 CFR Part 62 | Criteria and procedures for emergency access to non-federal and regional low level waste disposal facilities |
| 15. | 10 CFR Part 70 | Domestic licensing of special nuclear material |
| 16. | 10 CFR Part 71 | Packaging and transportation of radioactive material |

17. 10 CFR Part 72 Licensing requirements for the independent storage of spent nuclear fuel and high-level radioactive waste
18. 10 CFR Part 150 Exemptions and continued regulatory authority in agreement states and in offshore waters under section 274
19. 10 CFR Part 170 Fees for facilities and materials licenses and other regulatory services under the atomic energy act of 1954
20. 10 CFR Part 171 Annual fees for power reactor operating licenses, and fuel cycle licenses and materials licenses
21. 40 CFR Part 141 National Primary Drinking Water Regulations

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 ~~or~~ ~~license-reviewer~~ by the First Line Supervisor to test 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. The qualifying individual should review the NMSS policies and practices on:
 - a. Read the 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
 - 1-19 Notification of Regional Administrators
 - 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
 - 1-40 Legislative and Regulatory Review Requirements for the Office of the Inspector General
 - 1-46 Preparing Federal Register Notices for Site Decommissioning Management Plan Licensing Actions
 - 1-48 Preparing Environmental Assessments
 - 1-50 Environmental Justice in NEPA Documents
 - b. Travel (including Management Directive 14.1 Official Temporary Duty Travel)
 - c. Telephone use
 - d. Policies on use of annual leave and sick leave and excused leave.
 - e. Work schedule
 - f. Use of government equipment
 - g. Union activities
 - h. Communications outside NRC
 - i. Policies on outside employment and acceptance of gifts
 - j. Participation in political activities
 - k. Routing of mail and procedures for sending mail and materials (via U.S. Mail, Federal Express, etc.)

- l. Ordering of documents (e.g NUREGs)
 - m. NMSS emergency and evacuation procedures
 - n. Employee appraisal system and Individual Development Plan (IDP)
 - (1) Probationary period (Management Directive 10.1 Employment)
 - (2) Management Directive 10.67 (Non-SES Performance Appraisal System)
 - o. Differing Professional Opinions
- 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 |
| 1.143 | Design Guidance for Radioactive Waste Management Systems, Structures and Components Installed in Light Water Cooled Nuclear Power Plants |
| 3.10 | Liquid Waste Treatment System Design Guide for Plutonium Processing and Fuel Fabrication Plants |
| 3.13 | Guide for Acceptable Waste Storage Methods at UF₆ Production Plants |
| 3.50 | Standard Format and Content for a License Application to Store Spent Fuel and High-Level Radioactive Waste |
| 3.65 | Standard Format and Content of Decommissioning Plans for Licensees 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 |
| 4.17 | Standard Format and Content of Site Characterization Plans for High-Level Waste Geologic Repositories (1987) |
| 4.17 | Standard Format and Content of Environmental Reports for Near Surface Disposal of Radioactive Waste |
| 4.19 | Guidance for Selecting Sites for Near Surface Disposal of Low Level Radioactive Waste |

- 8.13 Instruction Concerning Prenatal Radiation Exposure
- 8.29 Instruction Concerning Risks from Occupational Radiation Exposure
- ~~DC 1006 Records Important for Decommissioning of Nuclear Reactors (Draft for Comment)~~

~~Others as selected by the first line supervisor~~

2. Information Notices and Bulletins

- IN 79-007 Rupture of Radwaste Tanks
- IN 80-024 Low-Level Radioactive Waste Burial Criteria
- IN 83-005 Obtaining Approval for Disposing of Very-Low-Level Radioactive Waste - 10 CFR Section 20.302
- IN 84-072 Clarification of Conditions For Waste Shipments Subject To Hydrogen Gas Generation
- IN 85-092 Surveys of Wastes Before Disposal From Nuclear Reactor Facilities
- IN 86-020 Low-Level Radioactive Waste Scaling Factors, 10 CFR Part 61
- IN 86-090 Requests to Dispose of Very Low-Level Radioactive Waste Pursuant to 10 CFR 20.302
- IN 87-003 Segregation of Hazardous and Low-Level Radioactive Wastes
- IN 88-008 Chemical Reactions with Radioactive Waste Solidification Agents
- IN 88-016 Identifying Waste Generators in Shipments of Low-Level Waste to Land Disposal Facilities
- IN 89-013 Alternate Waste Management Procedures in Case of Denial of Access to Low-Level Waste Disposal Sites
- IN 89-027 Limitations on the Use of Waste Forms and High Integrity Containers for the Disposal of Low-Level Radioactive Waste

IN 89-085	EPA's Interim Final Rule on Medical Waste Tracking and Management
IN 90-009	Extended Interim Storage of Low-Level Radioactive Waste by Fuel Cycle and Materials Licensees
IN 90-020	Personnel Injuries Resulting From Improper Operation of Radwaste Incinerators
IN 90-031	Update on Waste Form & High Integrity Container ... Review Status, Identification of Problems With Cement Solidification
IN 90-050	Minimization of Methane Gas in Plant Systems and Radwaste Shipping Containers
IN 90-075	Denial of Access to Current Low-Level Radioactive Waste Disposal Facilities
IN 91-003	Management of Wastes Contaminated With Radioactive Materials ("Red Bag" Waste and Ordinary Trash)
IN 91-065	Emergency Access to Low-Level Radioactive Waste Disposal Facilities
IN 94-023	Guidance to hazardous, Radioactive and Mixed Waste Generators on the Elements of a Waste Minimization Program
BL 75-007	No Title - Involves Exothermic Reaction in Radwaste Shipment
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/BR-0167	Software Quality Assurance Program and Guidelines (February 1993)
NUREG 1298	Qualification of Existing Data for HLW Repositories (February 1988)

NUREG 1318	Items and Activities in the High-Level Waste Geologic Repository Program Subject to Quality Assurance Requirements (April 1988)
NUREG 1323, Rev. 0	License Application Review Plan (September 1994)
NUREG 1330, Rev. 1	Manual for the Review of Financial Assurance Mechanisms for Decommissioning Under 10 CFR 30, 40, 70, and 72
NUREG 1444	Site Decommissioning Management Plan
NUREG 1495	Overall Review Strategy for the Nuclear Regulatory Commission's High-Level Waste Repository Program (November 1994)
NUREG/CR-3714	On the Development of Environmental Radiation Standards for Geologic Disposal of High-Level Radioactive Waste (July 1984)
NUREG/CR-4161	Critical Parameters for a High-Level Waste Repository (Vol. 1: Basalt, May 1985; Vol. 2: Tuff, May 1987; Vol. 3: Salt, July 1987)
NUREG/CR-4369	QA Plan for Computer Software Supporting the U.S. NRC's HLW Management Program (January 1986)
NUREG/CR-4510	Assessing Compliance with the EPA HLW October 1986 Standard: An Overview
NUREG/CR-4640	Handbook of Software Quality Assurance Techniques Applicable to the Nuclear Industry (August 1987)
NUREG/CR-5398	Technical Basis for Review of HLW Repository Modeling (March 1990)
NUREG/CR-5849	Manual for Conducting Radiological Surveys in Support of License Termination (Draft for Comment)
NUREG/CR-6232	Assessing the Environmental Availability of Uranium in Soils and Sediments

Others as selected by the first line supervisor

4. Generic Letters

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

As selected by the first line supervisor.

6. Policy and Guidance Directives

FC 83-23 Guidelines for Decontamination of Facilities and
Equipment Prior to Release for Unrestricted Use or
Termination of Byproduct, Source, and Special Nuclear
Material Licensees, November 1983

FC-90 Standard Review Plan for Evaluating Compliance with
Decommissioning Requirements for Source, Byproduct, and
Special Nuclear Material Applications, April 1991

FG-8-08 Scenarios for Assessing Potential Doses Associated with
Residual Radioactivity, May 1994

91-2 Standard review Plan: Evaluating Decommissioning Plans
for Licensees Under 10 CFR Parts 30, 40, and 70

73-01 "Occupational Radiation Exposure Records Systems," Reg.
Guide 8.7, May 1973. Superseded 92-06

73-02 "Guide for Administrative Practices in Radiation
Monitoring," Reg. Guide 8.2, February 1973.

73-03 "Acceptable Concepts, Models, Equations, and Assumptions
for a Bioassay Program," Reg. Guide 8.9, September 1973.

76-01 "Acceptable Programs for Respiratory Protection," Reg.
Guide, 8.15, October 1976.

- 77-01 "Design, Construction, and Inspection of Embankment Retention Systems for Uranium Mills," Reg. Guide 3.11, Rev. 2, December 1977.
- 77-02 "Operating Philosophy for Maintaining Occupational Radiation Exposures As Low As Is Reasonably Achievable," Rev. 1-R, Reg. Guide 8.10, May 1977.
- 78-01 "Preoperational Radiological Environmental Monitoring Programs for Uranium Mills, Fuel Proc. and Fab. Br., January 1978.
- 78-02 "Branch Position for the Contents of Applications for Uranium Ore-buying Station Licenses," Fuel Proc. and Fab. Br., February 1978.
- 78-03 "Laboratory Investigations of Soils for 1.138 Engineering Analysis and Design of Nuclear Power Plants," (For comment), Reg Guide 1.138, April 1978.
- 79-01 "Explorations for Design and Evaluation of Uranium Mill Tailings Retention Systems," January 1979.
- 79-02 "Quality Assurance for Radiological Monitoring Programs (Normal Operations)-Effluent Streams and the Environment," Rev. 1, Reg. Guide 4.15, February 1979.
- 80-01 "Operational Inspection and Surveillance of Embankment Retention Systems for Uranium Mill Tailings," Rev. 1, Reg. Guide 3.11.1, October 1980.
- 80-02 "Radiological Effluent and Environmental Monitoring at Uranium Mills," Rev. 1, Reg. Guide 4.14, April 1980.
- 80-03 "Calibration and Error Limits of Air Sampling Instruments for Total Volume of Air Sampled," Reg. Guide 8.25, August 1980. SUPERSEDED BY 92-05.
- 81-01 "Design, Installation, and Operation of Natural and Synthetic Liners at Uranium Recovery Facilities," Uran. Rec. Lic. Br., July 1981.
- 81-02 "Groundwater Monitoring at Uranium In-Situ Solution Mines," Uran. Rec. Lic. Br., December 1981.
- 81-03 "Standard Format and Content of License Applications for Uranium Mills," Proposed Rev 2, Reg. Guide 3.5, August 1981.
- 81-04 "Audible Alarm Dosimeters," Reg. Guide 8.28, August 1981.

- B1-05 "Instruction Concerning Risks from Occupational Radiation Exposure," Reg. Guide 8.29, July 1981.
- B1-06 "Compilation of Reporting Requirements for Persons Subject to NRC Regulations," Rev. 4, Reg. Guide 10.1, October 1981.
- B2-01 "Hydrogeologic Characterization of Uranium Solution Mine and Mill Tailings Disposal Sites," R1, Uran. Rec. Lic. Br., May 1982.
- B2-02 "Preparation of Environmental Reports for Uranium Mills," Rev. 2, Reg. Guide 3.8, October 1982.
- B2-03 "Standard Format and Content of License Applications, Including Environmental Reports, for In-Situ Uranium Solution Mining," Reg Guide 3.46, June 1982.
- B2-04 "Calculational models for Estimating Radiation Doses to Man from Airborne Radioactive Materials Resulting from Uranium Milling Operations," Reg. Guide 3.51, March 1982. Errata August 1982.
- B2-05 "Design, Installation, and Inspection of Seepage Control Liners at Uranium Recovery Facilities," Draft Reg. Guide HS-146-4, November 1982.
- B2-06 "Delegation and Assignment of Certain Licensing Functions Associated With Uranium Recovery Operations," Memorandum from J.G. Davis to William J. Dircks, November 1982.
- B3-01 "Hydrogeologic Design Criteria for Tailings Retention Systems," January 1983.
- B3-02 "Standard Review Plans Providing Guidance for Uranium Recovery Facility Licensing," July 1983.
- B3-03 "Guidelines for Modeling Groundwater Transport of Radioactive and Non-Radioactive Contaminants at Tailings Disposal Sites," Draft Reg. Guide ES-115-4, May 1983.
- B3-04 "Health Physics Surveys in Uranium Mills," Reg. Guide 8.30, June 1983.
- B3-05 "Information Relevant to Ensuring that Occupational Radiation Exposures at Uranium Mills Will Be As Low As Reasonably Achievable," Reg. Guide 8.31, May 1983.

- B4-01 "Guidelines for Decontamination of Facilities and Equipment Prior to Release for Unrestricted Use or Termination of
Licenses for Byproduct or Source Materials," URFO, Rev. September 1984.
- B5-01 "Standard Review Plan for UMTRCA Title I Mill Tailings Remedial Action Plans," October 1985. SUPERSEDED BY 92-09
- B6-01 "Inspections of Remedial Action at Inactive Uranium Mill Tailings Sites," (Title I UMTRCA), Chapter 2620, Inspection and Enforcement Manual, March 1986. SUPERSEDED BY 93-01.
- B6-02 "General Guidance for Designing, Testing, Operating and Maintaining Emission Control Devices at Uranium Mills," Reg. Guide 3.56, May 1986.
- B6-03 "Establishing Quality Assurance Programs for Packaging Used in the Transport of Radioactive Material," Rev. 1, Reg. Guide 7.10, June 1986.
- B7-01 "Regulation of Ground-Water Contaminants and In-Situ Uranium Solution Mining," Memorandum M.R. Knapp to R.D. Smith, May 1987.
- B7-02 "Methods for Estimating Radioactive and Toxic Airborne Source Terms for Uranium Milling Operations," Reg. Guide 3.59, March 1987.
- B7-03 "Instruction Concerning Prenatal Radiation Exposure," Rev. 2, Reg. Guide 8.13, December 1987.
- B8-01 "Information Needs to Demonstrate Compliance with EPA's Proposed Groundwater Protection Standards in 40 CFR Part 192, Subparts A-C," LLWM/LLTB, June 1988. SUPERSEDED BY 89-03.
- B8-02 "Alternate Concentration Limits for Uranium Mills-Standard Format and Content Guide and Standard Review Plan for Alternate Concentration Limit Applications," LLWM/LLtb, June 1988. SUPERSEDED BY 94-01.
- B8-03 "Management Position on Uranium Mill Tailings Reclamation," LLWM/LL08, November 1988. SUPERSEDED BY 89-01.

- B8-04 "Financial Assurances for Reclamation, Decommissioning, and Long-Term Surveillance and Control of Uranium Recovery Facilities," LLWM, October 1988.
- B8-05 "Onsite Meteorological Measurement Program for Uranium Recovery Facilities-Data Acquisition and Reporting," Reg. Guide 3.63, March 1988.
- B8-06 "Guidance for Selecting Sites for Near Surface Disposal of Low-Level Radioactive Waste," Reg. Guide 4.19, August 1988.
- B8-07 "Bioassay at Uranium Mills," Rev. 1 Reg. Guide 8.22, August 1988.
- B8-08 "Use of Title I Supplemental Standards for Title II Sites," Memorandum from H.L. Thompson, Jr. to R.D. Martin, June 27, 1988.
- B9-01 "Uranium Mill Tailings Management Position," Rev., LLWM/RSS (IV), January 1989.
- B9-02 "Testing and Inspection Plans During Construction of DOE's Remedial Action at Inactive Uranium Mill Tailings Sites," R 2, LLWM, January 1989.
- B9-03 "Standard Format and Content for Documentation of Remedial Action Selection at Title I Uranium Mill Tailings Sites," LLWM, February 1989.
- B9-04 "Processing Material License Applications Involving Change of Ownership," IMNS, RI, June 1989.
- B9-05 "Calculation of Radon Flux Attenuation by Earthen Mill Tailings Covers," Reg. Guide 3.64, June 1989.
- B9-06 "Standard Format and Content of Decommissioning Plans for Licensees under 10 CFR Parts 30, 40, and 70," Reg. Guide 3.65, August 1989.
- B9-07 "Records Important for Decommissioning for Licensees Under 10 CFR Parts 30, 40, 70, and 72," Draft Reg. Guide, Task DG-3001, July 1989.
- 90-01 "Design of Erosion Protection Covers for Stabilization of Uranium Mill Tailings Disposal Sites," LLWM, August 1990.
- 90-02 "Inspection Report Guidance," URFO, May 1990.

- 90-03 "Memorandum of Understanding Between the U.S. Department of Energy and the U.S. Nuclear Regulatory Commission," November 1990.
- 91-01 "Costs for Fencing Reclaimed Title II Sites," Letter from R.L. Bangart to A.B. Beach, February 1991.
- 91-02 "Standard Format for Completion Review Report (CRR)," LLUR, June 1991.
- 91-03 "Position on Disposal Of In-Situ Wastes," LLWM, September 1991.
- 91-04 "Implementation of 10 CFR Part 40, Appendix A, Criterion 1, as Affected by the Atomic Safety and Licensing Appeals Board Decision on Kerr-McGee's West Chicago Facility," Letter from J.S. Surmeier to R.E. Hall, October 1991.
- 91-05 "Request for Designation of an Historic Preservation Officer," Memorandum from R.L. Bangart to L.J. Callan, November 1991.
- 91-06 "Guidelines for NRC Staff Groundwater Protection Evaluation of DOE's UMTRCA Title I Remedial Action Plans," LLWM, June 1991. SUPERSEDED BY 92-09.
- 91-07 "Review of Environmental Monitoring Data During Inspections," URFO, December 1991.
- 91-08 "Combined List of Abbreviations and Acronyms Most Commonly Used," LLWM, July 1991.
- 91-09 "Guidelines for Handling 10 CFR Part 21 Reports," IMNS, June 1991.
- 91-10 "Assessing External Radiation Doses From Airborne Radioactive Materials," Draft Reg. Guide DG-8005, October 1991.
- 91-11 "Delegation of Authority," Memorandum from R.L. Bangart to J.J. Surmeier, April 3, 1991.
- 92-01 "Standardized In-Situ Facility License Conditions," Memorandum from L.J. Callan to R.L. Bangart, July 1992.
- 92-02 "Assessments and Audits: Low Level Waste Management (LLWM) Participation in Agreement State Reviews," LLWM, February 1992.

- 92-03 "Interim Guidance on Evaluation Procedure for Hydraulic Conductivity of Radon/Infiltration Barriers for Title I and Title II Mill Tailings Sites," Memorandum from J.J. Surmeier to R.E. Hall, April 9, 1992.
- 92-04 "Guiding Principals for EPA-NRC Cooperation and Decisionmaking," March 1992.
- 92-05 "Air Sampling in the Workplace," Reg. Guide 8.25, Rev. 1, June 1992.
- 92-06 "Instructions for Recording and Reporting Occupational Radiation Exposure Data," Reg. Guide 8.7, Rev.1, June 1992.
- 92-07 "Radiation Dose to the Embryo/fetus," Reg. Guide 8.36, July 1992.
- 92-08 "Monitoring Criteria and Methods to Calculate Occupational Radiation Doses," Reg. Guide 8.34, July 1992.
- 92-09 "Standard Review Plan for UMTRCA Title I Mill Tailings Remedial Action Plans," Revision 1, LLWM, October, 1992. SUPERSEDED BY 93-02.
- 92-10 "ALARA Levels For Effluents From Materials Facilities," Draft Reg. Guide DG-8013, October 1992.
- 93-01 "On-Site Construction Reviews of Remedial Action At Inactive Uranium Mill Tailings Sites," Chapter 2620, Inspection and Enforcement Manual, Rev. 1, February 1993.
- 93-02 "Standard Review Plan for the Review of Remedial Action of Inactive Mill Tailings Sites Under Title I of the Uranium Mill Tailings Radiation Control Act," Rev. 1, June 1993.
- 94-01 "Alternate Concentration Limits for Title II Uranium Mills," Draft Final Staff Technical Position, February 1994.
- 95-01 "Effluent Disposal at Licensed Uranium Recovery Facilities," Staff Technical Position, April 1995.

High-Level Waste Review Plans:

Administrative Plan and Procedures for NRC Staff Review of DOE's Site Characterization Plan (December 1988)

Revised Technical Review Plan for NRC Staff Review of DOE's Site Characterization Plans (December 1988)

Supplement to the Site Characterization Plan Review Plan (February 1989)

Review Plan for High-Level Waste Repository Quality Assurance Program Descriptions (Revision 2) (March 1989)

Review Plan for NRC Staff Review of DOE Site Characterization Plan Program Reports (August 1990)

Review Plan for NRC Staff Review of DOE Study Plans (Revision 2) (March 1992)

Draft Topical Report Review Plan (Revision 2) (March 1993)

Others as selected by the first line supervisor.

7. Branch Technical Position

SP 60-002 "Performance Objectives Relating to Isolation of the Waste" (August 1990)

SP 60-003 "Definition of the Term Performance Objectives as Used in 10 CFR 60.133(i)" (August 1990)

Disposal or Onsite Storage of Thorium and Uranium Wastes from Past Operations

Others as selected by the first line supervisor.

8. SECY Papers

89-319 Implementation of the U.S. Environmental Protection Agency's High-Level Waste Disposal Standards (October 17, 1989)

90-316 Decommissioning Records Plan, Records Management Guidelines (RMG)

92-01 Decommissioning Records

92-106 Action Plan to Ensure Timely Remediation of Sites Listed in the Site Decommissioning Management Plan

93-013 Analysis of Energy Policy Act of 1992 Issues Related to High-Level Waste Disposal Standards (January 25, 1993)

**94-145 Increase of Tritium and Iron-55 Unrestricted Use Limits
for Surface Contamination at Shoreham and Fort St. Vrain**

Others as selected by the first line supervisor.

**Qualification Guide 5
NRC Inspection Manual**

- A. A selection of currently applicable NRC IM and Inspection Procedure (IP) references with direct application to the Division of Waste Management Inspectors and ~~License Reviewers~~ program should be identified by the First Line Supervisor. The application of the specific references to the inspection and licensing program should be studied in detail by the qualifying individual.

NRC Inspection Manual Parts:

0100 Program Responsibility
0200 Program Management reports
0300 Inspector Policy
0600 Documentation of Findings
0800 Feedback- Improving the Regulatory Process
1000 Regional Office Program Interfaces
1100 Notification of Meetings and Conferences
1200 Inspector Requirements
1300 Incident Response
2800 Materials Inspection Program
3000 Management Meetings
3500 Quality Assurance
3700 Design, Design Changes, Modifications
6500 Low-Level Radioactive Waste Storage Facilities
8300 Radiation Protection
8400 Radioactive Waste Management

- 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 Division of Waste Management Inspectors and ~~License Reviewers~~ 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. 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. Standards selected should be documented by the first line supervisor**
- B. The First Line Supervisor should test the qualifying individual's knowledge of application of these codes and standards to the Division of Waste Management Inspectors and ~~License Reviewers~~ program by discussions, interviews, or oral quizzes.**

Qualification Guide 7 Inspection Accompaniments

- A. Each inspector should accompany certified inspectors on at least four inspections. At least two of these inspections should be performed at a facility other than the designated lead facility.**
- 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**
 - IP 86718 Periodic Maintenance of Packagings**
 - 2. Scheduling and Preparation for Inspections**
 - IM Chapter 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**
 - IM Chapter 0610 (Inspection Reports)**
 - IM Chapter 1100 (Notification of Significant Meetings)**
 - 7. Morning Reports**
 - IM Chapter 0230 (Morning Report)**
 - 8. Non-routine Licensee Events**
 - IM Chapter 1110 (Potential Abnormal Occurrences)**
 - IM Chapter 90711 (Nonroutine Event Review)**
 - IM Chapter 0325 (Augmented Inspection Team)**
 - 9. Preliminary Notification**
 - IM Chapter 1120 (Telephonic and Written Preliminary Notifications)**

10. Bulletins/Information Notices

IM Chapter 0720 (NRC Bulletins and Information Notices)

11. Use of Consultants of NRC

12. Allegations and Investigations

13. Communication outside NRC

Management Directive 5.5 Public Affairs Program

**Management Director 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 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 Management Directive 9.1 (Organization Management)**
- 2. NRC Management Directive 9.29 (Regional Offices)**
- 3. NUREG 0325 (USNRC Functional Organization Chart)**
- 4. NRC Management Directive 3.2 (Privacy Act)**
- 5. NRC Management Directive 3.1 (Freedom of Information Act)**
- 6. NRC Management Directive 10.130 (OSHA)**
- 7. NRC Management Directive 10.131 (Standards for Protection Against Ionizing Radiation)**
- 8. NRC Management Directive 14.1 (Official Temporary Duty Travel)**
- 9. NRC Management Directive 10.159 (Differing Professional Views or Opinions)**
- 10. NRC Management Directive 10.42 (Hours of Work and Premium Pay)**
- 11. NRC Management Directive 10.43 (Time and Attendance Reporting)**
- 12. NRC Management Directive 10.67 (Non-SES Performance Appraisal System)**
- 13. NRC Management Directive 10.101 (Employee Grievances)**
- 14. NRC Management Directive 10.114 (Employee Benefits Program)**
- 15. NRC Management Directive 8.3 (NRC Incident Investigation Program)**
- 16. NRC Management Directive 8.8 (Management of Allegations)**
- 17. NRC Management Directive 10.98 (Conduct of Employees)**
- 18. NRC Management Directive 4.6 License Fee Management Program**

19. NRC Management Directive 5.1 Intergovernmental Consultation
 20. NRC Management Directive 5.2 Memorandum of Understanding With States
 21. NRC Management Directive 5.5 Public Affairs Program
 22. NRC Management Directive 8.11 Review Process for 10 CFR 2.206
Petitions
 23. NRC Management Directive 10.5 Oath of Office
 24. NRC Management Directive 10.160 Open Door Policy
- B. Application of the selected NRC Management Directives to the Division of Waste Management Inspectors and ~~License Reviewers~~ 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 involving either licensees or sites
for which the Division of Waste Management has regulatory responsibility

- A. A selection of significant historical 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 individual and go over recommendations made, lessons learned, and changes identified to prevent recurrence. The relevance of the event to the Division of Waste Management Inspectors and ~~License Reviewers~~ program should be stressed.

Qualification Guide 10
Directed Review of selected licensing casework

- A. A selection of licensing casework should be identified by the first line supervisor. These events should be documented and studied in detail by the qualifying ~~license reviewer~~ **Inspector**.
- B. The first line supervisor should discuss the licensing casework in detail with the qualifying individual. The relevance of the casework to the Division of Waste Management ~~License Reviewers~~ **Inspectors** program should be stressed.

Qualification Guide 11
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.