

NRC INSPECTION MANUAL

NMSS

INSPECTION MANUAL CHAPTER 1248 APPENDIX F

TRAINING REQUIREMENTS AND QUALIFICATION JOURNAL
FOR DECOMMISSIONING INSPECTORS

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Introduction.

The U.S. Nuclear Regulatory Commission (NRC) Decommissioning Inspector (inspector) qualification program requires completion of a variety of activities designed to help and prepare you, the candidate inspector, learn information or practice skills important to independently performing this important function. When you have completed the entire qualification process, you will have demonstrated each of the competencies required to be a successful decommissioning inspector. The role of an inspector is to objectively determine if licensees are performing activities involving licensed radioactive material safely and securely and in accordance with NRC regulations, guidance, and license conditions. The inspector's role is not to establish policy in the areas of health and safety or security. Inspectors should refer policy questions to their management and to the program office.

A competent inspector should:

- a. Understand the legal basis and the processes used for achieving the NRC's regulatory objectives.
- b. Acquire a fundamental understanding of the NRC's organizational structure, mission, goals, and objectives.
- c. Understand the basis for the authority of the agency.
- d. Understand the processes established to achieve the regulatory objectives.
- e. Master the techniques and skills needed to collect, analyze, and integrate information using a safety and security focus to develop a supportable regulatory conclusion.
- f. Understand health physics fundamentals and further technical knowledge in the reactor and/or materials tracks, as they apply to decommissioning and site release.
- g. Have the personal and interpersonal skills to independently carry out assigned regulatory activities, either individually, as a member of a team, or as a team lead (for inspectors fully qualified in one or more technical tracks).

Program Organization.

The inspector qualification process develops your awareness of the role of the agency, your role and skill as an inspector, and your technical expertise for conducting health and safety and security inspections. The inspector qualification process is divided into two levels: (1) Basic Level and (2) Technical Proficiency Level. The Basic-Level activities are designed to help you develop awareness of the agency's role and the inspector's role. Successfully completing the Basic-Level work will provide you with a context for meaningful learning during onsite work and a foundation for in-depth learning at the Technical Proficiency Level. After successfully completing the Basic-Level activities, you will be eligible to receive a Basic Inspector Certification. With a Basic Inspector Certification, you may be assigned to perform limited scope inspection activities under an appropriate degree of detailed supervision where you can apply the skill sets that you have recently acquired. The scope of your assigned inspection activities will be controlled by your immediate supervisor. You may be asked to conduct inspection activities, but will not be expected to independently reach conclusions, describe official agency positions on evolving issues, or act as an official agency spokesperson.

The Technical Proficiency activities are designed to develop the technical expertise in the two decommissioning tracks: Reactors and Materials. The immediate supervisor shall discuss with the candidate inspector their expected path to qualification, which may include one or both tracks. It is expected that a candidate inspector may focus on one track and may or may not complete qualification in the other track depending on workload and supervisor discretion. However, for this qualification journal, to obtain a qualification in one track requires completion of a qualification board as described below. A subsequent qualification board is not necessary if the inspector completes the other track at a later time. This approach allows for the supervisor to balance workload by enabling a candidate inspector to focus on one track, become qualified, and begin leading inspections. An inspector who is qualified in one track shall not be the lead inspector for a project or site in the other track but may assist on inspections.

The two levels of the Decommissioning Inspector Qualification Journal consist of a series of Individual Study Activities (ISAs), classroom or virtual training requirements, and on-the-job training (OJT) activities. The ISAs, trainings, and OJTs in the Technical Proficiency level are marked as reactor track (R), materials track (M), or both tracks (B). There is no exact limit on the number of times you practice on-the-job activities. You must practice until you can perform inspector tasks successfully, in accordance with the evaluation criteria. You may complete the Basic Level requirements together with the Technical Proficiency requirements. The time necessary to complete this qualification journal will vary, depending on the candidate's previous experience and education. A candidate who is working to become cross-qualified while still performing other job duties may take longer. The qualification timeline should be discussed and agreed upon between the candidate and their supervisor and periodically reviewed.

The final activity in the qualification process is to appear before a qualification board. Inspection Manual Chapter (IMC) 1248, Section 08, "Qualification Board," provides guidance for Board members to use in conducting the oral qualification, including that the board should contain a cross-section of knowledgeable staff ranging from a peer with qualification in the discipline being sought by the candidate to a division director. Consideration should be given to including regional based staff as members on the board for non-region-based candidate inspectors for consistency. Successful completion of the qualification board examination validates your understanding of the role of the agency, the Office of Nuclear Materials Safety and Safeguards (NMSS) programs, and your role as an inspector to act independently in the field as a decommissioning inspector. Upon successful completion of all the activities in this qualification journal, including the qualification board, you become eligible to receive certification as a Reactor and/or Materials Decommissioning Inspector.

Qualification Journal Organization.

The qualification journal identifies the training courses, the ISAs and OJT activities you must complete. Document your progress on the signature cards and certifications as you move through the qualification process. The journal also contains a form to document the justification for accepting equivalent training or experience as a way to meet inspector qualification requirements. The signature cards, certification, and equivalency justification pages form the permanent record of completing the inspector qualification program. These pages will be placed in your official personnel file.

Consideration should be given to assigning a qualified inspector to assist you. This person would serve as a resource and mentor by answering any questions or providing guidance as you work to complete this qualification journal. If you do not work in a regional office, consider asking your immediate supervisor to coordinate with one of the regional offices to assign a qualified region-based inspector to provide for consistent training and for better coordination of OJTs.

Decommissioning Inspector Competencies.

The training and qualification program detailed in this qualification journal ensures that every inspector acquires competency in three general areas:

- Area 1: Understand the legal basis and the regulatory processes for achieving the NRC's regulatory objectives by:
- Acquiring a fundamental understanding of the NRC's organizational structure, mission, goals, and objectives (Regulatory Framework)¹.
 - Understanding the basis for the authority of the agency (Regulatory Framework).
 - Understanding the processes established to achieve the regulatory objectives (Regulatory Framework).
- Area 2: Acquire the techniques and skills needed to collect, analyze, and integrate information using a safety and security focus to develop a supportable regulatory conclusion by:
- Independently gathering information through objective review, observation, and open communications (Inspection).
 - Evaluating licensing information by conducting an objective review (Licensing Activities).
 - Determining acceptability of information by comparing with established criteria (Inspection and Licensing Activities).
 - Objectively analyzing and integrating information using a safety and security focus to identify the appropriate regulatory conclusion and regulatory response (Enforcement).
- Area 3: Have the personal and interpersonal skills to carry out assigned regulatory activities either individually or as a member of a team by:
- Expressing ideas or thoughts clearly and respectfully, carefully listening, and speaking and writing with appropriate safety and security focus and context (Communication).

¹ Specific competency areas are listed in parenthesis following each item

- Working collaboratively with others toward common objectives (Teamwork).
- Working independently, exercising judgment, and exhibiting flexibility in the completion of activities including during difficult or challenging situations (Self-Management).
- Using technology to locate, gather, manipulate, and share information (Information Technology).

Refresher Training.

Qualified inspectors must maintain their qualification by completing 24 hours of refresher training in the established requalification cycle of 24 months and by maintaining proficiency by performing a minimum of one decommissioning inspection per 24-month period. A fully qualified inspector who does not maintain proficiency may participate on inspection under the supervision of a qualified inspector but may not conduct independent inspection activities prior to fulfilling all refresher requirements. The beginning of each requalification cycle will be determined using the year the inspector completed their qualification. If the date the inspector completed their qualification is unknown, the immediate supervisor should establish a requalification cycle based on the best available information. The inspector's immediate supervisor may grant a six-month extension if, for good reason, the inspector is unable to complete the required refresher training within the limits of the requalification cycle. At the supervisor's discretion, if inspectors are qualified under multiple inspector qualification journals flexibility should be considered as refresher requirements may not be uniform provided the inspector is performing the equivalent of 12 hours every 12 months.

The qualified inspector's immediate supervisor will determine the training courses the inspector needs and will coordinate with Human Resources Training and Development (HRTD) staff, as necessary, to obtain the needed training. Additionally, the immediate supervisor may consult with HRTD staff to help identify specific courses that the staff member can take for refresher training. Examples of training that may be considered include: Health Physics Topics (H-401) NRC technical training courses, external training courses, attending lectures, developing presentations on subjects related to health and safety or security, directed self-study courses (identified in the Talent Management System [TMS]), decommissioning counterpart meetings, or other training approved by the qualified inspector's immediate supervisor.

It is important to note that only taking a single course may not be sufficient refresher training. Completing the refresher training will depend on the number of hours that the qualified staff member has completed.

Before taking refresher training, inspectors should receive approval from their immediate supervisor to confirm that the training will be credited as refresher training. The immediate supervisor should take into consideration the objectives of the training and determine whether the training will be beneficial to the inspector. When considering a self-study style of training, the immediate supervisor should determine whether the training is appropriately structured. If the immediate supervisor is unsure if the self-study training is appropriate, they may want to consult with HRTD staff for its analysis of the training.

NOTE: Inspectors may retake a course they had taken previously for refresher training. An immediate supervisor should consider whether it would be beneficial for the inspector to retake the course. An immediate supervisor should consider whether there have been changes in technology, regulations, or if the course has changed considerably since the last time the inspector took the course before allowing a course to be taken for refresher training. If the immediate supervisor allows the inspector to retake the course, the inspector must complete and pass the exam, if the course has one, to receive credit for the course.

Appendix A
Basic-Level Training and Qualification Journal

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Part I. Basic-Level Training and Qualification Journal

Required Basic Level Training Courses

These courses can be taken in any order (some of these courses are required outside of the qualification process):

- Site Access Training (Web-based, course H-100S) or Site Access Refresher Training (H-101).
- H-122S, Fundamental Health Physics (Web-based, course in TMS).
- Ethics Training for New Employees (Web-based, course in TMS) as part of ISA-13.
- Allegation Process (Web-based, course in TMS) as Part of ISA-12.
- The Non-Concurrence Process (NCP) (Web-based, course in TMS) as part of ISA-8.
- Differing Professional Opinion (DPO) Program (Web-based, course in TMS) as part of ISA-8.
- Information Security (INFOSEC) Awareness Training (Web-based, course in TMS) as part of ISA-19.
- Industrial Safety courses in TMS (Web-based, course numbers listed in OJT-1).

Interpersonal Skills Training

The interpersonal skills training courses listed below are not required until the Technical Proficiency Level. However, they can be taken at any time during the inspector qualification process. It is recommended that trainees observe an entrance and exit meeting or discuss the objectives of these meetings, with a qualified inspector before attending the Effective Communication for NRC Inspectors course. Successful completion of any of the following courses should be documented on the signature card in the Technical Proficiency Qualification Journal in Appendix B:

- Effective Communications for NRC Inspectors (instructor-led, course 5557 in TMS).
- Gathering Information for Inspectors through Interviews (instructor-led, course 135 in TMS).
- Media Training Workshop (Course 571).

Technical Training

Technical Training may be started at this level, provided that the training does not required successful completion of the Basic Level as a pre-requisite.

Part II. Basic-Level Individual Study Activities

The individual study activities (ISAs) direct and focus your efforts as you review documents and perform technical training assignments important to the performance of your job. Each activity begins with a purpose statement informing you of why the activity is important and how it relates to the inspector function. The evaluation criteria identify what you are expected to achieve upon completing the activity. The evaluation criteria are listed up front so that you can review them first. Use the evaluation criteria to help you focus on what is most important. The tasks outline the things you must do to successfully address the evaluation criteria.

The following general guidance applies as you complete the various study activities:

- ✓ The first ISA should be done first. Becoming familiar with the agency, the internal and external Web sites, your overall role as an inspector and the NRC's safety culture is important for successfully completing many of the remaining activities. You should also become familiar with the content of the remaining ISAs so that you can complete the ISAs as opportunities arise.
- ✓ Complete all assigned parts of each activity.
- ✓ Your immediate supervisor will act as a resource as you complete each activity. Your immediate supervisor also may designate qualified inspectors as mentors to work with you as you complete the various activities. Discuss any questions you may have about the content of anything you read with your immediate supervisor or mentor.
- ✓ You are responsible for keeping track of the tasks you have completed. Be sure to complete all the assigned tasks in each activity before meeting with your immediate supervisor for evaluation.

Decommissioning Basic Level Individual Study Activity

TOPIC: (ISA-1) History and Organization of the U.S. NRC

PURPOSE: The purpose of this activity is to familiarize you with the regulatory history of radioactive material and the evolution of the regulatory framework under which today's NRC staff functions. During this activity, you will review the organization of the agency and its staff and the relationships between the NRC Commissioners and major offices.

COMPETENCY
AREA: REGULATORY FRAMEWORK

REFERENCES:

1. Title 10 of the *Code of Federal Regulations* (10 CFR)
2. NUREG-0980, "Nuclear Regulatory Legislation" (NUREGs are in the Document Collections section of the NRC Library on the public Web page, select the latest edition)
3. NUREG-1350, "Information Digest"
4. NUREG/BR-0175, "A Short History of Nuclear Regulation, 1946-2009," Revision 2, September 2010
5. Management Directive (MD) 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)"
6. MD 5.8, "Proposed Section 274b Agreements with States"

EVALUATION
CRITERIA: Upon completion of this activity, you will be asked to demonstrate your understanding of the agency's regulatory history, its interaction with the Commissioners, and development of the commercial, industrial, and medical applications of radioactive material by successfully doing the following:

1. Discuss the purpose of the Atomic Energy Act of 1954, as amended.
2. Discuss the major regulatory impacts of the Energy Reorganization Act of 1974, as amended.
3. Discuss the major regulatory impacts of the Energy Policy Act of 2005.
4. Discuss the roles and responsibilities and relationship between the regions and the NMSS programs.
5. Discuss the relationship between the NRC and Agreement States.

6. Outline the major offices and briefly describe the functions of the Commission, the Office of the Inspector General, Office of the Secretary (SECY), the Atomic Safety and Licensing Board, the Advisory Committee on the Medical Uses of Isotopes (ACMUI), and Commission staff and program offices, including the Chief Financial Officer and Executive Director for Operations.
7. Locate Commission-related documents and discuss how the Commission uses staff requirements memoranda or SRMs to direct the staff.
8. Discuss the relationship between the NRC and the U.S. Department of Energy (DOE).
9. Describe your Region's organization and key management positions.

TASKS:

1. Locate and bookmark electronic locations of the above-stated reference material for personal use and future reference. Some documents may be available through the regional Public Affairs Office. You can find electronic copies of documents on the NRC external Web site in the NRC Library.
2. Review the reference material to gain an understanding of the principles discussed in the evaluation criteria.
3. Complete the course in TMS "The NRC: An Agency Overview". Note: Two offices discussed in the course: "The Office of New Reactors" and "The Office of Federal and State Materials and Environmental Management Programs," no longer exist as separate stand-alone organizations.
4. Review and discuss the items listed in the evaluation criteria with your immediate supervisor.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-1.

Decommissioning Basic Inspector Individual Study Activity

TOPIC:	(ISA-2) Understanding How the Commission Operates
PURPOSE:	The NRC Commissioners establish the approach the NRC staff will use to address a particular need of agency importance. Examples include the Commission policy statement regarding NRC staff use of probabilistic risk analysis in the decision-making process and resident inspector staffing requirements at operating power reactor facilities. Commission decisions can have a significant impact on the conduct of inspection activities and inspectors should be familiar with the direction-setting and policymaking activities of the Commission.
COMPETENCY AREA:	REGULATORY FRAMEWORK
REFERENCES:	NRC external Web sites
EVALUATION CRITERIA:	<p>At the completion of this activity, you should be able to do the following:</p> <ol style="list-style-type: none">1. Locate Commission-related documents on the internal and external agency Web sites.2. Discuss how the Commission uses staff requirements memoranda to direct the staff.
TASKS:	<ol style="list-style-type: none">1. Read about the Commission's direction-setting and policy making activities under Policy making.2. Read about the different kinds of decision documents issued by the Commission.3. Meet with your supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.
DOCUMENTATION:	Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-2.

Basic Level Inspector Individual Study Activity

TOPIC:	(ISA-3) Overview of Select Parts of Title 10 of the <i>Code of Federal Regulations</i>
PURPOSE:	The purpose of this activity is to acquaint you with the regulations that specify the requirements for all aspects of the NRC. This ISA will help you to understand the regulations and become familiar with specific requirements in the regulations.
COMPETENCY AREA:	REGULATORY FRAMEWORK
REFERENCES:	<ol style="list-style-type: none">1. The NRC internal home page2. An electronic or paper copy of the latest revisions to 10 CFR Parts 1 through 199
EVALUATION CRITERIA:	<p>Upon completion of the tasks in this activity, you will be asked to demonstrate your understanding of the general content of 10 CFR by successfully discussing the following (with emphasis on parts 30, 40, and 70):</p> <ol style="list-style-type: none">1. State the purpose of 10 CFR Parts 1, 2, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 50, 51, 61, 70, 71, 72, 73, 110, 150, 170, and 171.2. Given a specific subject, identify which section in 10 CFR discusses the requirements for that subject.3. Discuss the parts of the regulations identified. <p>Successfully answer the problems and questions about the regulations provided to you by your immediate supervisor. The problems and questions may be developed by your immediate supervisor or a qualified staff member assigned to assist you with qualification.</p> <p>Be able to discuss the difference between specific license of limited scope, specific license of broad scope, general license, and persons exempt from licensing.</p>
TASKS:	<ol style="list-style-type: none">1. Read and be familiar with the following parts of 10 CFR: 30, 40, 70. Also, specifically read Parts 30.35 and 30.36.2. Identify with your immediate supervisor what parts of the regulations you should focus on during your review. These may be in addition to what is listed above.

3. Answer the problems and questions about the regulations provided by your immediate supervisor and discuss your answers with your immediate supervisor and a senior technical staff member.
4. Meet with your immediate supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

Be able to discuss the difference between specific license of limited scope, specific license of broad scope, general license, and persons exempt from licensing.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-3.

Decommissioning Basic Level Inspector Individual Study Activity

TOPIC: (ISA-4) Overview of 10 CFR Part 50 for Power Reactors

PURPOSE: The purpose of this activity is to acquaint you with the regulations that specify the requirements for aspects of 10 CFR Part 50, "Domestic Licensing of Production and Utilization facilities," with a focus on those requirements important in the decommissioning process. This ISA will help you to understand the regulations and become familiar with specific requirements in the regulations.

COMPETENCY
AREA: REGULATORY FRAMEWORK

REFERENCES: 1. The NRC internal home page
2. An electronic or paper copy of the latest revisions to 10 CFR Part 50

EVALUATION
CRITERIA: Upon completion of the tasks in this activity, you will be asked to demonstrate your understanding of the general content of 10 CFR Part 50 by successfully discussing the following:

1. State the purpose of 10 CFR Parts 50.
2. Given a specific subject, identify which section in 10 CFR discusses the requirements for that subject.
3. Successfully answer the problems and questions about the regulations provided to you by your immediate supervisor. The problems and questions may be developed by your immediate supervisor or a qualified staff member assigned to assist you with qualification.

TASKS: 1. Read and be familiar with the following sections of 10 CFR Part 50: 50.2, 50.5, 50.7, 50.9, 50.12, 50.36, 50.36a, 50.36b, 50.48, 50.54, 50.59, 50.65, 50.70, 50.71, 50.82 and Appendix B.

2. Identify with your immediate supervisor what parts of the regulations you should focus on during your review.

3. Answer the problems and questions about the regulations provided by your immediate supervisor and discuss your answers with your immediate supervisor and a senior technical staff member.

4. Meet with your immediate supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Inspector Signature Cards Item ISA-4.

Decommissioning Basic Inspector Individual Study Activity

TOPIC:	(ISA-5) Overview of 10 CFR Part 19 and 10 CFR Part 20
PURPOSE:	The purpose of this activity is to familiarize you with 10 CFR Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations," and 10 CFR Part 20, "Standards for Protection against Radiation." These regulations are generic to any position within the agency and will provide a perspective on conducting inspections in the working environment of a nuclear reactor or a materials site. This individual study activity will help you understand the purpose of 10 CFR Part 19 and 10 CFR Part 20 and provide you with some basic knowledge that all NRC inspectors will use when conducting inspections in radiologically controlled areas (RCAs).
COMPETENCY AREA:	REGULATORY FRAMEWORK
REFERENCES:	1. The NRC internal Web page Information Resources Regs (10 CFR) NRC Maintained Parts 19 and 20
EVALUATION CRITERIA:	<p>Upon completion of the tasks in this activity, you will be asked to demonstrate your understanding 10 CFR Part 19 and 10 CFR Part 20 and why these regulations are important for all inspectors by successfully completing the following:</p> <ol style="list-style-type: none">1. Describe the general purpose of 10 CFR Part 19.2. Identify the section of 10 CFR Part 19 that describes the rights of radiation workers if they believe a violation of radiological working condition requirements has occurred.3. Identify the section of 10 CFR Part 19 that requires a licensee to report doses to workers.4. Describe the purpose of 10 CFR Part 20.5. Identify the relevant section of 10 CFR Part 20 and discuss the various radiological circumstances that would require a licensee to notify the NRC.6. Discuss why it is important for every NRC inspector to have a general understanding of 10 CFR Part 19 and 10 CFR Part 20.
TASKS:	<ol style="list-style-type: none">1. Review 10 CFR Part 19 for a general understanding of the following:<ol style="list-style-type: none">a. the purpose of 10 CFR Part 19 (19.1).b. requirements for document postings (19.11(d) and (e)).

- c. requirements for promptly identifying any condition that may cause unnecessary exposure (19.12(a)(4)).
 - d. instructions for individuals in a restricted area that may experience unnecessary exposure to radiation and/or radioactive materials (19.12(a)(5)).
 - e. the times the NRC can inspect a facility (19.14(a)).
 - f. requests by workers for an NRC inspection (19.16(a)).
- 2. Review 10 CFR Part 20 for a general understanding of the following:
 - a. the purpose of 10 CFR Part 20 (20.1001).
 - b. occupational dose limits for adults (20.1201).
 - c. occupational dose limits for members of the public (20.1301).
 - d. concepts of as low as reasonably achievable (ALARA) (20.1101).
 - e. conditions requiring individual monitoring of external and internal occupational dose (20.1502).
 - 3. Meet with your supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-5.

Decommissioning Basic Inspector Individual Study Activity

TOPIC: (ISA-6) Generic Communications

PURPOSE: The purpose of this activity is to become familiar with the different categories of generic communications, the appropriate uses of each type and the procedures associated with them.

COMPETENCY
AREA: Communication

REFERENCES:

1. Review the Generic Communications Program Web page at <https://www.nrc.gov/about-nrc/regulatory/gencomms.html>
2. IMC 0730, "Generic Communications Regarding Materials and Fuel Cycle Issues"
3. MD 8.18, "NRC Generic Communications Program"
4. NMSS Policy and Procedure 5.1, "Reactor Decommissioning Program Procedure for Interfacing with the Office of Nuclear Reactor Regulation (NRR)" (ADAMS Accession No. ML103050137)

NOTE: Please note that the link above and those found through this qualification journal are subject to change and are provided for your convenience. You are responsible for locating the most current information.

EVALUATION

CRITERIA: Upon completion of this activity, you will be asked to demonstrate your general understanding of different types of NRC generic communications and the purposes of each type.

1. Describe the different kinds of generic communications and their purposes.
2. Describe what can and cannot be required in the specific types of generic communications.

TASKS:

1. Review the references to understand the principles discussed in the evaluation criteria.
2. Identify with your immediate supervisor and review Information Notices (INs) and Regulatory Issue Summaries (RISs) pertinent to your position. Suggestions may be found in the references of the Technical Proficiency ISAs or OJTs.
3. Meet with your immediate supervisor or the person designated to be a resource for this activity and discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-6.

Decommissioning Basic Inspector Individual Study Activity

TOPIC:	(ISA-7) NRC IMC, Inspection Procedures (IP), and Other References.
PURPOSE:	This ISA will help you to familiarize yourself with the IMCs and IPs that have been developed and are available that relate to inspections. Your immediate supervisor will identify those references that you will focus on. Note that this ISA is meant to give you an overview of the inspection program. You will review specific IPs during training in the Technical Proficiency tasks.
COMPETENCY AREA:	INSPECTION
REFERENCES:	<ol style="list-style-type: none">1. IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports"2. IMC 0620, "Inspection Documents and Records"3. IMC 2561, "Decommissioning Power Reactor Inspection Program"4. IMC 2602, "Decommissioning Oversight and Inspection Program for Fuel Cycle Facilities and Materials Licensees"5. IMC 2800, "Materials Inspection Program"6. IMC 2810, "Master Material License Inspection Program"7. Other IMCs or IPs identified for review by your immediate supervisor8. NUREG-1757, "Consolidated Decommissioning Guidance"
EVALUATION CRITERIA:	<p>Upon completion of this activity, you will be asked to demonstrate your understanding of the purpose of the IMCs and IPs as well as the type of information contained in them.</p> <ol style="list-style-type: none">1. Discuss the IMCs and IPs you have reviewed and the purpose of the IMCs and IPs.2. Discuss inspection documentation for different types of inspections.3. Discuss the inspection program from one or more IMCs identified by your supervisor.4. Describe how the IPs are used during inspection.
TASKS:	<ol style="list-style-type: none">1. Locate electronic versions of the IMCs and IPs at: https://www.nrc.gov/reading-rm/doc-collections/insp-manual/.

2. Review the IMCs and IPs.
3. Meet with your immediate supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

NOTE: Please note that the links above are subject to change and are provided for your convenience. You are responsible for locating the most current information.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-74.

Decommissioning Basic Inspector Individual Study Activity

TOPIC: (ISA-8) Open, Collaborative Working Environment & Ways to Raise Differing Views.

PURPOSE: The purpose of this activity is to communicate the agency's policy on establishing and maintaining an environment that supports raising concerns and differing views and to provide guidance on the informal and formal processes for pursuing resolution of differing views that are directly related to the NRC's mission. The NRC strives to establish and maintain an environment that encourages all NRC employees and contractors to raise concerns and differing views promptly, without fear of reprisal, through various mechanisms. The free and open exchange of views or ideas conducted in a non-threatening environment provides the ideal forum where concerns and alternative views can be considered and addressed in an efficient and timely manner that improves decision-making and supports the agency's safety and security mission. All NRC employees and contractors are expected to discuss their views and concerns with their immediate supervisors on a regular, ongoing basis. These informal discussions should be enough to resolve most issues. However, if informal discussions do not resolve concerns, employees have various mechanisms for expressing and having their concerns and differing views heard and considered by management, including the Open-Door Policy, the NCP, and the DPO Program. This activity will provide you with an understanding of these processes.

COMPETENCY
AREAS: INSPECTION
SELF-MANAGEMENT
COMMUNICATION

REFERENCES:

1. NCP Web site: <https://drupal.nrc.gov/oe/24526>
2. DPO Program Web site: <https://drupal.nrc.gov/oe/24496>
3. MD 10.160, "Open Door Policy"
4. MD 10.158, "NRC Non-Concurrence Process"
5. MD 10.159, "The NRC Differing Professional Opinions Program"
6. Regional or office instructions establishing additional implementing guidance for raising differing views (if applicable)

EVALUATION
CRITERIA: Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC processes for raising concerns and differing views by successfully completing the following:

1. State the expectations for an Open and Collaborative Working Environment (OCWE) and behaviors for being an NRC Team Player.
2. Describe the Open-Door Policy.
3. Describe the key features of the NCP.
4. Describe the key features of the DPO Program.
5. Discuss under which circumstances the various methods available for expressing differing views would be used.
6. Describe the type of information available on the NCP and DPO Program Web site.

TASKS:

1. Explore information and guidance for OCWE, Open Door Policy, NCP, and the DPO Program on identified Web sites.
2. Review MD 10.160, MD 10.158, and MD 10.159.
3. Complete NCP Training in TMS.
4. Complete DPO training in TMS.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Card Item ISA-8.

Decommissioning Basic Inspector Individual Study Activity

TOPIC: (ISA-9) Review of Significant Events at Material Licensees.

PURPOSE: This ISA will help you become familiar with how the NRC handles events related to radioactive material. You will also become familiar with the NRC's Nuclear Material Events Database (NMED) and the information in the system.

COMPETENCY
AREA: INSPECTION ENFORCEMENT

REFERENCES:

1. NMED Web site: <https://nmed.inl.gov/>
2. MD 8.1, "Abnormal Occurrence Reporting Procedure"
3. MD 8.10, "NRC Medical Event Assessment Program"
4. NMED Annual Reports
(Hint: Use the drop-down menu on the NMED Web site to access reports)
5. Review cases of events as directed by your immediate supervisor
6. IMC 1245, Appendix A, "(ISA-11) Augmented Inspection Team (AIT), Special Inspection Team (SIT), and Incident Inspection Team (IIT) Activities"

EVALUATION
CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of how the NRC handles materials events (special inspections, AIT inspections, and Integrated Investigative Team inspections) and what information is stored in NMED.

1. Discuss the historical events reviewed, as well as the recommendations made, lessons learned, and the changes identified to prevent recurrences.
2. Describe the role of an inspector when responding to events that occur in the Region.
3. Describe the information included in the NMED Annual Reports.
4. Describe and discuss the information stored in NMED and how the NRC uses it.
5. Describe the information included in the Abnormal Occurrence Annual Reports.
6. State the purpose of the NRC Incident Investigation Program.

TASKS:

1. Obtain an NMED login and password by following the instructions at: <https://nmed.inl.gov/>.
2. Review the historical events, recommendations made, lessons learned, and changes identified to prevent recurrence as identified by your immediate supervisor or person designated to be your resource for this activity.
3. Review the most recent Abnormal Occurrence Report.
4. Discuss with your immediate supervisor or person designated to be your resource for this activity the responsibility of an inspector when responding to events that occur in the Region.
5. Review the most recent NMED Annual Report.
6. Meet with your immediate supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

NOTE: Please note that the links above are subject to change and are provided for your convenience. You are responsible for locating the most current information.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-9.

Decommissioning Inspector Individual Study Activity

TOPIC: (ISA-10) The NRC's Response to an Emergency at a Nuclear Facility.

PURPOSE: The purpose of this activity is to acquaint you with the actions that the NRC takes in response to an emergency that may occur at a nuclear facility. Emergency response is vital to the agency, fulfilling one of its primary mandates of protecting the health and safety of the public. As a fully qualified license reviewer or inspector, you will be trained to perform specific emergency response activities. This individual study activity will help you understand how the NRC meets its emergency response mandate and will begin to build the knowledge you will need later to successfully perform your assigned emergency response responsibilities.

COMPETENCY
AREA: REGULATORY FRAMEWORK
INSPECTION

REFERENCES:

1. NRC internal Web page (Program Office to Nuclear Security and Incident Response [NSIR])
2. MD 8.2, "NRC Incident Response Program"
3. Regional Policy Guide for Emergency Response

EVALUATION
CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the role of the agency and your Region or office in protecting public health and safety, and security when responding to emergency situations or hostile actions at a nuclear facility by successfully addressing the following:

1. Identify the types of emergency classifications and give examples of when the different classifications would be declared.
2. Identify the different modes of NRC emergency response and describe the purpose of each mode.
3. Discuss the capabilities (e.g., communications, information technology) provided in the Headquarters, regional, and on-site emergency response facilities.
4. Recognizing that these positions may not apply to all nuclear facilities and that the NRC will act with all available resources to respond to an emergency, identify the responsibilities of the following during a declared emergency event:

- a) Response Director.
 - b) Senior Agency Representative to the – Licensee/Unified Coordination Group.
 - c) Public Information Team.
 - d) Liaison Team.
 - e) Operations Section Chief.
 - f) Reactor Safety Group.
 - g) Protective Measures Group.
 - h) Security Group.
 - i) Planning Section.
 - j) Logistics Section.
 - k) Headquarters Operations Officers.
5. If you are onsite when an emergency is declared, explain the difference in your actions if the resident inspectors are or are not onsite.

TASKS:

- 1. Review your Region or office's policy guidance on emergency response.
- 2. Review the NRC Incident Manual Chapter (IRMC, 200) to address the evaluation criteria.
- 3. Regional inspectors meet with the incident response coordinator, tour the Incident Response Center, and if possible, observe the Region's response during a drill or event.
- 4. Meet with your immediate supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.
- 5. Complete the following courses in TMS:
 - a) General Response Training (Web-Based)
 - b) NRC National Incident Management System/Incident Command System Training (Web-Based)

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-10.

Decommissioning Inspector Individual Study Activity

TOPIC: (ISA-11) The Enforcement Program

PURPOSE: The purpose of this activity is to provide you with an overview of the NRC enforcement program. This individual study activity will assist you in learning and understanding: (1) the purpose of the enforcement program, (2) the sanctions used in the enforcement program, and (3) the methods used in assessing and dispositioning violations. It will also provide you with an understanding of the information and guidance resources available to the staff on the enforcement program.

COMPETENCY
AREAS: REGULATORY FRAMEWORK
ENFORCEMENT

REFERENCES:

1. Enforcement-related information found on the Enforcement Web page of the NRC public Web site, including the NRC enforcement policy, the enforcement manual, the enforcement program overview, and the enforcement process diagram
2. Regional policy guide for enforcement
3. "Writing Violations" course in TMS

EVALUATION
CRITERIA:

Upon completion of the tasks in this activity, demonstrate your understanding of the agency's enforcement program by successfully completing the following items:

1. State the purpose of the NRC enforcement policy.
2. Describe the legal basis from which the NRC derives its enforcement authority.
3. Identify the burden of proof standard that the NRC uses in enforcement proceedings.
4. Identify the primary sanctions the NRC uses in the enforcement program.
5. State the four issues the NRC considers to assess the significance of a violation.
6. Describe the two types of significance categorization outcomes.
7. Define a minor violation and state the policy on documenting and correcting these violations.
8. Define non-cited violation.

9. Define escalated enforcement action.
10. Write a draft violation given case-specific facts.
11. Understand how to use the enforcement process diagram to disposition violations.
12. Describe what pre-decisional enforcement conferences and regulatory conferences are and why, when, and with whom they are conducted.
13. Discuss the purpose of civil penalties, when the NRC considers issuing them, and how the NRC determines the amount of penalties.
14. Recognize the purpose of the different types of Orders and when they are used.

TASKS:

1. Locate the Enforcement Web page on the NRC public Web site. (Hint: Look under How We Regulate.)
2. Read the enforcement program overview included on the Enforcement Web page of the NRC external Web site.
3. Read the enforcement process diagram on the Enforcement Web page of the NRC external Web site.
4. Locate the enforcement manual on the Enforcement Web page of the NRC external Web site (look under Enforcement Guidance) and review the table of contents and appendices.
5. Read the memorandum from the Director, Office of Enforcement, dated December 5, 2000, titled, "Dispositioning of Enforcement Issues in a Risk-Informed Framework" (Agencywide Documents Access and Management System [ADAMS] Accession No. ML003777558).
6. Locate the most recent escalated enforcement action for a power reactor or materials site on the Enforcement Web page of the NRC external Web site and review the transmittal letter and attached notice of violation.
7. Review your region or office's guidance on implementing the enforcement policy.
8. Go to TMS and complete the course on "Writing Violations." Follow the guidance in the course to draft violations for the three sets of facts presented in the course.

9. Meet with the enforcement specialist in your region or office to review the draft violations you developed as part of the “Writing Violations” course and discuss the current enforcement guidance.
10. Meet with your supervisor or the person designated to be your resource for this activity and discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor’s signature in the line item for Basic Level Certification Signature Card Item ISA-11.

Decommissioning Inspector Individual Study Activity

TOPIC: (ISA-12) Allegations

PURPOSE: The purpose of this activity is to familiarize the candidate with the procedures, guidance and activities applicable to handling the receipt, processing, review and closure of allegations. This study activity will help you to effectively interact with individuals bringing concerns to the NRC and to appropriately respond to those concerns.

COMPETENCY
AREAS: INSPECTION
SELF-MANAGEMENT
COMMUNICATION

REFERENCES:

1. MD 8.8, "Management of Allegations"
2. Allegation Manual
3. NRC Form 613, "Allegations Program Identity Protection Policy" available in the Forms Library
4. Allegation Manual, Exhibit 1, "Information to be Obtained/Provided During the Initial Contact with the Allegor" or equivalent allegation receipt guidance
5. 10 CFR Section 50.5, "Deliberate Misconduct"
6. 10 CFR Section 50.7, "Employee Protection"
7. 10 CFR Section 50.9, "Completeness and Accuracy of Information"
8. Regional or office guidance on allegations
9. NUREG/BR-0240, "Reporting Safety Concerns to the NRC"
10. Office of Enforcement Webpage

EVALUATION
CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC's allegation process by successfully completing the following:

1. State the criteria used to evaluate submitted information to determine if it is an allegation.
2. State the information that is required to be obtained during the receipt of a potential allegation.
3. State the role of the Office Allegation Coordinator (OAC).

4. State the purpose of, and the actions taken, in preparation for an Allegation Review Board (ARB).
5. State the information that should be provided to an ARB.
6. Describe the allegation evaluation methods that may be directed by the ARB and discuss what information is needed to close the allegation for each approach.
7. State the purpose of, and the information needed, to prepare allegation closure documentation.
8. Explain what an Ad-Hoc/Emergency ARB is and when it is used.
9. State who is required to be on the ARB.

TASKS:

1. Review the applicable regulations and guidance listed in the reference section.
2. Complete the Web-based training modules on the allegations process that are located in TMS. There are at least two courses that must be completed. These courses are titled: "Allegations Process" and "Allegations Intake and Routing."
3. Review the applicable regional or office guidance for allegations.
4. Meet with the OAC and have the individual brief you on the allegation process and the OAC's role in the process.
5. Review two closed allegation case files (if possible, one should include an inspection effort) to:
 - a) Identify how incoming correspondence or information was determined to meet the definition of an allegation and how specific concerns were identified.
 - b) Review associated ARB documentation, particularly the determination of safety significance and the proposed action plan.
 - c) Review the associated allegation closure memorandum or closure letter to understand the rationale and basis for allegation closure.
6. Discuss with your supervisor or OAC the options available to the NRC to follow up on an allegation and the circumstance when each is appropriate.

7. Obtain the inspection results and/or licensee review information if a request for information (RFI) has been sent to the licensee. Discuss the precautions and limitations associated with RFIs with your supervisor or the OAC.
8. Attend two ARB meetings.
9. Working with your supervisor or OAC:
 - a) For a recently received (or simulated) allegation, complete the required documentation to present the concern at an ARB meeting. Include a discussion of safety significance and regulatory requirements/issues.
 - b) Discuss with your supervisor or OAC a proposed plan to resolve the recently received (or simulated) allegation.
 - c) Obtain the inspection and/or investigation results for a recently closed (or simulated) allegation; compare the results to the original concerns. Discuss with your supervisor or OAC how the inspection results addressed the concerns. Discuss whether the allegation concerns were substantiated and how you would respond to the alleged.
10. Meet with your supervisor or the OAC to discuss any questions that you may have as a result of this activity and to demonstrate that you can meet the evaluation criteria listed above.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-12.

Decommissioning Inspector Individual Study Activity

TOPIC: (ISA-13) Inspector Objectivity, Protocol, and Professional Conduct

PURPOSE: The purpose of this activity is to acquaint you with the NRC's expectations of inspector conduct and protocol. Professionalism is essential to the agency's ability to fulfill its goals of protecting public health and safety. Inspector conduct is a vital component of NRC's credibility as an effective regulator. As a qualified inspector, you will often be representing the agency in interactions with licensee management and workers, local officials, media, and the public. This individual study activity will help you understand NRC procedures, policies, and expectations related to inspector conduct. This activity will also help you develop the professional conduct that you will need to be an effective NRC inspector.

COMPETENCY
AREAS:

INSPECTION
SELF-MANAGEMENT

REFERENCES:

1. IMC 0102, "Oversight and Objectivity of Inspectors and Examiners at Reactor Facilities"
2. MD 7.5, "Ethics Counseling and Training"
3. IMC 1201, "Conduct of Employees"
4. Regional or office guidance related to inspector/employee conduct
5. MD 8.17 "Licensee Complaints Against NRC Employees"
6. The Ethics page of the Office of the General Counsel's (OGC's) Website
7. Ethics Training for New Employees (Web-based, course in TMS)

EVALUATION
CRITERIA:

Upon completion of the tasks in this activity, you will be asked to demonstrate your understanding of proper NRC inspector conduct during inspections at nuclear facilities by successfully addressing the following:

1. What are the expectations of NRC employees regarding:
 - a) alcohol and illegal drugs?
 - b) official business and personal relationships?
 - c) business partnerships with licensees?
 - d) work habits and professional demeanor?

2. Describe the restrictions regarding the following specific employee activities which could result in a loss of impartiality (or the perception thereof):
 - a) accepting transportation from licensee personnel.
 - b) attending social functions that are not open to the general public and are essentially limited to licensee and contractor personnel.
 - c) use of licensee fitness facilities.
 - d) coffee clubs, cafeterias, credit unions.
 - e) property and neighborhood relationships.
 - f) community activities.
 - g) employment of spouse and children.
3. Explain the Office of Government Ethics standards of ethical conduct for the following areas as applicable to NRC inspectors:
 - a) gifts from outside sources.
 - b) gifts between employees.
 - c) conflicting financial interests.
 - d) impartiality in performing official duties.
 - e) seeking other employment at NRC regulated facilities.
 - f) misuse of regulatory authority.
 - g) political activities at work.
 - h) employee responsibilities regarding the workplace environment.
4. What are the actions expected to be performed by NRC personnel when they identify unsafe work practices or violations which could lead to an unsafe situation at an NRC licensed facility?
5. What are some of the techniques used by NRC managers to verify the performance and objectivity of individual inspectors and team leaders during onsite activities at reactor facilities?
6. What are the expectations of inspector conduct in a reactor control room during normal, transient, and emergency conditions?

7. What are NRC employees supposed to do if they receive an allegation of improper action by an NRC staff member or contractor involved in inspection or other oversight activities?

TASKS:

1. Explore the information available on the Ethics page of OGC's Website particularly the information on the Ethics Advice and Articles tab. Find and read the Summary of Major Ethics Rules for NRC Employees (Ethics Articles). Complete the Ethics Training for New Employees in TMS.
2. Locate and review the material specifically listed in the reference section of this activity. Although the agency has a code of ethics for employee/inspector conduct, not all regions or offices have specific guidance in this area. You should closely review the guidance applicable to your position.
3. Meet with your regional counsel or other designated ethics expert and discuss applications of ethics to your role as an NRC employee. Demonstrate your understanding of the guidance by explaining the answers to the first three questions listed in the evaluation criteria section of this activity.
4. Meet with your supervisor, your regional counsel, or other designated ethics expert to discuss any questions you may have as a result of this activity. Discuss the items listed under the evaluation criteria section of this study activity with your supervisor.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-13.

Decommissioning Inspector Individual Study Activity

TOPIC: (ISA-14) The Office of Investigations (OI)

PURPOSE: The purpose of this activity is to familiarize you with the OI. As a fully qualified inspector you may be assigned to work with OI by providing technical support. This individual study activity will help you understand the role of OI, how it functions, and what your responsibilities will be if you are assigned to assist OI during the conduct of an investigation.

COMPETENCY
AREAS: INSPECTION
REGULATORY FRAMEWORK

REFERENCES:

1. MD 9.8, "Organization and Functions, Office of Investigations"
2. NRC external OI Web site
3. NRC internal OI Web site
4. <https://www.nytimes.com/1997/03/15/us/nuclear-official-guilty-in-maine-yankee-case.html>

EVALUATION
CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the purpose and function of OI by successfully addressing the following:

1. State the function of OI.
2. Describe the organizational structure of the OI.
3. Describe what your role would be in assisting OI while they conduct an investigation and the importance of not discussing the facts/issues of the case to individuals that do not have a "need to know."
4. Describe the authorities of an OI investigator.

TASKS:

1. Review the references
2. Review the OI Web page and associated organizational charts. Focus on the section that provides an overview of the office.
3. Meet with an experienced OI criminal investigator and discuss two materials/reactors cases investigated by OI, one substantiated and one not substantiated.

4. Meet with your supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-14.

Decommissioning Inspector Individual Study Activity

TOPIC: (ISA-15) NRC Interagency Agreements

PURPOSE: While conducting inspection activities, inspectors may identify important issues that could adversely affect health and safety but are not under the direct regulatory authority of the NRC. Examples include industrial safety items, such as loose asbestos insulation, and other issues, such as defective radioactive waste shipping trailers. Conversely, other Federal and State agencies may identify issues of concern to the NRC. To ensure that these items are addressed by the proper regulatory authority, the NRC has established agreements, called memoranda of understanding (MOUs), with other Federal and State agencies which outline how these issues should be addressed.

This activity will introduce you to the major interagency agreements that the NRC has entered and familiarize you with the regional or office points of contact that have been established for other Federal and State agencies.

COMPETENCY
AREA: REGULATORY FRAMEWORK
COMMUNICATION

REFERENCES:

1. IMC 1007, "Interfacing Activities between Regional Offices of NRC and OSHA" (Note: Research and test reactor inspectors should use this guidance as applicable.)
2. IMC 2602, "Decommissioning Oversight and Inspection Program for Fuel Cycle Facilities and Materials Licensees" section on coordination with federal agencies
3. MD 5.2, "Cooperation with States at Commercial Nuclear Power Plants and Other Nuclear Production or Utilization Facilities"
4. Regional or office guidance (if applicable)

EVALUATION
CRITERIA: At the completion of this activity, you should be able to do the following:

1. Locate the active MOUs used to coordinate between the NRC and other Federal or State agencies.
2. Explain, in general terms, how the NRC coordinates with State and other Federal agencies on matters that are not under the regulatory authority of the NRC.

3. Explain the actions required by an NRC inspector when he/she identifies an occupational health and safety issue at a reactor facility. Be able to state where the guidance for these actions is provided.
4. Explain how an inspector interacts with state and federal agencies, and with state inspectors who request to observe or participate in an NRC inspection.
5. Identify who, in your region or office, is the point of contact for coordinating NRC activities with the following Federal agencies:
 - a) Occupational Safety and Health Administration (OSHA).
 - b) Department of Transportation (DOT).
 - c) Federal Emergency Management Administration (FEMA).
 - d) Department of Energy (DOE).
 - e) Department of Defense (DOD).
 - f) State agencies.

TASKS:

1. Identify where the current NRC MOUs are available in your region or office. You can find electronic versions of MOUS in the NRC Library.
2. Review the MOUs to develop a general understanding of the agreements between the NRC and OSHA, DOT, FEMA, and DOE. For regional inspectors, review any MOUs between the NRC and the States in your regions. Determine the major services or resources available to be coordinated with the NRC and these agencies.
3. Identify the designated liaison for those agencies and State agencies in your region or office.
4. Meet with your supervisor, an experienced inspector, or the above liaison representative to discuss two reactor facility issues that involved interface with other Federal or State agencies. Discuss how the agency addressed the issues in the context of the applicable NRC MOU and office guidance.
5. Meet with your supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-15.

Decommissioning Inspector Individual Study Activity

TOPIC: (ISA-16) Interaction with the Public

PURPOSE: The purpose of this activity is to acquaint you with the expectations of NRC inspectors when dealing with members of the public. Responsiveness and openness are essential to the agency's ability to fulfill its goal of enhancing openness. As a qualified inspector, you will have many opportunities to interact with the public. This individual study activity will help you understand NRC procedures, policies, and available resources related to interaction with the public.

COMPETENCY
AREAS: COMMUNICATION
SELF-MANAGEMENT
REGULATORY
FRAMEWORK

REFERENCES:

1. NUREG/BR-0215, "Public Involvement in the Nuclear Regulatory Process," Revision 2
2. NUREG/BR-0297, "NRC Public Meetings"
3. MD 3.4, "Release of Information to the Public"
4. MD 3.5, "Attendance at NRC Staff-Sponsored Meetings"
5. MD 8.11, "Review Process for 10 CFR 2.206 Petitions"
6. NRC Communications (NRC internal Web page)
7. Regional or office guidance related to interaction with the public (e.g., conduct of public meetings, response to inquiries from the public, release of information to the public)

EVALUATION
CRITERIA: Upon completion of this activity, you will be asked to demonstrate your understanding of proper interaction with the public by successfully completing the following:

1. Describe the expectations of NRC employees regarding answering telephone calls, emails, or text messages that involve inquiries from a member of the public.
2. Name some resources available to you to assist you in responding to the following types of public inquiries:
 - a) general questions about NRC organization and functions.

- b) general questions about a technical topic such as radioactive particles.
 - c) questions about a licensed facility's performance or an NRC inspection.
 - d) questions on a specific technical issue of current interest.
3. Describe what is meant by "Plain Language". Identify where examples and guidance related to plain language can be found.
 4. Explain what a "2.206 petition" is. Describe how it is handled by the NRC.
 5. Describe how other public inquiries, including "non-allegations," are handled in your office.
 6. Describe what an NRC employee should do if he/she is requested to speak (on an NRC-related topic) at a meeting, such as the Lions Club or local chapter of the American Nuclear Society or a school.
 7. Identify what types of NRC meetings are generally open to the public. List some that are not usually open to the public.
 8. Describe how members of the public can find out about NRC public meetings. Discuss the expectations on timeliness of meeting notices and summaries.
 9. Describe the restrictions regarding the release of information to the public, including specific types of information that are not to be released.

NOTE: You may request NUREG references used in this activity that cannot be found on the NRC external Web site from your Public Affairs.

TASKS:

1. Review the information presented by the NRC Public Affairs Office on interactions with the public that can be found on the NRC internal and external Web sites. Review the information available on the external NRC Web site related to general topics of interest to the public, such as the public involvement, school programs, and technical information papers.
2. Visit the NRC Plain Language Action Plan on the internal Web site, including some of the links to resource materials.
3. Visit the Communication and Public Meetings page on the NRC internal Web site. Review the public meeting policy and checklist.

4. Locate and review the material specifically listed in the reference section of this activity. NUREG/BR-0200, "Public Petition Process," may also be beneficial in understanding the processing of 2.206 petitions and a ticketed items."
5. Review the steps in the rulemaking process on the NRC external Web site under How We Regulate.
6. Identify, locate, and review your region's policy guidance on the staff's receipt and processing of inquiries from the general public. Meet with your Public Affairs Officer (PAO) or supervisor and discuss the expectations of an inspector who receives an inquiry.
7. Meet with your supervisor and discuss what types of public interactions you are likely to encounter and ensure that you understand what you are to do. Discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-16.

Decommissioning Inspector Individual Study Activity

TOPIC: (ISA-17) Contacts with the Media

PURPOSE: The purpose of this activity is to provide you with an understanding of the importance of communicating with the public and media in an accurate, clear, and noncomplex manner within the limitations of agency guidance for the release of information to the public. Such communication supports one of the NRC's main objectives of increasing openness. This study activity will provide you information on the implementation of the guidance on contacts with the public and media.

COMPETENCY
AREAS: COMMUNICATION
SELF-MANAGEMENT

REFERENCES:

1. NUREG/BR-0202, "Guidelines for Interviews with the News Media"
2. MD 3.4, "Release of Information to the Public"
3. NUREG/BR-0224, "Guidelines for Conducting Public Meetings"
4. NUREG-1614, Vol 47, "Strategic Plan: Fiscal Years 2018 – 2022"
5. NUREG/BR-0308, "Effective Risk Communication"
6. Regional or office instructions establishing the policy and process for receipt of inquiries from the public/media
7. January 5, 2011, Yellow Announcement Regarding the Use of Social Media

EVALUATION
CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the guidance on contacts with the media by successfully completing the following:

1. Discuss the NRC goal of improving public confidence and how good communication with the media contributes to its achievement.
2. Identify the importance of communicating with the media in a manner to build trust.
3. Discuss the importance of agency goals, onsite inspection staff, the agency's safety focus, risk-informed policies, trustworthiness, and limitations on subject knowledge regarding communicating with the media.

4. Discuss the importance of planning ahead and preparing well for communicating with the media.
5. Discuss the importance of controlling your speech, including what words not to use, not speculating, not guessing, not answering the “what if” questions, not giving your opinion or repeating any other person’s opinion, and not talking off the record.
6. Describe the policy and process for how to communicate to management any inquiries from or unplanned interactions with the news media and other members of the public.

NOTE: You may request any NUREG references used in this activity that cannot be found on the NRC external Web site from your PAO.

TASKS:

1. Meet with the regional PAO or someone from the Office of Public Affairs at Headquarters to discuss the guidelines for interviews with the news media.
2. Explore all aspects of the importance of appropriate, accurate, and clear communications with the public as found on the NRC Web site.
3. Review the agency guidance on how to communicate with the public/media, NRC expectations/requirements regarding the use of social media when conducting NRC activities and issues that could occur regarding the sharing of information on social media platforms.
4. Meet with your supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor’s signature in the line item for Basic Level Certification Signature Card Item ISA-17.

Decommissioning Inspector Individual Study Activity

TOPIC: (ISA-18) The Freedom of Information Act (FOIA) and the Privacy Act

PURPOSE: The purpose of this activity is to provide you with an understanding of how the NRC implements FOIA and the Privacy Act while guarding against the inadvertent and unauthorized release of information. While it is very important to communicate with the public, communication must be done within the limitations of agency guidance for the release of information to the public. This supports one of the NRC's main objectives of increasing openness. This study activity will provide you with information on the implementation of the guidance on responding to FOIA requests from the public.

COMPETENCY
AREAS: COMMUNICATION
SELF-MANAGEMENT
REGULATORY
FRAMEWORK

REFERENCES:

1. 10 CFR Part 9, "Public Records"
2. MD 3.1, "Freedom of Information Act"
3. MD 3.2, "Privacy Act"
4. MD 3.4, "Release of Information to the Public"
5. IMC 0620, "Inspection Documents and Records"
6. Regional or office instructions establishing the policy and procedure for processing FOIA requests for agency records
7. FOIA Training for Federal Employees

EVALUATION
CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the guidance associated with FOIA and the Privacy Act by successfully completing the following:

1. Discuss the NRC goal of improving public confidence and how implementing the provisions of FOIA and the Privacy Act will contribute to achieving that goal.
2. Identify the completeness and timeliness requirements for responding to a FOIA request and discuss how important this responsiveness is in building public trust.

3. Discuss the following responsibilities when responding to a FOIA request:
 - a) provide all records subject to the request in the agency's possession.
 - b) identify other NRC offices that might have records subject to the FOIA request.
 - c) screen the records before their release to ensure that information that is to be withheld is properly marked before forwarding to Headquarters.
 - d) support the decision to withhold information by providing the appropriate exemption and "foreseeable harm" statements.
4. Identify the type of information that should be withheld from release when responding to a FOIA request, including proprietary, pre-decisional, and privacy information.
5. Describe the legal limitations of what can be released to the public and what must be protected under the Privacy Act.
6. Describe the policy and procedure for processing FOIA requests for agency records.
7. Discuss the possible consequences associated with maintaining unnecessary electronic or paper copies of licensee documents following completion of an inspection activity.

TASKS:

1. Meet with the FOIA Coordinator to discuss the procedure for processing FOIA requests for agency records.
2. Explore the information made available to the public on the NRC Web site and within ADAMS.
3. Review the agency guidance on how to implement FOIA without releasing pre-decisional information and other information covered under the Privacy Act.
4. Meet with your supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.
5. Complete the on-line course "FOIA Training for Federal Employees" located in TMS.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-18.

Decommissioning Inspector Individual Study Activity

TOPIC: (ISA-19) Entrance and Exit Meetings

PURPOSE: Effective communication is critical for overall agency success. For NRC inspectors, the inspection entrance and exit meetings are the primary opportunities to communicate issues with licensees. Besides communicating effectively, inspectors, as Government officials, have additional requirements to follow during entrance and exit meetings to ensure that proprietary data and safeguarded information are not disclosed, and that information is shared with the public when appropriate. To ensure that issues are discussed in accordance with NRC requirements, the agency has established communication standards that outline how entrance and exit meetings are to be conducted. The purpose of this activity is to introduce you to the standards for conducting NRC entrance and exit meetings and to allow you to demonstrate an ability to conduct an entrance and exit meeting.

COMPETENCY
AREAS: COMMUNICATION
TEAMWORK
INSPECTION

REFERENCES:

1. IMC 2561, "Decommissioning Power Reactor Inspection Program"
2. IMC 2602, "Decommissioning Oversight and Inspection Program for Fuel Cycle Facilities and Materials Licensees"
3. IMC 2800, "Materials Inspection Program"
4. IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports"
5. IMC 0620, "Inspection Documents and Records"
6. Regional or office guidance (if applicable)

EVALUATION
CRITERIA:

At the completion of this activity, you should be able to do the following:

1. Locate the various guidance for conducting NRC entrance and exit meetings.
2. Discuss with a qualified inspector the differences between an entrance and exit for a reactor inspection and various materials inspections and the appropriate level of management is in attendance.

TASKS:

1. Locate and read the guidance for conducting NRC entrance and exit meetings contained in the applicable IMC and regional or office instructions.
2. Observe at least two entrance and exit meetings. If possible, observe meetings that have been conducted for a wide range of inspection activities in a variety of locations, such as a public exit meeting.
3. Review an inspection report that was recently completed and conduct a “mock” entrance and exit meeting of the inspection report findings in the presence of your supervisor or a fully qualified inspector designated by your supervisor.
4. Meet with your supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

Obtain your supervisor’s signature in the line item for Basic Level Certification Signature Card Item ISA-19.

Decommissioning Inspector Individual Study Activity

TOPIC: (ISA-20) Documenting Inspection Findings

PURPOSE: NRC inspection reports serve many important functions. In addition to serving as a vehicle to communicate inspection findings to a licensee, inspection reports form part of the historical record of NRC activities at a reactor or nuclear materials site. To that end, it is vital for inspection reports to clearly document the results of inspection activities conducted. To assist inspectors in the preparation of inspection reports, the NRC has developed several guidance documents that outline relevant information that should be documented in an inspection report and how that information should be presented. The purpose of this activity is to introduce you to the standards for preparing NRC inspection reports and to allow you to demonstrate an understanding of the applicable inspection report documentation requirements.

COMPETENCY
AREAS: INSPECTION
SELF-MANAGEMENT
COMMUNICATION
TEAMWORK

ENFORCEMENT

- REFERENCES:
1. IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports"
 2. Enforcement Policy
<https://www.nrc.gov/docs/ML1935/ML19352E921.pdf>
 3. Enforcement Manual
<https://www.nrc.gov/docs/ML2129/ML21295A307.pdf>
 4. IMC 0620, "Inspection Documents and Records"
<https://www.nrc.gov/docs/ML2108/ML21089A217.pdf>
 5. "Plain Language Initiative" Web site, which references NUREG-1379 for editorial style guidance, the directives from the President of the United States, and other related documents
(<https://www.internal.nrc.gov/NRC/PLAIN/index.html>)
 6. Regional or office guidance (as applicable)

EVALUATION
CRITERIA: At the completion of this activity, you should be able to do the following:

1. Locate various guidance for preparing NRC inspection reports.
2. Verify that an inspection report was written in accordance with the applicable NRC guidance.

3. Explain the threshold for documenting licensee and inspector identified issues in NRC inspection reports.
4. Define inspection working files and indicate what should be captured in ADAMS, ultimately destroyed, or referenced in the inspection report.

TASKS:

1. Locate and read the various guidance and applications that are used for planning an NRC inspection and documenting inspection findings. The necessary information will be contained in NRC manual chapters and regional or office instructions.
2. Locate and read the various guidance for documenting violations. The necessary information will be contained in NRC manual chapters and regional or office instructions.
3. Select recently completed inspection reports prepared in your region or office that contain violation(s). Compare the inspection report format and content to the report preparation guidance contained in the applicable IMC and to any applicable regional or office guidance. Through review of the guidance, as well as conversations with the report author, verify that the report was prepared in accordance with the requisite report preparation guidance.
4. Meet with your supervisor or the person designated to be your resource for this activity and discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-20.

Decommissioning Inspector Individual Study Activity

TOPIC:	(ISA-21) Security Requirements for Nuclear Power Plants and Materials Sites
PURPOSE:	The purpose of this activity is to provide you with a general understanding of the requirements for the security program at nuclear power plants and materials sites.
COMPETENCY AREAS:	REGULATORY FRAMEWORK
REFERENCES:	<ol style="list-style-type: none">1. 10 CFR Section 73.55, "Requirements for Physical Protection of Licensed Activities in Nuclear Power Reactors against Radiological Sabotage"2. 10 CFR Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Material"3. MD 12.6, "Sensitive Unclassified Information Security Program"4. SECY-04-0191, "Withholding Sensitive Unclassified Information Concerning Nuclear Power Reactors from Public Disclosure"5. NUREG-2155, "Implementation Guidance for 10 CFR Part 37, "Physical Protection of Category 1 and Category 2 Quantities of Radioactive Material"6. NUREG-2166, "Physical Security Best Practices for the Protection of Risk-Significant Radioactive Material"
EVALUATION CRITERIA:	<p>Upon completion of this activity, you will be asked to demonstrate your understanding of security requirements at reactor and materials sites by successfully doing the following:</p> <ol style="list-style-type: none">1. Discuss how a reactor site security force maintains access control of the owner-controlled, protected, and vital areas.2. Discuss the applicability of a licensee's drug testing program to the inspector.3. Explain the need for maintaining designation of certain material safeguards and the proper handling of the material.4. Explain the purpose of 10 CFR Part 37 and the definitions of Category 1 and 2 materials.

TASKS:

1. Complete all three modules of the INFOSEC Awareness Training that is in TMS.
2. Review the reference material to gain an understanding of the principles discussed in the evaluation criteria.
3. Meet with your supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.
4. Discuss inspector responsibilities related to site security and safeguards with your supervisor or the person designated as a resource or a Physical Security Inspector. Your discussion should include practical circumstances that you may encounter, such as loss of security badge, identification of an inattentive security officer, receipt of suspicious package, or receipt of a bomb threat, including actions to be taken by the licensee and you, as appropriate.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item ISA-21.

Part III. Basic Level On-the-Job Activities

The OJT activities require you to perform inspection accompaniments, as assigned by your immediate supervisor, under the supervision of qualified inspectors. They are designed to allow you to observe and perform key knowledge-based inspector tasks under controlled circumstances. Like the ISAs, each OJT activity describes why the activity is important and what you are expected to successfully complete during the activity. The OJT activities do not specify that a particular number of inspection accompaniments need to be completed before the immediate supervisor considers you to be competent because the number of accompaniments don't always reflect competency. This is something only your immediate supervisor, assisted by the qualified inspector working with you, can determine and it will be based on your prior experience and your performance. Your immediate supervisor should consider sending you to multiple sites and inspections, depending on inspection availability, including reactor and materials sites, but given the heightened requirements for conduct, including emergency response and site navigation at a reactor site, trainees shall accompany an inspector at a reactor site prior to being Basic Level qualified.

The following general guidance applies as you complete the various on-the-job activities:

- ✓ Complete all assigned parts of each activity.
- ✓ Your immediate supervisor or a designated fully qualified inspector will act as a source as you complete each activity. Discuss any questions you may have about how a task must be done or how the guidance is to be applied.
- ✓ You are responsible for keeping track of the tasks you have completed. Be sure that you have completed all aspects of an OJT activity before you meet with your immediate supervisor or designated fully qualified inspector for evaluation.

Basic Level On-the-Job Activity

TOPIC:	(OJT-1) Facility Familiarization Tour with a Qualified Inspector
PURPOSE:	The purpose of this activity is to: (1) acquaint you with the general layout of at least one reactor and, at your supervisor's direction, a materials facility and identify various major equipment, (2) instruct you in the types of industrial and radiological personal protection requirements and the proper method of complying with these requirements, (3) instruct you in the use of security protocols, and (4) instruct you in the proper response to an emergency if the emergency is declared while you are in the facility.
COMPETENCY AREAS:	INSPECTION COMMUNICATION TEAMWORK SELF MANAGEMENT
REFERENCES:	1. Health, Safety, and Security Curriculum (IMC-1245) in TMS 2. Licensee's NRC approved emergency action level (EAL) scheme
EVALUATION CRITERIA:	Upon completion of this activity, you should be able to do the following: 1. Identify the types of industrial personnel safety equipment that are available and the circumstances under which each piece of equipment should be used. 2. Explain the process to enter a RCA for the site(s) visited. 3. Given specific scenarios related to emergency response situations at both materials and reactor sites, including declaration of an emergency event, describe what actions you would take. Describe the location of the site emergency response facilities and be able to travel to those facilities if needed (as applicable). 4. Given specific scenarios related to health physics situations, including for example, a spill of potentially contaminated liquid to a high local radiation alarm, describe what actions you would take.
TASKS:	1. Complete the industrial safety courses referenced above. Course numbers will change when courses are updated. Current courses can be assigned to a trainee in TMS by requesting your training coordinator or TrainingSupportResource@nrc.gov to assign the following curriculum, "Health, Safety, and Security Curriculum." Before the tour(s), discuss the requirements for personal industrial safety equipment with a qualified inspector.

2. Visit at least one decommissioning reactor and one materials site. If unable to visit a materials site, discuss the major differences with your supervisor.
3. Enter the RCA with a qualified inspector, tour the area to observe and discuss items such as the various radiological control postings, any radiological control clothing requirements for different areas, use of any portal monitors and/or personal friskers, and monitoring personal dosimetry.
4. Go to the control room (as applicable) with a qualified inspector and observe appropriate protocol. Gain a general understanding of pertinent systems and controls for the state the plant is in (as applicable).
5. During the tour, discuss the proper expected actions in response to a declared emergency (as applicable) and the proper response in the event of a radiological control event or anomaly while on-site at the facility. Tour emergency response facilities associated with that site (as applicable).
6. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item OJT-1.

Basic Level On-the-Job Activity

TOPIC: (OJT-2) Inspection Activities

PURPOSE: The purpose of this activity is to familiarize you with inspection tasks commonly performed by an inspector. This OJT will prepare you to independently plan and conduct the baseline inspection program, as defined in the applicable IMC.

COMPETENCY
AREAS: INSPECTION
COMMUNICATION
TEAMWORK
SELF MANAGEMENT

REFERENCES: 1. IMC 0330, "Guidance for NRC Review of Licensee Draft Documents"
2. Inspection planning guidance

EVALUATION
CRITERIA: Upon completion of this activity, you will be asked to demonstrate your understanding of the baseline inspection process by successfully doing the following:

1. Describe the process of planning for an inspection.
2. Discuss the documents to be reviewed, including their content and purpose, before an inspection.
3. Describe the activities you accomplished during the inspections and their purpose.
4. Describe the contents and purpose of the parts of the entrance and exit meetings you conducted.

TASKS:

1. Review how your inspection fits into the inspection program for the site you visit.
2. Participate in the inspection planning process, which could include an inspection planning call, development of an inspection-specific plan or document request, input to inspection planning systems, and coordination with the licensee and any other inspectors.
3. Observe the activities performed by a qualified inspector during the completion of the planned inspection by doing the following while on-site at a facility (as available):
 - a) Observe an entrance meeting.
 - b) Observe implementation of IPs.

- c) Observe interviews/discussion with facility personnel.
 - d) Observe facility work activities.
 - e) Review and discuss documentation and records.
 - f) Discuss inspection results with the lead inspector.
 - g) Observe a briefing of NRC management.
 - h) Observe an exit pre-brief of licensee management.
 - i) Observe an exit meeting.
4. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Basic Level Certification Signature Card Item OJT-2.

Form A-1: Basic-Level Signature Cards and Certification		
<u>Inspector Name</u>	<u>Employee Initials/Date</u>	<u>Supervisor's Signature/Date</u>
A. Required Basic-Level Training Courses		
Ethics Training for New Employees (Web-based, course in TMS)		
Allegation Process (Web-based, course in TMS)		
The Non-Concurrence Process (NCP) (Web-based, course in TMS)		
Differing Professional Opinion (DPO) Program (Web-based, course in TMS)		
INFOSEC Awareness Training (Web-based, course in TMS)		
Health, Safety, and Security Curriculum (IMC-1245) in TMS		
Site Access Training (H-100S) or Site Access Refresher Training (H-101)		
B. Individual Study Activities		
(ISA-1) History and Organization of the U.S. Nuclear Regulatory Commission		
(ISA-2) Understanding How the Commission Operates		
(ISA-3) Overview of Select Parts of Title 10 of the <i>Code of Federal Regulations (10 CFR)</i>		
(ISA-4) Overview of 10 CFR Part 50 for Power Reactors		
(ISA-5) Overview of 10 CFR Part 19 and 10 CFR Part 20		
(ISA-6) Generic Communications		
(ISA-7) NRC IMC, IP, and other References		
(ISA-8) Open, Collaborative Working Environment & Ways to Raise Differing Views		

(ISA-9) Review of Significant Events at Material Licensees		
(ISA-10) The NRC's Response to an Emergency at a Nuclear Facility		
(ISA-11) The Enforcement Program		
(ISA-12) Allegations		
(ISA-13) Inspector Objectivity, Protocol, and Professional Conduct		
(ISA-14) The Office of Investigations		
(ISA-15) NRC Interagency Agreements		
(ISA-16) Interaction with the Public		
(ISA-17) Contacts with the Media		
(ISA-18) The Freedom of Information Act and the Privacy Act		
(ISA-19) Entrance and Exit Meetings		
(ISA-20) Documenting Inspection Findings		
(ISA-21) Security Requirements for Nuclear Power Plants and Materials Sites		
C. On-the-Job Training Activities		
(OJT-1) Facility Familiarization Tour with a Qualified Inspector		
(OJT-2) Inspection Activities		

This signature card and certification must be accompanied by the appropriate Form A-2, Basic-Level Equivalency Justification, if applicable. Record completion in TMS by sending a request to TrainingSupport.Resource@nrc.org.

Supervisor's Recommendation
Division Director's Approval
Copies to: Inspector
 HR Office

Signature/Date _____
Signature/Date _____

Form A-2: Basic-Level Equivalency Justification	
Decommissioning Inspector's Name:	Identify equivalent training and experience for which the decommissioning inspector is to be given credit.
Appendix A: Basic-Level Individual Study Activities	
(ISA-1) History and Organization of the U.S. Nuclear Regulatory Commission	
(ISA-2) Understanding How the Commission Operates	
(ISA-3) Overview of Select Parts of Title 10 of the <i>Code of Federal Regulations</i>	
(ISA-4) Overview of 10 CFR Part 50 for Power Reactors	
(ISA-5) Overview of 10 CFR Part 19 and 10 CFR Part 20	
(ISA-6) Generic Communications	
(ISA-7) NRC IMC, Inspection Procedures (IP), and other References	
(ISA-8) Open, Collaborative Working Environment & Ways to Raise Differing Views	
(ISA-10) The NRC's Response to an Emergency at a Nuclear Facility	
(ISA-11) The Enforcement Program	
(ISA-12) Allegations	
(ISA-13) Inspector Objectivity, Protocol, and Professional Conduct	
(ISA-14) The Office of Investigations	
(ISA-15) NRC Interagency Agreements	
(ISA-16) Interaction with the Public	
(ISA-17) Contacts with the Media	
(ISA-18) The Freedom of Information Act and the Privacy Act	
(ISA-19) Entrance and Exit Meetings	
(ISA-20) Documenting Inspection Findings	
(ISA-21) Security Requirements for Nuclear Power Plants and Materials Sites	
Appendix A: Basic Level On-the-Job Activities	
(OJT-1) Facility Familiarization Tour with a Qualified Inspector	
(OJT-2) Inspection Activities	

Basic Decommissioning Inspector Certification

(name)

has successfully completed all of the requirements
to be certified as a

BASIC DECOMMISSIONING INSPECTOR

Immediate Supervisor Signature: _____

Date: _____

Appendix B
Technical-Level Training and Qualification Contents

Appendix B. Technical-Level Training and Qualification Contents

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Note: The ISAs and OJTs in the Technical Proficiency level are marked as reactor track (R), materials track (M), or both tracks (B)

Part I. Technical-Level Training Activities

Overview

This section of the Qualification Journal focuses on technical training needed to understand the operations, regulatory requirements, and inspection process of a decommissioning site. You may complete the Basic-Level Proficiency requirements together with the Technical Proficiency requirements. The Technical Proficiency activities are designed to develop the technical expertise in the two decommissioning tracks: Reactors and Materials. The immediate supervisor shall discuss with the candidate inspector their expected path to qualification, which may include one or both tracks. It is expected that a candidate inspector may focus on one track and may or may not be followed by qualification in the other track depending on workload and supervisor discretion. However, to obtain full qualification in one track requires completion of a qualification board. A subsequent qualification board is not necessary if the inspector completes qualification of the other track at a later time. This approach allows for the supervisor to balance and maintain the workload (prevent delays) by enabling a candidate inspector to focus on one track, become qualified, and begin leading inspections. An inspector who is qualified in one track shall not be the lead inspector for a project or site in the other track but may assist on inspections.

These two tracks of the Decommissioning Inspector Qualification Journal consist of a series of ISAs, classroom or virtual training requirements, and OJT activities. Each ISA, training, and OJT is used to document task completion, as indicated by the appropriate signature block(s) on Form B-1. The ISAs and OJTs in the Technical Proficiency level are marked as reactor track (R), materials track (M), or both tracks (B).

Required Technical Proficiency Training Courses

- Conducting Inspections Course (G-105)
- Inspection Procedures (G-108)
- Root Cause/Incident Investigation Workshop (G-205)
- Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) Self-Study Course (H-121S)
- Characterization and Planning for Decommissioning Self-Study Course (H-115S)
- Transportation of Radioactive Material Self-Study Course (H-308S)
- Environmental Monitoring and Air Sampling for Radioactivity Self-Study Course (H-130S)
- Environmental Monitoring and Air Sampling for Radioactivity Lab Course (H-130L)
- NRC Materials Control & Security Systems & Principles (S-201)
- Fundamental Health Physics Self-Study Course (H-122S)
- Fundamental Health Physics Lab Course (H-122L)
- Advanced Health Physics (H-201)

Note: Prior completion of the Fundamental HP Self-Study Course (H-122S) is now required to register for this course. H-122S must be completed at least four weeks before the scheduled offering of H-201. Students who have previously completed the Applied Health Physics (H-109) course are waived from this pre-requisite.

The required training courses are the minimum courses that you should take to complete the Decommissioning Inspector Qualification. Your immediate supervisor will determine any additional specialized training or other courses you must take to complete the inspector qualification. The above courses are required for both the materials and reactor decommissioning inspector tracks. Candidate inspectors shall ensure they meet the prerequisites before signing up for a class.

Immediate supervisors have the authority to waive any of the other required classes based on the experience of the candidate seeking qualification as an inspector. Document the reason for the waiver on Form 1: Decommissioning Inspector Equivalency Justification. While your immediate supervisor may waive certain classes, your qualification still requires certification by your regional administrator, office director, or their designee.

Specialized Training Courses

Additional training may be appropriate to support inspections at unique facilities or licensee operations; however, delaying qualification to attend specialized training should be avoided if possible. Instead, consideration should be given to attending specialized training as part of a continual or refresher training program. Candidates seeking qualification should discuss specific inspection needs and whether any specialized courses would be appropriate for or soon after inspector qualification.

- Multi-Agency Radiation Survey and Assessment of Materials and Equipment (MARSAME) Self-Study Course (H-120S)
- Respiratory Protection (H-311) or equivalent
- Internal Dosimetry Self-Study Course (H-312S)
- Health Physics Statistics Self-Study Course (H-301S)
- Residual Radioactivity (RESRAD) Overview (H-408)
- Evaluation of Dose Modeling for Compliance with Radiological Criteria for License Termination (Self-Study curriculum in TMS)
- Licensing Practices and Procedures Course (G-109)
- Practical Applications of Reactor Technology (G-115)
- Visual Sampling Plan H-500
- U.S. Geological Survey-NRC Training Workshop on Subsurface Modeling & Monitoring of Radionuclide Transport
- Decommissioning Planning Rule Training–Groundwater Monitoring and Modeling
- Facility Decommissioning, Argonne National Laboratory (external training)
- Gamma Spectroscopy, Oak Ridge Associated Universities (external training)
- Independent Spent Fuel Storage Installations (F-220S)
- Hazardous Waste Operations and Emergency Response (HAZWOPER) (external training)

Additional courses may be developed after the publication of this qualification journal. Immediate supervisors may include these new specialized training courses in the qualification journals.

Part II. Technical Proficiency Individual Study Activities

The individual study activities (ISAs) are designed to direct and focus your efforts as you begin reviewing documents that will be important to the performance of your job. Each study activity begins with a purpose statement informing you of why the activity is important and how it relates to the job of an inspector. You should review the evaluation criteria first to better understand what you should achieve as a result of completing the activity. The evaluation criteria should help you to focus on the relevant information. The tasks outline the items that you must complete to successfully address the evaluation criteria. The ISAs are marked as reactor track (R), materials track (M), or both tracks (B). If a trainee is planning on qualifying on one track, they should consult with their supervisor to determine if any of the ISAs in the other track would be applicable to their expected work scope. For example, an inspector qualifying on the materials track that will be inspecting uranium recovery sites should consider adding ISA-Technical-11R (Radiological Environmental Monitoring Program [REMP]/Radiological Effluent Technical Specifications [RETS]).

The following general guidance applies as you complete the various study activities:

You should complete all parts of each activity.

Your immediate supervisor will act as a resource as you complete each activity. Your immediate supervisor may also designate other fully qualified inspectors to work with you and sign off the qualification journal as you complete the material. You should discuss any questions with your supervisor or designated resource.

You are responsible for keeping track of the tasks completed. You should complete all the tasks in each activity before meeting with your immediate supervisor or designee for evaluation.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-1M) Decommissioning Materials Facilities

PURPOSE: The purpose of this activity is to provide you with an overview of the decommissioning process for materials sites, including the responsibilities of NRC headquarters and the regions.

NOTE: This ISA can be done concurrent with OJT 1M.

COMPETENCY
AREAS: REGULATORY FRAMEWORK
INSPECTION

REFERENCES:

1. 10 CFR (specific sections in tasks/evaluation criteria below)
2. MD 5.6, "Integrated Materials Performance Evaluation Program (IMPEP)"
3. NUREG-1757, Vol. 1, Rev. 2
4. NUREG-1757, Vol. 2, Rev. 1
5. NUREG-1757 Vol 3, Rev 1
6. IMC 2602 Decommissioning Oversight and Inspection Program for Fuel Cycle Facilities and Materials Licensees
7. MD 5.8, "Proposed Section 274b Agreements with States"
8. IMC 2800 Materials Inspection Program
9. IP 87104, Decommissioning Procedures for Materials Licensees

EVALUATION
CRITERIA:

Upon completion of the tasks, you should be able to do the following:

1. Discuss how to determine if the licensee met the "Timeliness Rule Requirement" per 10 CFR Sections 30.36(d), 40.42(d), 70.38(d), and 72.54(d).
2. Discuss how an inspector determines the licensee's Decommissioning Group (Decommissioning group can change during the process, constant evaluations).

3. Discuss how an inspector determines the adequacy of a Decommissioning Plan (DP) in accordance with the facility layout (when appropriate). For example, an in-depth independence assessments of the licensee's site assessments, plan for decommission, safety hazards, survey requirements, financial assurance, and waste disposal, (list not all inclusive, will vary with facilities).
4. Discuss the major points 10 CFR Part 51-National Environmental Policy Act.
5. Describe how the Memorandum of Understanding (MOU) with the EPA is implemented (if applicable).
6. Generate a Safety Evaluation Report (given the opportunity).

TASKS:

1. Read and Discuss the Decommissioning "Timeliness Rule."
2. Review and discuss with Subject Matter Experts the applicable IPs such as IP 83822, IP 84750, IP 87104.
3. Review and discuss 10 CFR Part 51.
4. Review and identify the important areas of a Safety Evaluation Report identified by your supervisor or qualified inspector.
5. Review and discuss 2-3 past complex materials decommissioning cases that had significant safety significance and evaluate the site the decommissioning process, safety hazards involved, lessons learned, etc.) as identified by your supervisor or qualified inspector.
6. Access and Navigate the Sealed Source Device Registry.
7. Access and Navigate the National Source Tracking System.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-1M.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-2M) Fuel Cycle Decommissioning

PURPOSE: The purpose of this activity is to provide you with information on the implementation of IP 88104. The objectives of IP 88104 are to determine if licensed decommissioning activities at fuel cycle facilities are being conducted with NRC requirements and in accordance with the DP.

NOTE: This ISA can be done concurrent with OJT 2M.

COMPETENCY
AREAS: REGULATORY FRAMEWORK
INSPECTION

- REFERENCES:
1. 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material"
 2. IP 88104, "Fuel Cycle Decommissioning"
 3. IMC 1247, "Qualification Program for Fuel Facility Inspectors in the Nuclear Material Safety and Safeguards Program Area"
 4. IMC 2600, "Fuel Cycle Facility Operational Safety and Safeguards Inspection Program" and associated procedures
 5. IMC 2602, "Decommissioning Oversight and Inspection Program for Fuel Cycle Facilities and Materials Licensees"
 6. Regulatory Guide (RG) 3.65, "Standard Format and Content of Decommissioning Plans for Materials Licensees"
 7. DP for a fuel cycle facility designated by your supervisor
 8. TS and safety analysis report for a fuel facility designated by your supervisor

- EVALUATION
CRITERIA:
- Upon completion of the tasks, you should be able to do the following:
1. Identify the hazards (nuclear criticality safety, radiation protection, chemical safety, and fire protection) associated with a particular fuel facility process at your designated facility.
 2. Generally, describe how the site security force maintains access control of the owner-controlled, protected, and material access areas, and secures special nuclear material (SNM) at your assigned site.

3. Describe your response for an emergency if you are on-site. Describe your responsibilities during the event including emergency communications.
4. Describe how you inspect how the licensee is meeting their license requirements and describe how the requirements are expected to change (via license amendment) over the decommissioning process.
5. Identify how to verify that the licensee is meeting the requirements in their DP.
6. Describe the different hazards at conversion, enrichment, and fabrication facilities, including any unique hazards at the facility assigned by your supervisor.

TASKS:

1. Read and discuss the criticality safety portions of 10 CFR Part 70 and the differences between inspection and licensing of criticality safety with a cognizant individual.
2. Identify the existing safety controls (Item Relied on for Safety) and the associated Management Measures for Nuclear Criticality, Radiation, Chemical and Fire Safety and discuss how the licensee meets the various sections and requirements.
3. Read the Emergency Plan for your assigned facility. Note the significant hazards that the plan is designed to protect workers and the public against.
4. Read the DP for a fuel facility assigned by your supervisor.
5. Define conversion, enrichment, and fabrication.
6. Consider taking or completing applicable portions of F-204S (Uranium Enrichment Processes Self-Study Course).
7. Discuss with a Fuel Facilities Inspector about the different types of facilities there are and the hazards in each.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-2M.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-3M) Decommissioning Uranium Recovery

PURPOSE: The purpose of this activity is to provide you with an overview of the decommissioning process for uranium recovery sites, including the responsibilities of NRC headquarters and the regions. This study activity will provide you with information on the implementation of IP 87654, "Uranium Recovery Decommissioning and 11e.(2) Byproduct Material Disposal Site Inspection."

NOTE: This ISA can be done concurrent with OJT 1M.

COMPETENCY
AREAS: REGULATORY FRAMEWORK
INSPECTION

REFERENCES:

1. 10 CFR Part 40 and specifically 10 CFR 40 Appendix A
2. 40 CFR Part 141, National Primary Drinking Water Regulations
3. 40 CFR Part 192 Health and Environmental Protection Standards for Uranium and Thorium Mill Tailings
4. Uranium Mill Tailings Radiation Control Act (UMTRCA) of 1978, as amended
5. IP 87654, "Uranium Recovery Decommissioning and 11e.(2) Byproduct Material Disposal Site Inspection"
6. RG 8.11 Applications of Bioassay for Uranium
7. RG 8.15 Acceptable Programs for Respiratory Protection
8. RG 8.22 Bioassay at Uranium Mills
9. RG 8.25 Air Sampling in the Workplace
10. RG 8.30 Health Physics Surveys in Uranium Recovery Facilities
11. RG 8.31 Information Relevant to Ensuring that Occupational Radiation Exposures at Uranium Recovery Facilities Will Be as Low as Is Reasonably Achievable
12. IMC 1230 "Quality Assurance Program for Radiological Confirmatory Measurements"
13. IMC 2801 "Uranium Mill and 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program"

14. IMC 1248 Appendix H, "Training Requirements and Qualification Journal for Uranium Recovery Inspector"
15. License for a uranium recovery site identified by your supervisor
16. NUREG-1507 "Minimum Detectable Concentrations with Typical Radiation Survey Instruments for Various Contaminants and Field Conditions," June 1998
17. NUREG-1569 Revision 1, A Standard Review Plan for In-Situ Leach Uranium Extraction License Applications, Draft Report for Comment, January 2002
18. NUREG-1575 "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)" Revision 1, June 2000
19. NUREG-1620 Revision 1, Standard Review Plan for the Review of a Reclamation Plan for Mill Tailings Sites Under Title II of the UMTRCA, Draft Report for Comment, January 2002 (Section 5.2)
20. NUREG-1727 NMSS Decommissioning Standard Review Plan, September 2000 (Appendix D, ALARA)

EVALUATION
CRITERIA:

Upon completion of the tasks, you should be able to do the following:

1. Describe the different sections of the license and how the IP ensures that the licensee is meeting the conditions in their license.
2. Describe how uranium recovery fits into the fuel cycle process.
3. Describe the differences between in-situ and conventional uranium recovery licensees, and how decommissioning differs at each.
4. Explain why NUREG-1757 does not apply to uranium recovery decommissioning.
5. Explain how 10 CFR Section 40.42(d) applies to uranium recovery licensees and how these licensees meet the decommissioning timeliness rule.
6. Describe the difference between Title I and Title II sites as defined in the UMTRCA of 1978, as amended.
7. Describe the relationship between the NRC and the U.S. DOE for UMTRCA Title I and II sites.
8. Describe the security controls typically necessary at a uranium recovery site and any differences expected as the site goes through decommissioning.

9. Describe what a typical soil background level of radium-226 is (a range) and why it is important for NRC licensing staff to approve a soil background value at a uranium recovery site.
10. Describe the characteristics of typical radionuclides of concern, including half-life, toxicity, soil distribution coefficient (Kd value), etc.
11. Describe how to notify State personnel of an upcoming inspection at a uranium recovery facility.
12. Describe the differences between a DP and a reclamation plan and when each have been used.

TASKS:

1. Review a license for a uranium recovery site identified by your supervisor
2. For a site identified by your supervisor, review the previous inspection history, license conditions and licensee's submittals concerning decommissioning and associated Technical Evaluation Reports for related amendments.
3. Define Naturally Occurring Radioactive Material (NORM) and Technologically Enhanced Naturally Occurring Radioactive Material.
4. Define uranium tailings.
5. Identify the typical radionuclides of concern at uranium recovery sites.
6. Define cleanup level (CL).
7. Meet with a uranium recovery license reviewer and discuss the typical license review process through decommissioning.
8. Meet with a qualified Uranium Recovery inspector and discuss how uranium recovery is different than other material license decommissioning.
9. Review items listed in ISA-Technical-11R, "Radioactive Waste Treatment and Effluent and Environmental Monitoring" and discuss with your supervisor or designated qualified inspector which items should be completed as part of this ISA.
10. Review training items in IMC 1248 Appendix H, "Training Requirements and Qualification Journal for Uranium Recovery Inspector" and discuss with your supervisor or designated inspector any items that should be completed as part of this ISA.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-3M.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-4M) NUREGs-1757

PURPOSE: The purpose of this activity is to expand your knowledge of the below references. Use the most recent revision of the documents and find the equivalent section if the activities listed below reference specific sections.

COMPETENCY
AREAS: REGULATORY FRAMEWORK
INSPECTION

REFERENCES:

1. NUREG-1757 Volume 1, Decommissioning Process for Materials Licensees (most recent revision)
2. NUREG-1757 Volume 2, Characterization, Survey, and Determination of Radiological Criteria (most recent revision)
3. NUREG-1757 Volume 3, Financial Assurance, Recordkeeping, and Timeliness (most recent revision)

EVALUATION
CRITERIA:

Upon completion of the tasks, you should be able to do the following:

1. Understand the Decommissioning Process and the applicable timeline involved in Decommissioning (See, Figure 5.1-Do I need to Decommission in NUREG 1757 Volume 1, "The Decommission Timeliness Rule").
2. Identify and briefly describe each of the different decommissioning groups, examples of sites that fall into each, and the changes. Understand which decommissioning group would require a DP (Figure 7.1 Determining the Appropriate Decommissioning Group, NUREG-1757 Volume 1).
3. Understand the different Radiological Criteria for Decommissioning such as Unrestricted Use, Restricted Conditions, and Alternate Criteria.
4. Understand the Decision Framework in NUREG-1757 Volume 2 (Figure 1.2) and the Subsequent Section 1.4.1 and 1.4.2 of Volume 2.
5. Describe the scoping and characterization process and how we inspect this part of the decommissioning process.
6. Understanding the different type of Methodologies Licensee Used to demonstrate compliance to 10 CFR Part 20 (such as final status survey [FSS] and Derived Concentration Guideline Level [DCGL], Dose Modeling Approach).

7. Describe the NRC decision making framework to demonstrate compliance as reviewed in Task 3.
8. Describe the major parts of a DP and the process for approval.

TASKS:

1. Understanding and Discuss the Decommissioning Timeliness Rule as stated above.
2. Review the seven Decommissioning Groups and the regulatory requirements regarding each such as which group might need a DP.
3. Read NUREG-1757 Volume 2 rev 1 Section 1.4.
4. Review the scope/characterization process in in NUREG-1757 Volume 2 rev 1 Section 4.2.
5. Describe what kinds of surveys would be expected at various facilities and also the location of the surveys.
6. Review the differences between simple and complex sites and some characteristics of complex sites (NUREG-1757 Volume 2 Section 1).
7. What is the National Environmental Policy Act? (NUREG-1757 Volume 1 Section 15).
8. Describe the purpose major parts of DPs (NUREG-1757 Volume 1, Part II).

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-4M.

Decommissioning Technical Inspector Individual Study Activity

TOPIC:	(ISA-Technical-5R) Decommissioning Process for Reactors
PURPOSE:	The purpose of this activity is to provide you with an overview of the decommissioning process for reactors from plant shutdown to license termination, including the responsibilities of NRC headquarters and the regions.
COMPETENCY AREAS:	REGULATORY FRAMEWORK INSPECTION
REFERENCES:	<ol style="list-style-type: none">1. 10 CFR Part 20 Subpart E, "Radiological Criteria for License Termination"2. 10 CFR Section 50.82, "Termination of license"3. 10 CFR Section 50.83, "Release of part of a power reactor facility or site for unrestricted use"4. IMC 2515 Appendix G, "Baseline Inspection Guidance for Power Reactors Preparing for Transition to the Decommissioning Phase"5. IMC 2561, "Decommissioning Power Reactor Inspection Program"6. RG 1.179, "Standard Format and Content of License Termination Plans for Nuclear Power Reactors," Revision 27. RG 1.184, "Decommissioning of Nuclear Power Reactors," Revision 18. RG 1.184, "Standard Format and Content for Post-Shutdown Decommissioning Activities Report," Revision 19. A post shutdown decommissioning activities report (PSDAR) of a site assigned by your supervisor10. A license termination plan (LTP) of a site assigned by your supervisor11. NMSS Policy and Procedure 5-1, Revision 3, March 31, 2016 (ADAMS Accession No. ML103050137)12. Decommissioning Lessons Learned Report (ADAMS Accession Nos. ML16085A029 and ML16302A022)

EVALUATION
CRITERIA:

Upon completion of the tasks, you should be able to do the following:

1. Discuss the process and timeline for coordinating and transferring project management responsibilities between NRR and NMSS after plant shutdown.
2. Discuss the various decommissioning categories found in IMC 2561 Appendix A and how inspection effort varies over the decommissioning process.
3. Discuss the steps in the decommissioning process including the following:
 - a) The certification requirements found in 10 CFR Section 50.82(a)(1)(i) and 10 CFR Section 50.82(a)(1)(ii).
 - b) How long a licensee has to complete decommissioning after permanent cessation of operations.
 - c) PSDAR purpose, contents, timeline, and associated public meeting.
 - d) LTP purpose, contents, timeline, and associated public meeting.
 - e) Requirements for non-power reactor licensees.
 - f) Partial site release prior to LTP approval.
4. Discuss the process and general timeline for transitioning a shutdown site from the Reactor Oversight Process to IMC 2561 and the use of resident inspectors to perform decommissioning inspections per IMC 2561.
5. Explain the reduction in risks following permanent cessation of operation and how those reductions likely lead to licensee's requesting a change in the licensing basis.
6. Discuss the advantages and disadvantages of the immediate dismantlement versus a period of Safe Storage (SAFSTOR).

TASKS:

1. Identify the responsibilities held by NRR and NMSS prior to and throughout the decommissioning process.
2. Review 10 CFR Section 50.82, "Termination of License."
3. Review a site PSDAR and identify the decommissioning schedule and cost estimate.

4. Define the different decommissioning phases as described in RG 1.184.
5. Define major decommissioning activities.
6. Meet, as available, with the NRR and NMSS project managers and discuss an overview of the typical license amendments submitted prior to shutdown and throughout the decommissioning process, including emergency preparedness, partial site releases, technical specification changes, etc.
7. Review a site LTP, identify which group is responsible for reviewing the LTP and discuss an overview of the process with an LTP reviewer.
8. Define the radiological criteria for license termination for both restricted and unrestricted use.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-5R.

Decommissioning Inspector Technical Individual Study Activity

TOPIC: (ISA-Technical-6R) Reactor Licensing Basis

PURPOSE: This study activity will help decommissioning inspectors develop a working knowledge of the contents of the Defueled Safety Analysis Report (DSAR), the TS, and the Offsite Dose Calculation Manual (ODCM).

Other important programs for an inspector to be familiar with are the Radiation Protection Program (RPP), Quality Assurance Program (QAP), the Process Control Program (PCP), and the Ground Water Protection Program.

COMPETENCY
AREAS: REGULATORY FRAMEWORK
INSPECTION

REFERENCES:

1. Plant Defueled Safety Analysis Report (DSAR)
2. Technical Specifications (TS)
3. Technical Requirements Manual (TRM)
4. Quality Assurance Plan (QAP)
5. Radiation Protection Program (RPP)
6. Offsite Dose Calculation Manual (ODCM)
7. Process Control Program (PCP)
8. Groundwater Protection Plan (GPP)
9. Generic Letter 89-01, "Implementation of Programmatic Controls for Radiological Effluent Technical Specifications in the Administrative Controls Section of the TS and the Relocation of Procedural Details of RETS to the ODCM or to the PCP," January 31, 1989

EVALUATION
CRITERIA: Upon completion of this activity, the inspector should be able to:

1. Identify the applicable sections of the designated facility DSAR (meteorology, engineered safety features ventilation/filtered systems, radiation monitoring instrumentation, radiation protection, radioactive waste management, TS, and quality assurance [QA]) and discuss the content.

2. Identify the applicable sections of the designated facility TS (definitions, radiation monitoring instrumentation, engineered safety features ventilation, radioactive effluents, solid radioactive waste (PCP), radiological environmental monitoring, administrative controls) and TRM (definitions, limiting conditions for operation and surveillance requirement applicability, instrumentation, radioactive effluents, radiological environmental monitoring, and administrative controls) and discuss the content and basis for the requirements.
3. Discuss the content and basis for the requirements of the designated facility ODCM.
4. Discuss the legal basis, purpose, license conditions, definitions and terms found in and how these documents (DSAR, TS, TRM, PCP, QA, and ODCM, Emergency Plan, Fire Protection Program and Security Plan) can be changed.
5. Discuss the requirements for surveillances, action statements, and reporting.
6. Discuss the administrative controls section of the TS and the types of information located in this section. Focus on high radiation area alternative controls and radioactive materials effluent requirements.
7. Discuss the QAP and compare it to the requirements in 10 CFR Part 50 Appendix B.
8. Discuss the Radiation Protection Plan's purpose, legal bases, and its contents.
9. Discuss the Groundwater Protection Program's purpose, legal bases and its contents as recommended in Nuclear Energy Institute (NEI) 07-07.
10. Discuss the limiting accident described in the DSAR.

TASKS:

1. For the facility designated by your supervisor or mentor, locate a copy of the following documents and review the various sections as listed in the Evaluation Criteria section:
 - a) DSAR
 - b) TS
 - c) TRM (or site-specific equivalent)
 - d) ODCM

- e) PCP
 - f) Emergency Plan
 - g) Radiation Protection Plan
 - h) Ground Water Protection Plan
2. Meet with your supervisor or qualified inspector to discuss any questions you may have as a result of this ISA. Discuss the answers to the questions listed under the Evaluation Criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-6R.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-7R) Safety Reviews, Design Changes, and Modifications

PURPOSE: This study activity will provide you with information on the implementation of IP 37801, "Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors." The objectives of IP 37801 are to verify the licensee's safety review process is in accordance with the requirements of 10 CFR Section 50.59, "Changes, Tests, and Experiments."

NOTE: This ISA can be done concurrent with OJT 2R.

COMPETENCY
AREAS: INSPECTION

REFERENCES:

1. 10 CFR Section 50.59, "Changes, Tests and Experiments"
2. 10 CFR Section 50.82(a)(6)
3. IMC 0335, "Changes, Tests, and Experiments"
4. NEI 96-07, "Guidelines for 10 CFR 50.59 Implementation"
5. RG 1.187, "Guidance for Implementation of 10 CFR 50.59, Changes, Tests, and Experiments," June 2021
6. TMS Training Course: "10 CFR 50.59 Refresher Training"
7. Licensee's 10 CFR Section 50.59 procedure (if available)

EVALUATION
CRITERIA:

Upon completion of this activity, the inspector should be able to:

1. Explain the purpose of 10 CFR Section 50.59 and how it applies to decommissioning plants.
2. State the NRC's inspection objectives for the reviews of permanent and temporary plant modifications and indicate why they are important.
3. Discuss how licensees control modifications both before and after implementation, including affected design documents and plant procedures.
4. Define current licensing basis and design basis.
5. Demonstrate knowledge of the 10 CFR Section 50.59 process.
6. Review licensees' 10 CFR Section 50.59 procedures.

7. Discuss the criteria when a licensee may make changes to the facility or procedure or perform tests or experiments without obtaining prior NRC approval, including under Section 50.82(a)(6).

TASKS:

1. Review the references listed above and complete the course in TMS to understand the definitions and review the threshold for changes that licensees may make to power reactor facilities without first obtaining an amendment to the facility License.
2. Review a 10 CFR Section 50.59 screening and evaluation.
3. Review a recent (if available) documented violation related to 10 CFR Section 50.59 identified by your supervisor or qualified inspector.
4. Meet with your supervisor or the person designated to be your resource for this activity and discuss the items listed under the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-7R.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-8R) Problem Identification and Resolution

PURPOSE: This study activity will provide you with information on the implementation of IP 40801, "Problem Identification and Resolution at Permanently Shutdown Reactors." The objectives of IP 40801 are to evaluate the effectiveness of licensee controls in identifying, resolving correcting issues in accordance with the NRC's approved QAP and 10 CFR Part 50, Appendix B, Criterion XVI. Additional objectives include to determine whether the audits and assessments are conducted in accordance with the requirements of the NRC-approved QAP and 10 CFR Part 50, Appendix B and to confirm that the licensee has established, implemented, and performs management reviews of the safety-conscious work environment (SCWE).

NOTE: This ISA can be done concurrent with OJT 2R.

COMPETENCY
AREAS: INSPECTION

REFERENCES:

1. IP 40801, "Problem Identification and Resolution at Permanently Shutdown Reactors"
2. 10 CFR Part 50, Appendix B, Criterion XVI, "Corrective Action"
3. Site specific documents that describe the licensee's corrective program
4. 10 CFR Section 50.54, "Conditions of Licenses"
5. Site specific documents that describe the licensee's QAP implementation
6. RG 1.33, "Quality Assurance Program Requirements (Operation)"
7. Safety Culture Policy Statement and Federal Notice (ADAMS Accession No. ML11146A047)
8. NUREG-2165, "Safety Culture Common Language"

EVALUATION CRITERIA:

Upon completion of this activity, the inspector should be able to:

1. Discuss the principal steps in a site's corrective action program (CAP) with respect to identification of a condition adverse to quality through final resolution.

2. Describe the relationship between the plant license, DSAR, and the TS.
3. Outline the key elements of an effective QAP.
4. State the purpose of the NRC's Safety Culture Program.
5. Describe a SCWE.
6. Explain the role of the inspector in the NRC Safety Culture Program.

TASKS:

1. At a licensee site, gain a general understanding of the licensee's CAP through a combination of discussions with a qualified inspector and attendance at routine CAP meetings.
2. Using IP 40801 for guidance, review a sample of 5 – 7 issues entered into the licensee's CAP within the past month and compare the licensee's actions with regulatory requirements. Discuss the resolution of the issues with a qualified inspector.
3. Review the regulations that require a QAP. Find where the DSAR, TS, and plant license address QA. Review a licensee QAP and the implementing procedures.
4. At a licensee site, gain a general understanding of the licensee's QAP through a combination of discussions with a qualified inspector and review of assessments/reports prepared by the licensee QA organization.
5. Define safety culture and SCWE and discuss why they are important, how they are different, and how they support each other.
6. Identify the safety culture point of contact in the region or office.
7. Gain a general understanding of the licensee's Employee Concerns Program (ECP) with consideration to meet with the ECP manager.
8. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-8R.

Decommissioning Inspector Technical Individual Study Activity

TOPIC: (ISA-Technical-9R) Spent Fuel Pool Maintenance, Surveillance and Safety

PURPOSE: This study activity will provide you with information on the implementation of IP 60801. The objectives of IP 60801 are to ensure the safe wet storage of spent fuel at PSRs and to ensure that there is an effective program to implement 10 CFR Section 50.65, "Requirements for monitoring the effectiveness of maintenance at nuclear power plants" (the Maintenance Rule).

NOTE: This ISA can be done concurrent with OJT 2R.

COMPETENCY
AREAS:

INSPECTION

- REFERENCES:
1. 10 CFR Section 50.65, "Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants" (the Maintenance Rule)
 2. 10 CFR Section 50.68, "Criticality Accident Requirements"
 3. Bulletin 94-01, "Potential Fuel Pool Drindown Caused by Inadequate Maintenance Practices at Dresden Unit 1"
 4. Generic Letter 80-113, "Control of Heavy Loads"
 5. Generic Letter 16-01, "Monitoring of Neutron-Absorbing Materials in Spent Fuel Pools"
 6. Inspection Enforcement (IE) Bulletin 79-24, "Frozen Lines"
 7. IP 60801, "Spent Fuel Pool Maintenance, Surveillance and Safety"
 8. Information Notice 88-65, "Inadvertent Drainages of Spent Fuel Pools"
 9. Information Notice 87-13, "Potential for High Radiation Fields Following Loss of Water from Fuel Pool"
 10. Information Notice 90-33, "Sources of Unexpected Occupational Radiation Exposures at Spent Fuel Storage Pools," May 9, 1990
 11. Information Notice 02-03, "Highly Radioactive Particle Control Problems During Spent Fuel Pool Cleanout," January 10, 2002
 12. IP 71111.04, "Equipment Alignment"
 13. TMS Maintenance Rule training for Inspectors

14. RG 1.160, "Monitoring the Effectiveness of Maintenance at Nuclear Power Plants"
15. NUMARC 93-01, "Industry Guideline for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants"

EVALUATION
CRITERIA:

Upon completion of this activity, the inspector should be able to:

1. Discuss how to evaluate a site's compliance with their TS.
2. Discuss what foreign material exclusion is and why it is important particularly around spent fuel pools.
3. Discuss what criticality is and how a licensee ensures that criticality does not occur in their spent fuel pool.
4. Discuss the potential conditions and consequences described in your readings under Task 4.
5. Discuss how to implement IP 60801, including walkdowns of the spent fuel pool cooling system and temperature and level monitoring.
6. Explain the scope and purpose of 10 CFR Section 50.65, "Maintenance Rule," as it applies to decommissioning.
7. Explain the basic process for a system to be "scoped in" to the maintenance rule and how performance of the system is monitored.
8. Explain what happens when a system exceeds its established maintenance rule monitoring acceptance criteria.

TASKS:

1. Locate the spent fuel and spent fuel related items in a decommissioning site's TS (one that has fuel in the spent fuel pool).
2. Define foreign material exclusion.
3. Define criticality and identify and read the applicable regulations for spent fuel pools.
4. Read Bulletin 94-01: Potential Fuel Pool Draindown Caused by Inadequate Maintenance Practices at Dresden Unit 1, IE Bulletin 79-24: Frozen Lines, Information Notice 88-65: Inadvertent Drainages of Spent Fuel Pools, and Information Notice 87-13: Potential for High Radiation Fields Following Loss of Water from Fuel Pool.

5. Identify the important equipment for spent fuel pool cooling and temperature and level monitoring.
6. Locate the Maintenance Rule scoping and monitoring criteria for an applicable system.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-9R.

Decommissioning Inspector Technical Individual Study Activity

TOPIC: (ISA-Technical-10R) Fire Protection Program

PURPOSE: The purpose of this activity is to provide you with information on the implementation of IP 64704. The objectives of IP 64704 are to ensure that the licensee has an effective decommissioning fire protection program that is maintained and implemented throughout decommissioning.

NOTE: This ISA can be done concurrent with OJT 2R.

COMPETENCY
AREAS: INSPECTION

REFERENCES:

1. 10 CFR Section 50.48, "Fire Protection"
2. RG 1.191, Revision 1, "Fire Protection Program for Nuclear Power Plants During Decommissioning"
3. Licensee's Fire Protection Program Procedure for a site identified by your supervisor
4. Licensee's Fire Hazard Analysis for a site identified by your supervisor

EVALUATION
CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the fire protection program at reactor sites by successfully doing the following:

1. Discuss the general content of 10 CFR Section 50.48(f).
2. Discuss the general content of RG 1.191, Revision 1, "Fire Protection Program for Nuclear Power Plants During Decommissioning."
3. Discuss the objectives and implementation of the Fire Protection Program at Permanently Shutdown Reactors IP.
4. Discuss, in general terms, the contents of the licensee's fire hazard analysis and pre-fire plan strategies.
5. Discuss the general changes expected to a site's fire protection program over the decommissioning process.

TASKS:

1. Define the following:
 - a) Automatic Fire Suppression Systems

- b) Manual Fire Suppression Systems
 - c) Fire Detection Systems
 - d) Combustible Material
 - i. Transient
 - ii. Fixed
 - e) Fire Area
 - f) Fire Barrier
 - g) Hot work
 - h) Pre-Fire Plan
2. At a facility, designated by your supervisor, walk down several plant areas to observe various fire detection and automatic/manual suppression systems. Discuss what areas of the site are most risk significant from a decommissioning fire protection viewpoint.
 3. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-10R.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-11R) Radioactive Waste Treatment, and Effluent and Environmental Monitoring

PURPOSE: The purpose of this activity is to provide you with the regulatory bases in the area of radioactive gaseous and liquid effluent treatment and radioactive environmental monitoring and provide you the technical knowledge to conduct inspections using procedure IP 84750, "Radioactive Waste Treatment, and Effluent and Environmental Monitoring."

The NRC requires that licensees' ensure adequate protection of public health and safety and the environment from exposure to radioactive materials released to the public domain. Radiation exposure to the public must be below the 10 CFR Part 20 and 40 CFR Part 190 limits. Doses below the design objectives of Appendix I to 10 CFR Part 50 and 40 CFR Part 190 dose values are considered ALARA. Radioactive effluent treatment systems are required by Criteria 60 and 64 of Appendix A to 10 CFR Part 50. The REMP is required by Criterion 64 of Appendix A to 10 CFR Part 50. The REMP supplements the effluent monitoring program by verifying that the measurable concentrations of radioactive materials and levels of radiation in the environment are in agreement with the values calculated by the radioactive effluent monitoring program. The licensee is required to implement the REMP in accordance with its TS and/or ODCM, which are based on the design objectives contained in Appendix I of 10 CFR Part 50, as required by 10 CFR Section 50.34a.

NOTE: This ISA can be done concurrent with OJT 2R.

COMPETENCY
AREAS:

INSPECTION

REFERENCES:

1. NRC IP 84750, "Radioactive Waste Treatment and Environmental Monitoring" including the references section
2. Plant Decommissioning Safety Analysis Report and ODCM for a facility designated by your supervisor
3. The latest Annual Radiological Environmental Operating Report (AREOR) and Annual Radiological Effluent Release Report (ARERR) for a facility designated by your supervisor
4. 10 CFR Section 50.34(a)
5. 10 CFR Part 50, Appendix A, Criteria 60 and 64 and Appendix I
6. 10 CFR Section 50.75(g)

7. 40 CFR Part 190 limits
8. Part 61 analyses for a facility designated by your supervisor
9. NEI 07-07, "Industry Groundwater Protection Initiative – Final Guidance Document," August 2007
10. NEI-08-08A, "Guidance for Life Cycle Minimization of Contamination – with SER" (ADAMS Accession No. ML093220530)
11. Electric Power Research Institute (EPRI) TR-1016099, "Groundwater Protection Guidelines for Nuclear Power Plants," 2008
12. Liquid Radioactive Release Lessons Learned Task Force Final Report September 2006 (ADAMS Accession No. ML062650312)
13. RG 4.1, "Radiological Environmental Monitoring for Power Plants," June 2009, and other revisions as applicable
14. RG 4.15, "Quality Assurance for Radiological Monitoring Programs (Inception through Normal Operations to License Termination) – Effluent Streams and the Environment," July 2007 and other revisions as available
15. RG 4.25, "Assessment of Abnormal Radionuclide Discharges in Ground Water to the Unrestricted Area at Nuclear Power Plant Sites," March 2017 and other revisions as available
16. IE Bulletin 80-10, "Contamination of Nonradioactive System and Resulting Potential for Unmonitored, Uncontrolled Release of Radioactivity to Environment," May 6, 1980
17. IE Circular No. 80-18, "10 CFR 50.59 Safety Evaluations for Changes to Radioactive Waste Treatment Systems," August 22, 1980
18. Information Notice No. 82-43, "Deficiencies in LWR Air Filtration/Ventilation Systems," November 16, 1982
19. Information Notice No. 13-13, "Deficiencies with Effluent Radiation Monitoring System Instrumentation," July 12, 2013
20. NRC Branch Technical Position, "An Acceptable Radiological Environmental Monitoring Program," November 1979
21. NUREG-1301, "Offsite Dose Calculation Manual Guidance: Standard Radiological Effluent Controls for Pressurized Water Reactors" and NUREG-1302, "Offsite Dose Calculation Manual Guidance: Standard Radiological Effluent Controls for Boiling Water Reactors"

22. NUREG/CR-4007, "Lower Limit of Detection: Definition and Elaboration of a Proposed Position for Radiological Effluent and Environmental Measurements"

EVALUATION
CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of environmental and effluent monitoring requirements at reactor and materials sites by successfully doing the following:

1. Discuss the specific regulatory requirements that require a licensee to have a REMP and the regulatory requirements for RETS and the process for making changes to either.
2. Identify the various sources of liquid and gaseous radioactive wastes at your assigned facility by review of the DSAR. Discuss the DSAR described waste streams, and technologies associated with liquid and gaseous radioactive waste processing for the facility.
3. Discuss the specific environmental sampling techniques (water, milk, air particulate, vegetation, fish, and soil/sediment) required to be collected in accordance with the REMP and ODCM.
4. Describe and discuss the calibration techniques used for effluent monitoring instruments, alarm set points, and typical calibration frequencies.
5. Discuss calculation of projected public dose calculation methodologies (all pathways) listed in RG 1.109 and the use of the results from the annual land use census in the dose assessment process.
6. Discuss the licensee's 10 CFR Part 61 report for determining the amount of radionuclides released.
7. Describe the purpose of the Section 50.75(g) file and describe the process your assigned site uses for determining applicability of plant leaks and spills.
8. Discuss laboratory QA/Quality Control (QA/QC) Policy and its implementation, including inter-laboratory and intra-laboratory comparisons. Discuss NRC expectations in this area.
9. Discuss the requirements for and the contents of the AREOR and the ARERR and how they are used to perform inspection activities.
10. Discuss considerations that would factor into collecting a "representative sample."

11. Discuss the NRC requirements for a Meteorological Monitoring Program, including calibration methodology for wind direction, wind speed, and delta temperature. Compare this with that described in the licensee's ODCM.
12. Show how to determine X/Q and D/Q, and annual average data and discuss when the values of X/Q and D/Q in the ODCM should be updated.
13. Discuss the principle parts of a REMP Annual Report and a RETS Annual Report.
14. Identify the specific environmental sample requirements for your assigned facility as described in the REMP and ODCM.
15. Discuss the elements of a ground water protection program.
16. Discuss the contents of the licensee's ODCM and explain and compare the contents to NUREG-1301/1302 (or Branch Technical Position, November 1979).
17. Describe the man-made and natural radiation exposure pathways (fission/activated products and the source of the natural background radiation) that are present at your assigned facility.
18. Discuss the continued importance of RETS and REMP through decommissioning.
19. Discuss ideal conditions for environmental air monitoring stations and environmental dosimeters.
20. Discuss impacts from global fallout from nuclear weapons testing and nuclear accidents.

TASKS:

1. Review the list references located in IP 84750 and state the purpose of each.
2. Review and evaluate the laboratory's QA/QC Policy and its implementation, including inter-laboratory and intra-laboratory comparison.
3. Identify the various sources of liquid and gaseous radioactive waste, waste streams, and technologies associated with liquid and gaseous radioactive waste processing. Compare that with the descriptions presented in the DSAR.
4. Review and evaluate the projected public dose calculation methodologies (all pathways as available) listed in RG 1.109.

5. Identify the gaseous and liquid effluent monitors for your facility using the DSAR and ODCM. Locate in the ODCM the required functional tests and channel calibrations specified for these effluent radiation monitors.
6. Review the requirement of the REMP and RETS program, including review of the licensee's latest AREOR and ARERR.
7. Review NUREG-1301/1302 (or Branch Technical Position, November 1979) and bases.
8. Review counting statistics and data reduction, including minimum detectable activity (MDA) and lower limits of detection (LLDs).
9. Review man-made and natural radiation exposure pathways (fission/activated products and the source of the natural background radiation).
10. Identify the gaseous and liquid effluent monitors for your facility using the FSAR and ODCM. Locate in the ODCM the required functional tests and channel calibrations specified for these effluent radiation monitors.
11. Locate the acceptance criteria to implement the voluntary Groundwater Protection Initiative in NEI 07-07.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-11R.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-12R) Material Control and Accountability

PURPOSE: The purpose of this activity is to provide you with information on the implementation of IP 85103. The objectives of IP 85103 are to verify that the licensee has implemented and is maintaining an adequate and effective program to control and account for the SNM in its possession.

COMPETENCY
AREAS: REGULATORY FRAMEWORK
INSPECTION

REFERENCES:

1. 10 CFR Section 74.13, "Material status reports"
2. 10 CFR Section 74.15, "Nuclear material transaction reports"
3. 10 CFR Section 74.19, Recordkeeping"
4. NUREG/BR-0006, "Instructions for Completing Nuclear Material Transaction Reports (DOE/NRC Forms 741 and 740M)"
5. NUREG/BR-0007, "Instructions for the Preparation and Distribution of Material Status Reports (DOE/NRC Forms 742 and 742C)"
6. IP 85103, "Material Control and Accounting at Decommissioning Nuclear Power Reactors"

EVALUATION CRITERIA:

Upon completion of this activity, the inspector should be able to:

1. Discuss the purpose of Material Control & Accounting (MC&A).
2. Discuss the regulatory requirements for records, procedures, and inventory as defined by 10 CFR Section 74.19.
3. Describe when IP 85103 should be implemented per IMC 2561.
4. Describe the purpose of the national Nuclear Materials Management and Safeguards System (NMSS) and the requirements for using it.

TASKS:

1. Review examples of material status and transaction reports.
2. Describe a physical inventory inspection.
3. Define MC&A.

4. Define SNM.
5. Identify how to conduct Section 02.04 of IP 85103.
6. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-12R.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-13B) Planning for an Inspection

PURPOSE: The purpose of this activity is to provide you with a working knowledge of how to plan for an inspection and assist in identifying guidance documents for review.

NOTE: This ISA can be done concurrent with the OJTs.

COMPETENCY
AREAS: INSPECTION

REFERENCES: 1. IMC 2561, Appendices A and B
2. IMC 2602 and associated procedures
3. Previous applicable inspection reports from areas last inspected

EVALUATION
CRITERIA: Upon completion of this activity, the inspector should be able to:

1. Identify any follow-up that may be required from previous inspections, including any recent violations.
2. Identify the appropriate IPs needed for the inspection.
3. Identify the applicable regulations and guidance documents for inspection.
4. Determine the focus of the inspection based on risk, regulations, and license requirements.
5. Navigate the logistics of planning for an inspection, including interacting with the licensee and internal processes.
6. Identify how an inspector arranges for site access for applicable sites.
7. Input or describe how to input the planned inspection into the applicable in-house software and identify who the appropriate contact is for any issues.
8. Identify the various ways a licensee can provide information for an inspection and which method is most likely to be used for your site.

9. Describe how to check out radiation instrumentation to take on inspections and identify which inspections are most likely to benefit from bringing an instrument along. Describe the difference between an operational check and efficiency determination and when an instrument should be used qualitatively or quantitatively.

TASKS:

1. For a facility chosen by your supervisor, familiarize yourself with the recent inspections conducted at the facility and the resultant inspection reports.
2. Familiarize yourself with the applicable in-house software for planning inspections such as Reactor Program System and/or Web Based Licensing.
3. Participate in an inspection planning call to the licensee as appropriate.
4. Determine whether there are any open allegations for your site and whether the subject matter affects the inspection. Discuss with the allegations coordinator as necessary.
5. Arrange for site access (as applicable).
6. Identify which licensee documents will be necessary for the inspection and submit a document request (as applicable).
7. Locate the radiation instrument storage location and learn the process of checking an instrument out.
8. Familiarize yourself with the process to prepare for an inspection that requires the inspector to gather samples and ship them offsite for analysis.
9. Write an inspection plan at the discretion of your supervisor. This could be a master inspection plan, a plan for a single inspection.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-13B.

Decommissioning Inspector Technical Individual Study Activity

TOPIC: (ISA-Technical-14B) Financial Assurance

PURPOSE: The purpose of this activity is to provide you with information to be knowledgeable on financial assurance for materials decommissioning site and on the implementation of the financial assurance section of IP 71801. The objectives of IP 71801 include identifying and documenting the status, progress, and changes that potentially impact decommissioning financial assurance, to supplement information for the Financial Assurance Branch (FAB) to support and ensure a thorough financial analysis review of the annual decommissioning trust fund reported by the licensee.

COMPETENCY
AREAS: REGULATORY FRAMEWORK
INSPECTION
TEAMWORK

REFERENCES:

1. 10 CFR Section 50.75, "Reporting and recordkeeping for decommissioning planning" and 10 CFR Section 50.82, "Termination of licenses"
2. 10 CFR Section 30.35, "Financial assurance and recordkeeping for decommissioning," 10 CFR Section 40.36, "Financial assurance and record keeping for decommissioning," and 10 CFR Section 70.25, "Financial assurance and recordkeeping for decommissioning"
3. PSDAR for a site identified by your supervisor
4. Decommissioning Funding Plan for a site identified by your supervisor
5. LTP for a site identified by your supervisor (if available)
6. NRC IP 71801 "Decommissioning Performance and Status Reviews"
7. MD 8.12, "Decommissioning Financial Assurance Instrument Security Program"
8. RG 1.202, Standard Format and Content of Decommissioning Cost Estimates for Nuclear Power Reactors, issued February 2005
9. RG 1.185, "Standard Format and Content for Post-Shutdown Decommissioning Activities Report," Revision 1, issued June 2013
10. RG 1.159, Assuring the Availability of Funds for Decommissioning Nuclear Reactors, Revision 2, issued October 2011

11. NUREG-1713, "Standard Review Plan for Decommissioning Cost Estimates for Nuclear Power Reactors"
12. NUREG-1757, Volume 3 Financial Assurance Recordkeeping and Timeliness
13. LIC-205, "Procedures for NRC's Independent Analysis of Decommissioning Funding Assurance for Operating Nuclear Power Reactors and Power Reactors in Decommissioning," Revision 6, dated April 10, 2017, ADAMS Accession No. ML17075A095 or equivalent
14. Reactor Decommissioning Financial Assurance Working Group Final Report, issued May 1, 2020, ADAMS Accession No. ML20120A550

EVALUATION
CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of financial assurance requirements by successfully doing the following:

1. Discuss the general content of the regulations read in Task 2.
2. Discuss why is it so important for a licensee to obtain and maintain financial assurance.
3. Discuss the general timeline of when a licensee can use their decommissioning funds and restrictions on use.
4. Describe how to implement the financial assurance portions of decommissioning IPs, including the purpose and when to implement the spot check program.
5. Describe the general content of the Decommissioning Cost Estimate section of a PSDAR and/or the decommissioning funding plan for a site(s) assigned by your supervisor.
6. Describe the general content of a financial assurance report.
7. Identify the maximum amount of time a reactor and/or materials site can take to decommission a facility.
8. Describe how financial assurance licensing actions are performed for materials licensees and the NRC's storage and handling criteria for original financial instruments.
9. Describe the role of the FAB, including review of pre-notification of disbursement of funds and periodic reports from the licensee.

TASKS:

1. Read the Decommissioning Cost Estimate section of the PSDAR and/or a decommissioning funding plan for a site(s) assigned by your supervisor. Skim NUREG-1713 as necessary.
2. Read 10 CFR Section 50.75 and 10 CFR Section 50.82 and/or 10 CFR Section 30.35, 10 CFR Section 40.36, and 10 CFR Section 70.25 as directed by your supervisor.
3. Read a financial assurance report for a site assigned by your supervisor.
4. Meet with a license reviewer and discuss how financial assurance licensing reviews are performed.
5. Meet with a member of the Financial Assessment Branch in NMSS. Review their role in the organization and how you interact with them as an inspector.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-14B.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-15B) Occupational Radiation Exposure

PURPOSE: The purpose of this activity is to provide you with information on the implementation of decommissioning IPs associated with occupational radiation exposure. Certain tasks in this ISA can only be completed during a site visit and should therefore be completed concurrent with the applicable OJT.

NOTE: It is recognized that the level of effort for this ISA will vary significantly based on your background. Discuss with your supervisor the level of effort expected for this activity. Experienced health physicists should, at a minimum, review the IPs and the differences between sites they are used to and decommissioning sites they will be inspecting. Inexperienced health physics are expected to spend a significant amount of time between this ISA, the training courses and on-the job experience to gain competency in this area.

COMPETENCY
AREAS: INSPECTION

REFERENCES:

1. RPP for a site assigned by your supervisor
2. 10 CFR Part 19, "Notices, Instructions and Reports to Workers: Inspection and Investigations"
3. 10 CFR Part 20, "Standards for Protection Against Radiation"
4. IP 71124, "Radiation Safety – Public and Occupational"
5. IP 83750, "Occupational Radiation Exposure at Permanently Shutdown Reactors"
6. IP 83822, "Radiation Protection"
7. RG 8.15, "Acceptable Programs for Respiratory Protection"
8. RG 8.25, "Air Sampling in the Workplace," June 1992, and other revisions as applicable
9. RG 8.34, "Monitoring Criteria and Methods to Calculate Occupational Radiation Doses," July 1992, and other revisions as applicable
10. RG 8.38, Revision 1, "Control of Access to High and Very High Radiation Areas," issued May 2006
11. IE Bulletin 80-10, "Contamination of Nonradioactive System and Resulting Potential for Unmonitored, Uncontrolled Release of Radioactivity to the Environment," May 2, 1980

12. Information Notice 84-82, "Guidance For Posting Radiation Areas," November 19, 1984
13. Information Notice 85-92, "Surveys of Wastes Before Disposal from Nuclear Reactor Facilities," December 2, 1985
14. Information Notice 90-47, "Unplanned Radiation Exposures to Personnel Extremities Due to Improper Handling of Potentially Highly Radioactive Materials," July 27, 1990
15. Information Notice 97-36, "Unplanned Intakes by Workers of Transuranic Airborne Radioactive Materials and External Exposure Due to Inadequate Control of Workers," June 20, 1997
16. IE Circular No. 81-07, "Control of Radioactively Contaminated Material," May 8, 1981
17. NUREG/CR 5569, Rev. 1, "Health Physics Positions Data Base"
18. NUREG/CR-6204, "Questions and Answers Based on Revised 10 CFR Part 20"
19. ANSI N13.1-1969 (R 1982), "Guide to Sampling Airborne Radioactive Materials in Nuclear Facilities"
20. ANSI N323-1978, "Radiation Protection Instrumentation Test and Calibration"
21. ANSI 323A-1997, "Radiation Protection Instrumentation, Test and Calibration, Portable Survey Instruments"

EVALUATION
CRITERIA:

Upon completion of this activity, the inspector should be able to:

1. Describe the following terms and provide examples of each term:
 - a) unrestricted area
 - b) controlled area
 - c) radiological restricted area
 - d) radiation area
 - e) high radiation area
 - f) technical specification locked high radiation area
 - g) very high radiation area
 - h) hot spots

- i) contaminated area
 - j) hot or discrete particle area
 - k) airborne radiation area
2. Explain the ALARA concept and how it is applied to performance of radiological work.
 3. Identify the radiological hazards at a site(s) designated by your supervisor and describe the types of instruments that are appropriate to survey for the hazards.
 4. Describe how personnel and materials are checked for free release from radiation-controlled areas and contaminated areas. Identify the actions that must be taken when contamination is identified on an individual or a component before they are allowed to be removed from a radiation-controlled area.
 5. Describe observed radiologically significant work and identify if the work was appropriately planned, executed, and monitored, including considering ALARA principles.
 6. Describe the NRC-approved methods for assessing internal doses described in RG 8.34.
 7. Explain the modes by which radioactive material can be deposited in the body.
 8. Discuss the regulatory philosophy for providing engineering controls to minimize airborne radioactivity (i.e., describe why Part 20 gives priority to engineering controls over the use respiratory protection devices.) Explain why it may not be ALARA to use protective gear or perform decontamination when work is being performed in a contaminated area with the risk of an intake.
 9. List the elements of information provided in a radiation work permit, and how this information can be effectively used to brief workers before the start of the work.
 10. Describe the effects of operating temperature and pressure on the accuracy of instruments.
 11. Describe and discuss the calibration techniques used for portable radiation detection instruments including where electronic source usage is appropriate and typical calibration frequencies.

12. Discuss laboratory analytical techniques for identifying and quantifying different radionuclides. Be familiar with instruments and techniques used to analyze gross alpha/beta contamination, as well as instruments used to specifically analyze gamma emitters (Co-60), alpha emitters (Am-241), beta emitters (Sr-90), and hard-to-detect nuclides (H-3).
13. Discuss MDA and LLDs.

TASKS:

1. Select several important radiation detection and measurement instruments (e.g., portable survey instruments, fixed monitoring equipment, constant air monitors, portable air samplers). Examine them as necessary to verify operability, including proper alarm settings (if applicable). Observe a source check and/or calibration of instruments (as available).
2. Review the types of dosimetry used at a site(s) assigned by your supervisor. Determine if they are appropriate for the radiological hazards and identify any infrequently used methods they may need to employ, for example, internal dosimetry methods.
3. During a site tour, identify (as able) at least one contaminated area, radiation area, high radiation area, technical specification locked high radiation area, very high radiation area, hot spots area, and airborne radioactivity area and verify that access to each is controlled in accordance with regulations and the licensee's requirements.
4. Observe (if possible) and review the results of at least one completed radiation survey and verify that the survey was conducted in accordance with procedures.
5. Observe radiologically significant work and determine if the work was appropriately planned, executed, and monitored, including considering ALARA principles.
6. Review the respiratory protection program at your site and observe a fit test, observe donning and doffing of a respirator, and observe work where workers are wearing respirators as applicable and as able.
7. Observe a high radiation area, locked high radiation area, or very high radiation area brief and determine if the appropriate topics and information was covered.
8. Review and evaluate the characteristics of radiation monitoring systems, such as gamma-scintillation detector, beta-scintillation detector, Geiger-Mueller, and ion chamber used by the licensee. Identify capabilities and limitations.

9. Review and evaluate the different measuring techniques, such as proportional counter, gamma spectroscopy, and liquid scintillation counter.
10. Review and evaluate the MDA and LLDs used by the licensee.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-15B.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-16B) Inspection of Remedial and Final Surveys

PURPOSE: This study activity will provide you with an overview of how to perform inspections of remedial and final surveys, including implementation of IP 83801, "Inspection of Remedial and Final Surveys at Permanently Shutdown Reactors" and IP 83890, "Closeout Inspection and Survey." The objectives of these procedures include ensuring that the licensee has effectively decontaminated their facility and performed the FSSs as approved by the NRC in their LTP or DP and verifying the site may be released for restricted or unrestricted use and the license can be terminated as appropriate.

NOTE: This ISA can be done concurrent with OJT 1M and 2R. Note that if the opportunity is not available during the qualification process to observe FSSs or the equivalent, then extra effort should be taken to observe routine licensee surveys on-site.

COMPETENCY
AREAS:

INSPECTION
LICENSING ACTIVITIES

REFERENCES:

1. 10 CFR Part 20
2. NRC IP 83801, "Inspection of Remedial and Final Surveys at Permanently Shutdown Reactors"
3. NRC IP 83890, "Closeout Inspection and Survey"
4. LTP and/or DP for a site(s) designated by your supervisor
5. NRC Safety Evaluation(s) for the above
6. Site procedures that govern performance of Remedial Action Support Surveys and FSSs
7. Survey plan for a site designated by your supervisor
8. NUREG-1507, Rev 1 Minimum Detectable Concentrations with Typical Radiation Survey Instruments for Various Contaminants and Field Conditions
9. NUREG-1575, "Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM)" including:
 - a) Chapter 2
 - b) Appendix D

10. NUREG-1700, "Standard Review Plan for Evaluating Nuclear Power Reactor License Termination Plans"
11. NUREG-1757, "Consolidated Decommissioning Guidance" including:
 - a) Volume 1, Revision 2, Section 15.4.5
 - b) Volume 2, Section 4.2
 - c) Volume 2, Section 4.3
 - d) Volume 2, Section 4.5
 - e) Volume 2, Appendix A
 - f) Volume 2, Appendix O, Lesson 4
 - g) Volume 3, Revision 1, Section 3.3.
12. NUREG/CR 5849, "Manual for Conducting Radiological Surveys in Support of License Termination"
13. NRC Form 303, "Request for Analysis and Chain of Custody"
14. NRC Inspection and Enforcement Circular No. 81-07, "Control of Radioactively Contaminated Material"

EVALUATION
CRITERIA:

Upon completion of this activity, the inspector should be able to:

1. Describe the licensing and inspection process leading up to and including license termination.
2. Describe the dose criteria required for restricted and unrestricted license termination under 10 CFR Part 20 Subpart E.
3. Describe how the licensee can modify a LTP and/or a DP.
4. For scenarios given by your supervisor or qualified inspector, determine what survey instrument(s) would be appropriate conduct surveys, count samples, etc. with i.e., a lab contaminated with P-32, a piece of reactor pressurizer piping, a water sample with expected tritium, a facility that previously manufactured items with depleted uranium, a field next to a power reactor, etc.
5. Describe the expectations for the QA and/or quality control program requirements.
6. Describe when and how the NRC used contractors for independent verification and confirmatory surveys.

7. Describe situations when an inspector may ship samples to an NRC contractor for evaluation and the process for doing so.
8. Identify NRC guidance to assist with reviewing survey plans and describe some of the key points.
9. Describe when a LTP and/or DP must be submitted to the NRC.
10. Describe how to convert from counts per minute to disintegrations per minute.

TASKS:

1. Meet with a technical reviewer of a LTP or DP reviewer designated by your supervisor and discuss their role, previous issues identified, and lessons learned.
2. Define the following:
 - a) scoping surveys
 - b) characterization surveys
 - c) remedial action support surveys
 - d) final status surveys
 - e) verification surveys
 - f) confirmatory surveys
 - g) radionuclide of concern
 - h) derived concentration guideline level
 - i) minimum detectable concentration
 - j) calibration
3. Meet with the NRC Contracting Officer Representative responsible for the contracts for obtaining independent verification or confirmatory survey contractor support and review the process for obtaining and using contractor support.
4. Identify the process of shipping samples to an NRC contractor.
5. Review a survey plan for a site designated by your supervisor and determine whether the instrumentation, number of samples, etc. was appropriate to complete the objective of the survey.

6. Discuss with a qualified inspector the challenges of surveying and license termination for issues, including hot particles, groundwater contamination, etc.
7. Define surrogate radionuclide and describe when it is appropriate to use them for surveys.
8. Read the IPs listed in the references and discuss with a qualified inspector when and how they are implemented.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-16B.

Decommissioning Technical Inspector Individual Study Activity

TOPIC: (ISA-Technical-17B) Transportation of Radioactive Materials

PURPOSE: The purpose of this activity is to provide you with the information on the implementation of IP 86750 and applicable materials decommissioning procedures. The objectives of IP 86750 are to verify the effectiveness of the licensee's program for processing, handling, storage, and transportation of radioactive material.

COMPETENCY
AREAS: REGULATORY FRAMEWORK
INSPECTION

REFERENCES:

1. 10 CFR Parts 20, 37, 61, and 71
2. IE Bulletin 79-19, "Packaging of Low-Level Radioactive Waste for Burial," August 10, 1979
3. IE Bulletin 80-10, "Contamination of Nonradioactive System and Resulting Potential for Unmonitored, Uncontrolled Release of Radioactivity to Environment," May 6, 1980
4. NRC Branch Technical Position, Waste Form Technical Position, Rev. 1, January 1991 (ADAMS Accession No. ML033630746)
5. NRC Branch Technical Position, Concentration Averaging and Encapsulation, Rev. 1, February 2015 (Vol. 1–ADAMS Accession No. ML12254B065, Vol.2–ADAMS Accession No. ML12326A611)
6. NUREG-1608, "Categorizing and Transporting Low Specific Activity Materials and Surface Contaminated Objects"
7. Information Notice 85-92, "Surveys of Waste Before Disposal from Nuclear Reactor," December 2, 1985
8. Information Notice 86-20, "Low-Level Radioactive Waste Scaling Factors, 10 CFR Part 61," March 28, 1986
9. Generic Letter 81-38, "Storage of Low-Level Radioactive Wastes at Power Reactor Sites," November 10, 1981
10. RIS 2014-03, "Notice of 10 CFR Part 37 Implementation Deadline for NRC Licensees," March 13, 2014
11. Radioactive Effluent Release Report

EVALUATION
CRITERIA:

Upon completion of this activity, the inspector should be able to:

1. For a reactor site, discuss the station's recent radiological effluent release report and the types and amounts of radioactive waste that the licensee has disposed in the past year. Specifically, you should be able to identify the types of waste, quantities, and the principal radionuclides contained in the various types of waste. You should also identify those types of wastes that would require more stringent packaging and identify where in the ODCM such reports are required.
2. Discuss the purpose and principal requirements of 10 CFR Part 61 and NRC waste classification and characterization guidance.
3. Discuss NRC guidance in the area of collection of representative samples of waste for the 10 CFR Part 61 program and how changes in waste streams should be identified for purposes of waste characterization and classification.
4. Discuss the packaging, labeling and marking requirements for various types of radioactive materials packages expected to be shipped from the facility, as presented in NUREG-1660 and 49 CFR Parts 100-189.
5. Discuss the manifesting, labeling, and placarding requirements for non-exempt types of radioactive materials packages relative to NUREG-1660 requirements. Discuss the manifesting and placarding requirements for various types of radioactive materials packages you inspected. Discuss conformance with NUREG/BR-0204.
6. For shipments you inspected during accompaniments, identify the allowable radiation and contamination dose limits specified in regulatory documents 49 CFR Parts 100-189, and compare and contrast them with the values the licensee identified.
7. Discuss the allowable radiation dose rates (e.g., contact, 1 meter) and contamination limits for shipment of packages of radioactive material specified in regulatory documents 49 CFR Parts 100-189. The limits include transport vehicle dose limits, cab limits, and package limits, as appropriate.

8. Discuss the principal aspects of classification of low-level radioactive waste as outlined in 10 CFR Part 61. Identify and discuss the licensee's 10 CFR Part 61 waste stream analysis program and the various waste streams present and compare those identified with that reported by the licensee in its annual report.
9. Discuss how the licensee ensures collection of representative samples of waste for the 10 CFR Part 61 program and how it monitors for changes in its waste streams for purposes of waste characterization and classification. Identify how the licensee ensures meeting branch technical positions and is aware of guidance in Information Notice 86-20.
10. Demonstrate and discuss how the licensee uses the 10 CFR Part 61 waste stream analysis data, and any scaling factors and calculations, 1) to account for difficult-to-measure radionuclides, and 2) to determine curie content for waste to be shipped including concentration averaging. Specifically, identify how the licensee quantifies Table 1 and Table 2 radionuclides in 10 CFR Section 61.55.
11. Describe the security program under Part 37 program for a site chosen by your supervisor. Describe the types of material and the controls in place and compare them to the regulations to determine their adequacy.
12. Discuss QA Requirements for a radioactive materials shipping program, as described in 10 CFR Part 71 including the collection of representative samples and 10 CFR Part 20, Appendix G.

TASKS:

1. Review and familiarize yourself with the references listed above. Specifically, identify the purpose of each document and what guidance the document provides.
2. Review the requirements for the transfer and receipt of radioactive material as specified in 10 CFR Part 20 and 10 CFR Part 71, including reporting requirements for problems identified.
3. Review and highlight the key aspects and requirements for low-level radioactive waste disposal as outlined in 10 CFR Part 61 and Part 71, and the burial site license.
4. Review the contents of either a reactor licensee's PCP or equivalent procedures at a materials site, use of scaling factors for hard-to-detect nuclides, and the waste form and characteristic requirements for disposal of solid radioactive waste.

5. Review the requirements in the area of training and emergency response as specified in 49 CFR Parts 100-189. Identify minimum training requirements and minimum emergency response requirements.
6. Discuss how one would verify that a licensee is checking to see if another licensee is authorized to receive a radioactive material shipment package.
7. Select at least five non-exempt radioactive materials shipments and review for compliance with all appropriate regulatory requirements including conformance with the cask certificate of compliance for the shipping casks used.
8. Observe the packaging, surveying, labeling, marking, vehicle checks, emergency instruction, disposal manifests, shipping papers, and loading of a radioactive waste shipment (a non-exempt shipment preferable). Inter-compare your findings with applicable regulatory requirements. This can be done concurrent with applicable OJTs.
9. Review corrective action reports in the area of radioactive waste processing, handling, storage, and transportation to identify problems in this area and to understand the licensee's corrective action process.
10. Review the Part 37 program at a site chosen by your supervisor. Review the types of materials and controls in place.
11. Review the scenarios provided below and discuss the questions with your supervisor or designated inspector.
12. Meet with your supervisor or a qualified inspector to discuss any questions you may have as a result of this activity. Discuss answers to the questions listed under the Evaluation Criteria section of this study guide with your supervisor.

Scenario A

On October 7, 2003, a low-level radioactive waste shipment consisting of two box containers (volume of approximately 1400 cubic-foot each) was prepared by the licensee and offered to a carrier for transport to a waste processing contractor. Each of the sea-land (box) containers housed plastic bagged waste with one containing "Green is Clean" potentially contaminated dry waste and the other dry active waste (DAW). The sea-land containers were loaded back-to-back on an open, flatbed trailer with the DAW container loaded toward the rear of the vehicle. The shipment was consigned as exclusive use and categorized as class 7 (radioactive) materials, low specific activity, containing a total activity of about 67 millicuries of primarily mixed activation products. The shipment departed the site at approximately 2:00 p.m. on October 7, 2003 and arrived at the waste processing facility about 10 hours later.

On October 8, 2003, radiation measurements performed by waste processing contractor personnel on the exterior surface of the packages (the sea-land containers) identified a highly localized area of elevated radiation on the external surface of the DAW container that exceeded the DOT limit provided in 49 CFR Section 173.441. Specifically, a coin-sized (one-inch diameter) spot measuring 250 millirem/hour was identified on the external surface of the sea-land container's rear door, about three and one-half feet up from the bottom of the package and one and one-half inches lateral to a vertical metal bar used to latch the container's door. Package and vehicle surveys performed by the licensee prior to the shipment's departure on October 7, 2003, documented a maximum package surface radiation level of 33 millirem/hour on the DAW filled container that was located in the same general location as the coin-sized "hot spot" identified at waste processing contractor.

Questions:

1. What two Codes of Federal Regulations apply to this condition? (NRC/DOT)
2. What is the DOT limit on external surface of containers?
3. What are the possible reasons for the licensee “missing” the hot spot on the container?

DOCUMENTATION: Obtain your supervisor’s signature in the line item for Technical Level Certification Signature Card Item ISA-Technical-17B.

Part III. Decommissioning Inspector Technical On-the-Job Activities

The technical OJT activities require you to perform inspection accompaniments, as assigned by your immediate supervisor, under the supervision of qualified inspectors. Typically, you will be expected to assist the qualified inspector on the first inspections and then gradually take on more of the responsibility for the inspection until you are leading the inspection. Like the ISAs, each OJT activity tells you why the activity is important and what you are expected to complete successfully during the activity. The OJT activities do not specify that a particular number of inspection accompaniments need to be completed before the immediate supervisor considers you to be competent because numbers of completions don't always reflect competency. This is something only your immediate supervisor, assisted by the qualified inspector working with you, can determine.

As you complete training activities you should complete Form B-1 located at the end of this Appendix and ask the qualified inspector working with you to provide their comments. This form will be used to track your progress as an inspector. Eventually, your immediate supervisor will determine you are ready to demonstrate your full competency at an oral qualification board.

The following general guidance applies as you complete the various on-the-job activities:

- ✓ Complete all assigned parts of each activity.
- ✓ Your immediate supervisor, a qualified inspector, or a qualified license reviewer will act as a resource as you complete each activity. Discuss any questions you may have about how a task must be done or how the guidance is to be applied.
- ✓ You are responsible for keeping track of the tasks you have completed. Be sure that you have completed all aspects of an OJT activity before you meet with your immediate supervisor, qualified inspector, or qualified license reviewer for evaluation.

Decommissioning Inspector Technical On-the-Job Activity

TOPIC: (OJT-Technical-1M) Inspection Accompaniments at Complex Materials Facilities Undergoing Decommissioning

PURPOSE: The purpose of this activity is to familiarize you with inspection tasks commonly performed by an inspector; acquaint you with the different types of facilities that may undergo decommissioning; and provide the opportunity to observe how inspectors use licensing documents to identify appropriate activities for inspections at materials sites. This OJT will prepare you to independently plan and conduct decommissioning inspections, as defined in the applicable IMC.

Note: The objective of this activity is to make sure that you have experienced the full range of inspection activities. Inspectors should discuss with their branch chief and/or their designated qualified inspector to identify the types of materials sites they will be expected to inspect, the level of effort needed for completion, including which IPs to observe and the amount of on-site inspection effort. Factors to consider include any previous inspector qualification, previous work experience, and individual needs. Any inspector expected to inspect a uranium recovery, fuel cycle, or any other unique facilities shall perform the appropriate ISA and become proficient at inspecting at those facilities through this OJT.

COMPETENCY
AREAS:

INSPECTION
COMMUNICATION
TEAMWORK
SELF-MANAGEMENT

REFERENCES:

1. Licensee's radioactive materials license documents (especially, recent license amendments that have approved DPs)
2. IMC 0111 "Region I Monitoring Activities for the DOE West Valley Demonstration Project," (as applicable)
3. IMC 2602 "Decommissioning Oversight and Inspection Program for Fuel Cycle Facilities and Materials Licensees"
4. IMC 2800 "Materials Inspection Program"
5. IMC 2801 "Uranium Mill 11e.(2) Byproduct Material Disposal Site and Facility Inspection Program"

EVALUATION
CRITERIA:

Upon completion of this activity, you should be able to do the following:

1. Understand the inspection process.

2. Describe the contents and purpose of the site-specific inspection plan.
3. Describe how the inspector used the reference documents to conduct or support the inspection.
4. Describe the purpose of the following inspection activities:
 - a) entrance meeting.
 - b) management briefing and exit pre-briefing of licensee management.
 - c) exit meeting.
5. Discuss how the inspection will be documented.

TASKS:

1. Participate in inspection activities as discussed per the Note above. The number of accompaniments is at the discretion of the supervisor, but inspectors shall be proficient in conducting inspections at the types of materials sites they will be expected to inspect in order to complete this OJT.
2. Prior to inspection observations, perform tasks as described in ISA-Technical-13B.
3. Observe/Conduct the following inspection activities as directed by your supervisor, as applicable and available:
 - a) IP 87104, Decommissioning Inspection Procedure for Materials Licensees.
 - b) IP 87654, Decommissioning Inspection Procedure for Uranium Recovery.
 - c) IP 83890, Closeout Inspection and Survey.
 - d) IP 88104, Decommissioning Inspection Procedure for Fuel Cycle Facilities.
 - e) IP 89060, Department of Energy Legacy Management Site Review.
 - f) Discretionary procedures as listed in IMC 2602 Appendix B as available.
4. During inspection observations, perform the following tasks:
 - a) observe implementation of IPs.

- b) observe entrance and exit meetings and any exit pre-briefings of licensee management.
 - c) observe interviews and discussion with facility personnel.
 - d) observe facility work activities.
 - e) review documentation and records.
 - f) discuss inspection results with the lead inspector.
5. Perform the following tasks in at least one inspection:
- a) draft a portion of the inspection-specific plan.
 - b) conduct activities described in Tasks 1 and 2 above, as appropriate.
 - c) conduct a portion of the following:
 - i. entrance meeting.
 - ii. briefing of NRC management.
 - iii. pre-briefing of licensee management.
 - iv. exit meeting.
6. Assist the inspector in developing the inspection documentation in accordance with the applicable IMC.
7. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item OJT-Technical-1M.

Decommissioning Inspector Technical On-the-Job Activity

TOPIC: (OJT-Technical-2R) Inspection Accompaniments at Shutdown Reactor Facilities

PURPOSE: The purpose of this activity is to familiarize you with inspection tasks commonly performed by an inspector; acquaint you with the different types of reactors that may undergo decommissioning along with the different phases of reactor decommissioning; and provide the opportunity to observe how inspectors use licensing documents and review licensee activities to identify appropriate activities for the various IPs. This OJT will prepare you to independently plan and conduct reactor decommissioning inspections.

Note: The objective of this activity is to make sure that you have experienced the full range of inspection activities. Inspectors should discuss with their branch chief and/or their designated qualified inspector to identify the level of effort needed for completion, including which IPs to observe and the amount of on-site inspection effort. Factors to consider include any previous inspector qualification, previous work experience, and individual needs. Any excused inspection activity must have a basis i.e., an inspector qualified under IMC 1245 Appendix C3 may not need to observe inspection activities conducted under IP 83750, 84750, or 86750.

COMPETENCY
AREAS:

INSPECTION
COMMUNICATION
TEAMWORK
SELF MANAGEMENT

REFERENCES:

1. Licensing documents including license, TS, and final safety analysis report (FSAR) (especially, recent license amendments that have approved DPs and changes to the TS and FSAR)
2. IMC 2561 "Decommissioning Power Reactor Inspection Program" and associated IPs listed in Appendices A and B of IMC 2561
3. IMC 2545 "Research and Test Reactor Inspection Program"
4. IP 69013 "Research and Test Reactor Decommissioning"
5. IMC 0610 "Nuclear Material Safety and Safeguards Inspection Reports"
6. IMC 0615 "Research and Test Reactor Inspection Reports"
7. Previous inspection reports
8. Regulatory guidance documents as applicable

EVALUATION
CRITERIA:

9. Recent Enforcement/Allegation history (~two years)

Upon completion of this activity, you should be able to do the following:

1. Understand the inspection process.
2. Describe the contents and purpose of the site-specific inspection plan.
3. Describe how the inspector used the reference documents to conduct inspection.
4. Describe how the inspector determined what licensee activities would be inspected.
5. Describe the purpose of the following inspection activities.
 - a) entrance meeting.
 - b) management briefing and exit pre-briefing of licensee management.
 - c) exit meeting.
6. Discuss how the inspection will be documented.

TASKS:

1. Prior to inspection observations, perform tasks as described in ISA-Technical-13B:
2. During inspection observations, perform the following tasks:
 - a) observe implementation of IPs.
 - b) observe entrance and exit meetings and any exit pre-briefings of licensee management.
 - c) observe interviews and discussion with facility personnel.
 - d) observe facility work activities.
 - e) review documentation and records.
 - f) discuss inspection results with the lead inspector.

3. Perform the following tasks in at least one inspection:
 - a) draft a portion of the inspection-specific plan.
 - b) conduct activities described in Tasks 1 and 2 above, as appropriate.
 - c) conduct a portion of the following:
 - i. entrance meeting.
 - ii. briefing of NRC management.
 - iii. pre-briefing of licensee management.
 - iv. exit meeting.
4. Observe/Conduct the following inspection activities as directed by your supervisor, as available:
 - a) IP 37801, Safety Reviews, Design Changes, and Modifications at Permanently Shutdown Reactors.
 - b) IP 40801 Problem Identification and Resolution at Permanently Shutdown Reactors.
 - c) IP 60801 Spent Fuel Pool Maintenance, Surveillance, and Safety at Permanently Shutdown Reactors.
 - d) IP 64704 Fire Protection Program at Permanently Shutdown Reactors.
 - e) IP 71801 Decommissioning Performance and Status Reviews at Permanently Shutdown Reactors.
 - f) IP 83750 Occupational Radiation Exposure.
 - g) IP 83801 Inspection of Remedial and Final Surveys at Permanently Shutdown Reactors.
 - h) IP 84750 Radioactive Waste Treatment, and Effluent and Environmental Monitoring.
 - i) IP 86750 Solid Radioactive Waste Management and Transportation of Radioactive Materials.
 - j) A combination of the above IPs at a SAFSTOR site.

5. Assist the inspector in developing the inspection documentation in accordance with the applicable IMC.
6. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item OJT-Technical-2R.

Decommissioning Inspector Technical On-the-Job Activity

TOPIC: (OJT-Technical-3B) Documenting Inspection Issues

PURPOSE: The purpose of this activity is to give guidance on content, format, and style for inspection reports. The objectives of this activity are to ensure that inspection reports: (1) clearly communicate significant inspection results to licensees, NRC staff, and the public, (2) provide a basis for significance determination and enforcement action, and (3) present information associated with significant inspection issues in a manner that will be useful to NRC management in developing longer-term, broad assessments of licensee performance.

COMPETENCY
AREAS: INSPECTION
COMMUNICATION
TEAMWORK
ENFORCEMENT

REFERENCES:

1. IMC 0330, "Guidance for NRC Review of Licensee Draft Documents"
2. IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports"
3. IMC 0612, Appendix E, "Examples of Minor Issues"
4. IMC 0620, "Inspection Documents and Records"
5. Enforcement Policy (refer to the NRC Web site)
6. Enforcement Manual, Appendix E, "Minor Violation Examples"
7. "Plain Language Initiative" Web site, which references NUREG-1379 for editorial style guidance, the directives from the President of the United States, and other related documents
(<https://www.internal.nrc.gov/NRC/PLAIN/index.html>)

EVALUATION
CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of documenting inspection findings by successfully addressing the following:

1. Discuss the thresholds for determining what issues should be documented in an inspection report.
2. For materials decommissioning inspections, describe when an NRC Form 591 is transmitted versus a letter report.

3. Given a violation of regulatory requirements and the enforcement policy and guidance, write an inspection report input for the violation. Describe how to process an inspection issue using IMC 0610 and the Enforcement Policy.
4. Describe the various sections of an inspection report and what should be included in each.
5. For the recent violations at decommissioning sites reviewed for Task 6, describe the violation identified and why it was considered more than minor.
6. Discuss how to write a violation. Contrast the differences in documenting a non-cited violation and an apparent violation.
7. Describe the general timeliness guidance for issuing inspection reports.
8. Describe how to process escalated enforcement actions.

TASKS:

1. Use IMC 0610 and the Enforcement Policy, to determine whether an identified issue is above the threshold for documentation.
2. Use IMC 0610 and other available guidance, to draft an inspection report.
3. Identify the criteria for a violation to be considered a non-cited violation.
4. Define the following:
 - a) Minor violation.
 - b) Severity Level IV violation.
 - c) Severity Level III violation.
 - d) Severity Level II violation.
 - e) Severity Level I violation.
 - f) Enforcement Discretion.
 - g) Alternative Dispute Resolution.
 - h) Pre-decisional Enforcement Conference.
 - i) Regulatory Conference.

5. Given a violation of regulatory requirements and the enforcement policy and guidance, write the analysis and enforcement sections for a violation and a non-cited violation. Practice briefing the issue to a senior inspector or your branch chief.
6. Review several recent violations at decommissioning sites.
7. Review the "Plain English Initiative."
8. Use IMC 0330 and IMC 0620 to describe how to determine the documents that must be included as attachments to an inspection report for the agency record.

DOCUMENTATION: Obtain your supervisor's signature in the line item for Technical Level Certification Signature Card Item OJT-Technical-3B.

Form B-1: Technical-Level Signature Card and Certification		
Inspector Name	Employee Initials/Date	Supervisor's Signature/Date
A. <u>Required (R) and Specialized Training</u> (Additional specialized training courses can be added to this signature card as required)		
Effective Communications for NRC Inspectors (instructor-led, course 5557 in TMS) Conducting Inspections Course (G-105) (R)		
Inspection Procedures (G-108) (R)		
Root Cause/Incident Investigation Workshop (G-205) (R)		
MARSSIM: Multi-Agency Radiation Survey and Site Investigation Manual Self-Study Course (H-121S) (R)		
Characterization and Planning for Decommissioning Self-Study Course (H-115S) (R)		
Transportation of Radioactive Material Self-Study Course (H-308S) (R)		
Environmental Monitoring and Air Sampling for Radioactivity Self-Study Course (H-130S) (R)		
Environmental Monitoring and Air Sampling for Radioactivity Lab Course (H-130L) (R)		
NRC Materials Control & Security Systems & Principles (S-201) (R)		
Fundamental Health Physics Self-Study Course (H-122S) (R)		
Advanced Health Physics (H-201) (R)		
Gathering Information for Inspectors through Interviews (instructor-led, course 135 in TMS) (R)		
Media Training Workshop (Course 571) (R)		
Specialized Training Course (Optional):		
Specialized Training Course (Optional):		
Specialized Training Course (Optional):		
B. <u>Technical-Level Individual Study Activities</u>		
(ISA-Technical-1M) Decommissioning Materials Facilities		
(ISA-Technical-2M) Decommissioning Fuel Cycles		
(ISA-Technical-3M) Decommissioning Uranium Recovery		
(ISA-Technical-4M) NUREGs-1757 and 1500		
(ISA-Technical-5R) Decommissioning Process for Reactors		
(ISA-Technical-6R) Reactor Licensing Basis		
(ISA-Technical-7R) Safety Reviews, Design Changes, and Modifications		
(ISA-Technical-8R) Problem Identification and Resolution		
(ISA-Technical-9R) Spent Fuel Pool Maintenance Surveillance, and Safety		
(ISA-Technical-10R) Fire Protection Program		
(ISA-Technical-11R) Radioactive Waste Treatment, and Effluent and Environmental Monitoring		
(ISA-Technical-12R) Material Control and Accountability		
(ISA-Technical-13B) Planning for Inspections		

(ISA-Technical-14B) Financial Assurance		
(ISA-Technical-15B) Occupational Radiation Exposure		
(ISA-Technical-16B) Inspection of Remedial and Final Surveys		
(ISA-Technical-17B) Transportation of Radioactive Materials		
C. <u>Technical Level On-the-Job Training Activities</u>		
(OJT-Technical-1M) Inspection Accompaniments at Materials Facilities Undergoing Decommissioning Activities		
(OJT-Technical-2R) Inspection Accompaniments at Shutdown Reactor Facilities		
(OJT-Technical-3B) Documenting Inspection Findings		

This signature card and certification must be accompanied by the appropriate Form B-2, Technical Level Equivalency Justification, if applicable. Record completion in TMS by sending a request to TrainingSupport.Resource@nrc.org.

Supervisor's Recommendation

Signature/Date _____

Division Director's Approval

Signature/Date _____

Copies to: Inspector

HR Office Form B-2: Technical-Level Equivalency Justification	
Decommissioning Inspector's Name:	Identify equivalent training and experience for which the decommissioning inspector is to be given credit.
A. <u>Required (R)</u> (Additional specialized training courses can be added to this signature card as required)	
Root Cause/Incident Investigation Workshop (G-205) (R)	
MARSSIM: Multi-Agency Radiation Survey and Site Investigation Manual Self-Study Course (H-121S) (R)	
Transportation of Radioactive Material Self-Study Course (H-308S) (R)	
Environmental Monitoring and Air Sampling for Radioactivity Self-Study Course (H-130S) (R)	
Environmental Monitoring and Air Sampling for Radioactivity Lab Course (H-130L) (R)	
NRC Materials Control & Security Systems & Principles (S-201) (R)	
Fundamental Health Physics Self-Study Course (H-122S) (R)	
Advanced Health Physics (H-201) (R)	
Gathering Information for Inspectors through Interviews (instructor-led, course 135 in TMS) (R)	
Media Training Workshop (Course 571) (R)	

(ISA-Technical-1M) Decommissioning Materials Facilities	
(ISA-Technical-2M) Decommissioning Fuel Cycles	
(ISA-Technical-3M) Decommissioning Uranium Recovery	
(ISA-Technical-4M) NUREGs-1757 and 1500	
(ISA-Technical-5R) Decommissioning Process for Reactors	
(ISA-Technical-6R) Reactor Licensing Basis	
(ISA-Technical-7R) Safety Reviews, Design Changes, and Modifications	
(ISA-Technical-8R) Problem Identification and Resolution	
(ISA-Technical-9R) Spent Fuel Pool Maintenance Surveillance, and Safety	
(ISA-Technical-10R) Fire Protection Program	
(ISA-Technical-11R) Radioactive Waste Treatment, and Effluent and Environmental Monitoring	
(ISA-Technical-12R) Material Control and Accountability	
(ISA-Technical-13B) Planning for Inspections	
(ISA-Technical-14B) Financial Assurance	
(ISA-Technical-15B) Occupational Radiation Exposure	
(ISA-Technical-16B) Inspection of Remedial and Final Surveys	
(ISA-Technical-17B) Transportation of Radioactive Materials	
B. Appendix B: Technical Level On-the-Job Training Activities	
(OJT-Technical-1M) Materials Inspection Accompaniments	
(OJT-Technical-2R) Reactor Inspection Accompaniments	
(OJT-Technical-3B) Documenting Inspection Findings	

Supervisor's Recommendation Signature/Date _____

Division Director's Approval Signature/Date _____

Copies to: Inspector
 HR Office

This signature card and certification must be accompanied by the appropriate Form B-1, Technical Level Signature Card and Certification, if applicable.

Materials Decommissioning Inspector Certification

(name)

has successfully completed all of the requirements
to be certified as a

MATERIALS DECOMMISSIONING INSPECTOR

Immediate Supervisor Signature: _____

Date: _____

Reactor Decommissioning Inspector Certification

(name)

has successfully completed all of the requirements
to be certified as a

REACTOR DECOMMISSIONING INSPECTOR

Immediate Supervisor Signature: _____

Date: _____

Attachment 1: Table of Abbreviations

ACMUI	Advisory Committee on the Medical Uses of Isotopes
ADAMS	Agencywide Documents Access and Management System
AIT	Augmented Inspection Team
ALARA	As Low As Reasonably Achievable
ANSI	American National Standards Institute
ARB	Allegation Review Board
AREOR	Annual Radiological Environmental Operating Report
ARERR	Annual Radiological Effluent Release Report
CAP	Corrective Action Program
CFR	<i>Code of Federal Regulations</i>
CL	Cleanup Level
DAW	Dry Active Waste
DCGL	Derived Concentration Guideline Level
DOD	Department of Defense
DOE	Department of Energy
DOT	Department of Transportation
DP	Decommissioning Plan
DPO	Differing Professional Opinion
DSAR	Defueled Safety Analysis Report
EAL	Emergency Action Level
ECP	Employee Concerns Program
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
FAB	Financial Assurance Branch
FEMA	Federal Emergency Management Administration
FOIA	Freedom of Information Act
FSAR	Final Safety Analysis Report
FSME	Office of Federal and State Materials and Environmental Management Programs
FSS	Final Status Surveys
GPP	Groundwater Protection Plan
HAZWOPER	Hazardous Waste Operations and Emergency Response
HRTD	Human Resources Training and Development
IE	Inspection Enforcement
IIT	Incident Inspection Team
IMC	Inspection Manual Chapter
IMPEP	Integrated Materials Performance Evaluation Program
INFOSEC	Information Security
IP	Inspection Procedures
ISA	Individual Study Activities
LLD	Lower Limit of Detection
LTP	License Termination Plan
LWR	Light-Water Reactor
MARSAME	Multi-Agency Radiation Survey and Assessment of Materials and Equipment
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
MC&A	Material Control & Accounting
MD	Management Directive
MDA	Minimum Detectable Activity
MOU	Memoranda of Understanding
NCP	Non-Concurrence Process

NEI	Nuclear Energy Institute
NMED	Nuclear Material Events Database
NMSS	Office of Nuclear Materials Safety and Safeguards
NORM	Naturally Occurring Radioactive Material
NRC	U.S. Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
NSIR	Office of Nuclear Security and Incident Response
OAC	Office Allegation Coordinator
OCWE	Open and Collaborative Working Environment
ODCM	Offsite Dose Calculation Manual
OGC	Office of the General Counsel
OI	Office of Investigations
OJT	On-the-Job Training
OSHA	Occupational Safety and Health Administration
PAO	Public Affairs Officer
PCP	Process Control Program
PSDAR	Post Shutdown Decommissioning Activities Report
QA	Quality Assurance
QAP	Quality Assurance Program
QA/QC	Quality Assurance/Quality Control
RCA	Radiologically Controlled Area
REMP	Radiological Environmental Monitoring Program
RESRAD	Residual Radioactivity
RETS	Radiological Effluent Technical Specifications
RFI	Request for Information
RG	Regulatory Guide
RIS	Regulatory Issue Summary
RPP	Radiation Protection Program
SAFSTOR	Safe Storage
SCWE	Safety-Conscious Work Environment
SECY	Office of the Secretary
SIT	Special Inspection Team
SNM	Special Nuclear Material
TMS	Talent Management System
TRM	Technical Requirements Manual
TS	Technical Specifications
UMTRCA	Uranium Mill Tailings Radiation Control Act

Attachment 2: Revision History Table Revision History Table for IMC 1248, Appendix F

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-Decisional, Non-Public Information)
N/A	ML112351143 10/26/11 CN 11-022	Revision history sheet added. Combined Appendix A9 with Appendix B9 and renamed as IMC 1246 Appendix E4. Added "training requirements" section from Appendix A9.	None	ML112351154
N/A	ML12240A163 04/19/13 CN 13-011	IMC 1248 Appendix F was created to replace IMC 1246 Appendix E4 and remove FSME activities from NMSS qualification journal IMC 1246. The qualification was originally published on January 5, 2001. No changes were made to the training requirements or qualification journal since they were published on January 5, 2001.	None	N/A
N/A	ML15266A113 10/07/16 CN 16-026	IMC 1248, Appendix F was updated per IMC 0040 and to capture Decommissioning Inspection activities. This is a major revision.	None	ML15266A115
N/A	ML22060A158 03/03/22 CN 22-005	IMC 1248, Appendix F was revised to reflect updates in the overall decommissioning reactor inspection program and to reflect changes made to the core and discretionary IPs. Specific changes include: 1) Splitting the manual chapter into basic and technical qualifications; 2) Adding reactor and materials technical tracks; 3) adding technical topics commensurate with risk significance; and 4) deleting old references and adding new guidance.	None	ML22060A157