

APPENDIX E8

TRAINING REQUIREMENTS AND QUALIFICATION JOURNAL FOR URANIUM RECOVERY PROJECT MANAGER/TECHNICAL REVIEWER

Note: The Uranium Recovery Project Manager/Technical Reviewer 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 XIII and Appendix B Section XIII 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 E8

TRAINING REQUIREMENTS FOR URANIUM RECOVERY PROJECT MANAGER/TECHNICAL REVIEWER

A. APPLICABILITY

The training described below is required for all uranium recovery project manager/technical reviewers assigned to perform project management and technical reviews of licensing actions on Source Material Licenses.

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 Management Directives
 - (6) Directed Review of Selected Licensing Casework
 - (7) Formal Training (and Other Specialized Training and/or Courses)
 - b. Core Training. These courses establish minimum formal classroom training requirements. Refer to Section 1246-08 for exceptions to these requirements.
 - (1) Licensing Practices and Procedures (G-109)
 - (2) NMSS Radiation Worker Training (H-102)
 - (3) General Health Physics Practices for Uranium Recovery (F-104) or General Health Physics Practices for Fuel Cycle Facilities Directed Self-Study Course (F-102S)
 - (4) Environmental Impact Assessment (Form 368)
 - c. Specialized Training. Depending on the employee's previous work experience and planned activities, additional courses may be required in order to gain knowledge necessary for specialized licensing activities. Management will make this determination on an individual basis.

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 licensing activities in specific areas.
3. Refresher Training. Refresher training will be conducted every three years following initial certification. Refresher training will be determined by management on a case-by-case basis.

END

URANIUM RECOVERY PROJECT MANAGER/TECHNICAL REVIEWER NRC PROJECT MANAGER/TECHNICAL REVIEWER QUALIFICATION JOURNAL

Applicability

This NRC Project Manager/Technical Reviewer Qualification Journal implements NRC Manual Chapter 1246, which establishes the minimum training requirements for personnel assigned to perform Project Management and Technical Reviews for uranium recovery facilities. The Qualification Journal must provide traceable documentation to show that minimum requirements are met for each Project Manager/Technical Reviewer.

The NRC Project Manager/Technical Reviewer Qualification Journal consists of a series of qualification guides and signature cards. Each signature card is used to document task completion, as indicated by the appropriate signature blocks. Each signature card has a corresponding qualification guide which 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 license reviewer's qualification. The Project Manager/Technical Reviewer is expected to have a general familiarity with these references. Other sections of the qualification guides identify specific references that have direct application to the license review discipline. The Project Manager/Technical Reviewer is expected to demonstrate detailed knowledge of the license review specific references.

In order to support the review of upper tier documents, programs, and policies, the Project Manager/Technical Reviewer's First Line Supervisor will assign one or more uranium recovery facilities as reference facilities. The selection of a reference facility is intended to provide the Project Manager/Technical Reviewer's management with the ability to tailor the qualification process to the experience and training level of the license reviewer, and to meet the needs of the NRC. The use of specific real world material will reinforce the qualification process.

LICENSE REVIEWER QUALIFICATION JOURNAL
 Uranium Recovery Project Manager/ Technical Reviewer

Name	Title	Branch	Section
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To complete your qualification as a Uranium Recovery Project Manager/ Technical Reviewer you are to complete the following signature cards. All signoffs shall include the signature of the responsible reviewer and the date. Maintain these cards in a notebook along with any background or written material required by the program. This notebook will comprise your NRC Project Manager/ Technical Reviewer 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	First Line Supervisor	
4. Regulatory Guidance	First Line Supervisor	
5. Site Familiarization Visits	First Line Supervisor	
6. NRC Management Directives	First Line Supervisor	
7. Directed Review of Selected Licensing Casework	First Line Supervisor	
8. Formal Training	First Line Supervisor	
Qualification Board Requirement met	Second Level Supervisor or Board Chairman	
Recommended as a qualified License Reviewer	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 NMSS 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 Uranium Recovery program	_____	_____
	First Line Supervisor	

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	_____

Qualification Card 4
Regulatory Guidance

	<u>Initials</u>	<u>Date</u>
A. Review of selected 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. NRC Branch Technical Positions	_____ Employee	_____
8. SECY Papers	_____ Employee	_____
B. Discussion of regulatory guidance with application to the Uranium Recovery program	_____ First Line Supervisor	_____

Qualification Card 5
Site Familiarization Visits

		<u>Initials</u>	<u>Date</u>
A.	Site Familiarization visits completed		
1.	_____ Facility	_____ Employee	_____
2.	_____ Facility	_____ Employee	_____
3.	_____ Facility	_____ Employee	_____
4.	_____ Facility	_____ Employee	_____
B.	Discussion of Review and discussion by first line supervisor of licensing site visits and their relation to the Project Manager/ Technical Reviewer's role		
1.	_____ Facility	_____ First Line Supervisor	_____
2.	_____ Facility)	_____ First Line Supervisor	_____
3.	_____ Facility	_____ First Line Supervisor	_____
4.	_____ Facility	_____ First Line Supervisor	_____

Qualification Card 6
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 Uranium Recovery program	_____ First Line Supervisor	_____

Qualification Card 7
Directed Review of Selected Uranium Recovery Licensing Casework

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

Qualification Card 8
Formal Training

A. CORE TRAINING:	<u>Initials</u>	<u>Date</u>
1. Licensing Practices and Procedures Course (G-109)	_____	_____
	Training Coordinator	
2. NMSS Radiation Worker Training Course (H-102)	_____	_____
	Training Coordinator	
3. General Health Physics Practices for Uranium Recovery Course (F-104) or General Health Physics Practices for Fuel Cycle Facilities Directed Self-Study Course (F-102S)	_____	_____
	Training Coordinator	
4. Environmental Impact Assessment (Form 368)	_____	_____
	Training Coordinator	

B. SPECIALIZED TRAINING

Other specialized training and/or courses required for license reviewers performing 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 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 1974, 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 license reviewer in that mission.

Qualification Guide 2
Code of Federal Regulations (CFR)

A. A selection of currently applicable CFR Parts should be made by the First Line Supervisor. The selection should include the references listed below and be documented. 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 21 Reporting of defects and noncompliance
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 51 Environmental protection regulations for domestic licensing and related regulatory functions
10. 29 CFR Part 1910 General Industry Standards - Respiratory Protection (10CFR1910.134)
11. 30 CFR Part 828 Special Permanent Program Performance Standards - In-Situ Processing
12. 40 CFR Part 141 National Primary Drinking Water Regulations
13. 40 CFR Part 192 Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings

B. Following completion of the qualifying individual's self study of the listed CFR Parts, a discussion will be held with the qualifying 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. Read the NMSS Policy and Procedures Letters (PPLs)
 - 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
 - 1-42 Radiation Protection Procedures for NMSS Employees
 - 1-48 Preparing Environmental Assessments
 - 1-50 Environmental Justice in NEPA Documents
2. The qualifying individual should review the NMSS 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 and 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. NMSS 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)
- o. NMSS Delegation of Authority (September 18, 1995)

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 that are within the particular area of reviewer's technical expertise 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.

1. Regulatory Guides (use latest revision)

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|------|---|
| 3.5 | Standard Format and Content of License Applications for Uranium Mills |
| 3.8 | Preparation of Environmental Reports for Uranium Mills |
| 3.11 | Design, Construction, and Inspection of Embankment Retention Systems for Uranium Mills |
| 3.46 | Standard Format and Content of License Applications, including Environmental Reports, for In-Situ Uranium Solution Mining |
| 3.56 | General Guidance for Designing, Testing, Operating and Maintaining Emission Control Devices at Uranium Mills |
| 3.59 | Methods for Estimating Radioactive and Toxic Airborne Source Terms for Uranium Milling Operations |
| 3.63 | Onsite Meteorological Measurement Program for Uranium Recovery Facilities-Data Acquisition and Reporting |
| 4.15 | Quality Assurance for Radiological Monitoring Programs (Normal Operations)-Effluent Streams and the Environment |
| 8.37 | ALARA Levels for Effluents from Material Facilities |

Others as selected by the First Line Supervisor

2. Information Notices (IN) and Bulletins (BL)

- | | |
|-----------|---|
| IN 93-60 | Reporting Fuel Cycle and Materials Events to the NRC Operations Center, Supplement 1 |
| IN 94-023 | Guidance to Hazardous, Radioactive and Mixed Waste Generators on Elements of Waste Minimization |
| IN 95-055 | Handling Uncontaminated Yellowcakes Outside of Facility Processing Circuit |
| IN 96-047 | Record Keeping, Decommissioning Notifications for Disposals of Radwaste by Land Burial |

IN 97-050	Contaminated Lead Products
IN 97-055	Calculation of Surface Activity for Contaminated Equipment and Materials
IN 97-057	Leak Testing of Packaging used in Transport of Radioactive Material
IN 97-058	Mechanical Integrity of In-Situ Leach Injection Wells & Piping

Others as selected by the First Line Supervisor

3. NUREGs (latest revision, where applicable)

NUREG 1330	Manual for the Review of Financial Assurance Mechanisms for Decommissioning under 10 CFR 30, 40, 70, and 72
NUREG 1569	Draft Standard Review Plan (SRP) for In Situ Leach Uranium Extraction License Applications
NUREG 1621	Final SRP for the Review of Remedial Action of Inactive Mill Tailings Sites under Title I of the UMTRCA
NUREG/CR-4884	Interpretation of Bioassay Measurements
NUREG/CR-5849	Manual for Conducting Radiological Surveys in Support of License Termination
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)

97-03	Annual Financial Surety Update Requirements for Uranium Recovery Licensees
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Others as selected by the First Line Supervisor.

5. Federal Register Notices (FR)

62 FR 39058	Minimization of contamination (July 21, 1997)
60 FR 49296	Final Revised Guidance on Disposal of Non-Atomic Energy Act of 1954, Section 11e.(2) Byproduct Material in Tailings Impoundments (September 22, 1995)

Others as selected by the First Line Supervisor.

6. Policy and Guidance Directives

PGD 8-01	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
UR 90-03	Memorandum of Understanding Between the U.S. Department of Energy and the U.S. Nuclear Regulatory Commission, November 1990
UR 91-01	Costs for Fencing Reclaimed Title II Sites, Letter from R.L. Bangart to A.B. Beach, February 1991
UR 91-02	Standard Format for Completion Review Report (CRR), LLUR, June 1991
UR 91-03	Position on Disposal Of In-Situ Wastes, LLWM, September 1991
UR 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

Others as selected by the First Line Supervisor.

7. Branch Technical Position

Alternate Concentration Limits for Title II Uranium Mills (January 1996)

Design of Erosion Protection Covers for Stabilization of Uranium Mill Tailings Sites (August 1990)

Effluent Disposal at Licensed Uranium Recovery Facilities (April 1995)

Others As selected by the First Line Supervisor.

8. SECY Papers

97-110 Status Report on Implementation of Dam Safety Program (May 29, 1997)

95-155 Review of Previously Approved Reclamation Plans (June 14, 1995)

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

Others as selected by the First Line Supervisor.

Qualification Guide 5 Site Familiarization Visits

- A. Each Project Manager/Technical Reviewer should accompany a certified inspector on at least four inspections for site familiarization. At least two of these site familiarization visits 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 site familiarization visits. The First Line Supervisor will discuss these items, as appropriate, following each site familiarization visit.
1. The Inspection Program
 - MC 2620 On-Site Construction Reviews of Remedial Actions at Inactive Uranium Mill Tailings Sites (Title I UMTRCA)
 - MC 2641 In-Situ Leach Facilities Inspection Program
 - MC 2801 Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program
 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 0620 Inspection Documents and Records
 - MC 1100 Notification of Significant Meetings
 7. Morning Reports
 - MC 0230 Morning Report
 8. Non-routine Licensee Events
 - MC 1110 Potential Abnormal Occurrences
 - IP 90714 Nonroutine Reporting Program
 - Management Directive 8.3 NRC Incident Investigation Program

Management Directive 8.10 NRC Medical Event Assessment 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

MC 0730 Generic Communications Regarding Materials and Fuel Cycle Issues

11. Use of Consultants of NRC

MC 1360 Use of Physician and Scientific Consultants in the Medical Consultant Program

Management Directive 10.6 Use of Consultants & Experts

12. Allegations and Investigations

Management Directive 8.8 Management of Allegations

13. Communication outside NRC

MC 1007 Interfacing Activities Between Regional Offices of NRC and OSHA

Management Directive 5.5 Public Affairs Program

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

Qualification Guide 6
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 Program
15. NRC MD 8.8 Management of Allegations
16. NRC MD 4.6 License Fee Management Program
17. NRC MD 5.1 Intergovernmental Consultation
18. NRC MD 5.2 Memorandum of Understanding With States
19. NRC MD 5.5 Public Affairs Program
20. NRC MD 8.11 Review Process for 10 CFR 2.206 Petitions
21. NRC MD 10.5 Oath of Office
22. NRC MD 10.160 Open Door Policy

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

Qualification Guide 7
Directed Review of Selected Uranium Recovery Licensing Casework

- A. A selection of licensing casework should be identified by the First Line Supervisor. The relevance of the casework to the Uranium Recovery program should be documented and studied in detail by the qualifying individual.

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

Qualification Guide 8 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 E8

Commitment Tracking Number	Document Accession number and Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	ML112360177 10/26/11 CN 11-022	Revision history sheet added. Combined Appendix A13 with Appendix B13 and renamed as Appendix E8. Added "training requirements" section from Appendix A13.	None	N/A	ML112360186