

Appendix B

Materials Health Physics Inspector Qualification Journal

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Introduction

The U.S. Nuclear Regulatory Commission (NRC) Materials Health Physics Inspector qualification (inspector) program requires completion of a variety of activities designed to help you, the inspector candidate, 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 that describe a successful inspector. The role of an inspector is not to set policy in the areas of health and safety or security. An inspector should refer policy questions to their management as well as the program office.

A competent inspector must accomplish the following:

- a. Understand the legal basis for and the regulatory processes as well as the NRC organizational structure and objectives.
- b. Understand the basis for the authority of the agency.
- c. Understand the processes established to achieve the regulatory objectives.

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 final activity in the qualification process is to appear before a qualification board. Successful completion of the qualification board exam validates your understanding of the role of the agency, Office of Federal and State Materials and Environmental Management Programs (FSME) programs, and your role as an inspector. Upon successful completion of all the activities in the qualification journal, including the qualification board, you become a qualified inspector eligible to receive the *Materials Health Physics Inspector Qualification Certification*.

Qualification Journal Organization

The qualification journal identifies the training courses, the individual study activities and on-the-job learning 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 means of meeting inspector qualification requirement(s). The signature cards, certification, and equivalency justification pages form the permanent record of completing the inspector qualification program and will be placed in your official file.

Your supervisor should consider assigning a senior materials health physics inspector as a resource/mentor. This person would serve as a resource/mentor by answering any questions or provide guidance as you work to complete this qualification journal.

Required Online Training Courses

These courses can be taken in any order:

- Computer Security Awareness
- Ethics Overview for Employees —as part of ISA-3
- Ethics Training for NRC Employees—as part of ISA-3
- Allegations Training—as part of ISA-4
- Annual Personally Identifiable Information (PII) Responsibilities—as part of ISA-11
- No Fear Act—as part of ISA-13
- ADAMS Overview for NRC Staff—as part of ISA-15
- Information Security (INFOSEC) Awareness Training—as part of ISA-16

NOTE: It is your responsibility to meet your Region's deadline for taking some of the above online self-study course work. Be aware that the list of online training courses may change in between revisions to this qualification journal.

Required Core Training Courses

- Inspection Procedures (G-108)
- OSHA Training for Materials Inspectors (MC-1248) - the curriculum is on iLearn
- Root Cause/Incident Investigation Workshop (G-205)
- Site Access Training (H-100) or Site Access Refresher Training (H-101)
- Diagnostic and Therapeutic Nuclear Medicine (H-304)
- Safety Aspects of Industrial Radiography (H-305)
- Transportation of Radioactive Materials (H-308)
- Brachytherapy, Gamma Knife, and Emerging Technologies Course (H-313)

- NRC Materials Control & Security Systems & Principles (S-201)
- Effective Communication for NRC Inspectors
- Health Physics Technology (H-201)

NOTE: Take the Health Physics Technology (H-201) course as one of your last courses. The H-201 course builds on the different concepts taught in the other training courses. You will have a better understanding of health physics concepts and technology if you take the H-201 later in the qualification program.

See the note after Specialized Training Courses regarding the prerequisites for the H-201 course.

Specialized Training Courses

- Licensing Practices and Procedures Course (G-109)
- Environmental Monitoring for Radioactivity (H-111)
- Introductory Health Physics (H-117)
- Air Sampling for Radioactive Materials (H-119)
- Multi-Agency Radiation Survey and Site Investigation (MARSSIM) (H-121)
- Basic Health Physics Technology (H-122)
- Respiratory Protection (H-311)
- Internal Dosimetry and Whole Body Counting (H-312)
- Safety Aspects of Well Logging (H-314)
- Irradiator Technology Course (H-315)
- Health Physics Topics (H-401)
- RESRAD Training Workshop (H-410)
- RESRAD-OFFSITE Training Workshop (H-411)

- Visual Sampling Plan (H-500)
- Gathering Information for Inspectors through Interviews
- Media Training Workshop

Additional courses may be developed after the publication of this qualification journal. Supervisors may include these new courses as Specialized Training Courses.

NOTE: The Required Core Training Courses are the minimum recommended courses that you should take in order to complete the Materials Health Inspector Qualification Journal. However, your supervisor will determine the appropriate training courses that you must take to complete the qualification journal. For example, a supervisor may require you to complete the Safety Aspects of Well Logging based on the number of well logging licensees inspected in your Region.

All materials health physics inspectors involved with the materials security program must take S-201 or be able to demonstrate that you have the equivalent training or experience.

Before enrolling in the Health Physics Technology (H-201) course, the Human Resources Training and Development (HRTD) Organization requires that, you either complete the Introductory Health Physics (H-117) course, the Basic Health Physics Technology (H-122) course, or have equivalent health physics education, training, or experience.

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: Materials Health Physics Inspector Equivalency Justification. While your supervisor may waive certain classes, your qualification will still needs certification by your Regional Administrator or their designee.

Refresher Training

Qualified inspectors must maintain their qualification by completing refresher training in the established requalification cycle. Each refresher cycle will be determined using the month the inspector completed their qualifications. If the date the inspector completed their qualifications is unknown, then continue using the month currently used to calculate their refresher training cycle. The refresher cycle will be a 24-month period. The inspector's supervisor may grant a three (3) extension if the inspector was unable to complete the required refresher training.

The qualified inspector must complete 24 hours of refresher training in order to maintain their qualification status. Refresher training may consist of either health and safety or security topics. The qualified inspector's supervisor will determine which training courses the inspectors needs and will coordinate with HRTD staff, as deemed necessary. Additionally, the supervisor can consult with HRTD staff to help identify specific courses that the staff member can take for their refresher training. Examples of training that may be considered include: Health Physics Topics (H-401), NRC technical training courses, external training courses, attending lectures, making presentations on subjects related to health and safety or security, directed self-study courses (identified in iLearn), or other training approved by the qualified inspector's supervisor.

It is important to note that only taking an H-401 course may not be enough refresher training. Completing the refresher training will be dependent on the number of hours that the qualified staff member has completed.

Prior to taking refresher training the inspector should receive approval from their immediate supervisor to confirm that the training will be credited as refresher training. The 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 supervisor should determine whether the training is a structured program. If the supervisor is unsure if the self-study training is appropriate, they may want to consult with HRTD staff for their analysis of the training. The supervisor also needs to take into consideration what refresher training they believe that their staff member needs (i.e. security, a specific technology, etc.)

NOTE: An inspector may retake a course that they had taken previously. A supervisor should consider whether it would be beneficial for the inspector to retake the course. A 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 supervisor allows the inspector to retake the course, the inspector must complete and pass the exam, if the course has one, in order to receive credit for the course.

In order to receive credit and track the number of hours needed for refresher training, for training offered outside of the NRC training catalog, the inspector and immediate supervisor should provide the course details (title of training, number of hours, etc.) to either its division training coordinator or the appropriate HRTD staff. The Training Coordinator or HRTD staff will enter the information into iLearn. If there is any concern about the content of the training, HRTD management and the qualified inspector's management will resolve the concern. The use of iLearn will assist the inspector in keeping track of how many hours of refresher training they have completed.

NOTE: For staff who qualified under IMC 1246, the new refresher training requirements in IMC 1248 begin on October 1, 2011. You will have 24 months from this date to complete the 24 hours of refresher training.

Materials Health Physics Inspector Individual Study Activity

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 **level of effort** gives you an idea of how much effort should be expended in completing the activity. (The times are estimates. You may need more or less time.) The **evaluation criteria** identify what you are expected to achieve upon completing the activity. The evaluation criteria are listed up front so that you will 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 three activities should be done first. Becoming familiar with the agency, the internal and external Web sites, and your overall role as an inspector is important for successfully completing many of the remaining activities. You should also become familiar with the content of the remaining activities so that you can complete the activities as opportunities arise.
- ✓ Complete all parts of each activity.
- ✓ Your supervisor will act as a resource as you complete each activity. Your supervisor may also designate other senior staff 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 supervisor or designated resource.
- ✓ You are responsible for keeping track of the tasks you have completed. Be sure to complete all the tasks in each activity before meeting with your supervisor for evaluation.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-1) History and Organization of the U.S. Nuclear Regulatory Commission

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 NRC Commissioners and major offices.

COMPETENCY AREA: REGULATORY FRAMEWORK

LEVEL OF EFFORT: 24 hours

REFERENCES:

1. Title 10 of the Code of Federal Regulations (CFR)
2. NUREG-1350, "Information Digest," use the most current version available on the NRC Web site
3. NUREG/BR-0175, "A Short History of Nuclear Regulations," Revision 1, June 2000

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 relationship between the Regions and the Office of Federal and State Materials and Environmental Management Programs.
 - a. Discuss roles and responsibilities.

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 to direct the staff.
8. Describe your region's organization and key management positions.

TASKS:

1. Obtain paper copies or 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 Electronic Reading Room.
2. Review the reference material to gain an understanding of the principles discussed in the evaluation criteria.
3. Read about Commission's direction setting and policymaking activities under Policymaking and understand the different kinds of decision documents issued by the Commission.
4. Review and discuss the evaluation criteria with your supervisor.

DOCUMENTATION:

Obtain your supervisor's signature in the line item for Qualification Journal Certification Signature Card Item ISA-1.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-2) Navigating the NRC Internal and External Web Sites

PURPOSE: The purpose of this activity is to familiarize you with the NRC's internal and external Web sites and to acquaint you with the information available. Inspectors must routinely review a variety of documents to support their inspection activities. Many of these documents are available electronically. This ISA will familiarize you with the Web locations of documents and information vital to your job. Thus, you will begin to build the knowledge you will need later to successfully perform your assigned responsibilities.

COMPETENCY AREA: INFORMATION TECHNOLOGY

LEVEL OF EFFORT: 24 hours

REFERENCES: 1. NRC internal and external Web sites

EVALUATION CRITERIA: There are no specific evaluation criteria for this activity. Use your supervisor or other agency personnel as a resource as you complete this activity.

NOTE: Circumstances may result in some parts of the Web sites being unavailable at times. Also, be aware that some of the Web sites' titles or content may change. Please review the most recent version of the Web site. Complete as much as possible.

NOTE: There are often several ways to reach a particular piece of information. As you navigate the various Web sites, you will be directed to bookmark specific information that you will need to access later to complete other activities in this manual chapter.

TASKS: Open your Web browser and do the following:

1. Explore the NRC's internal home page.
 - a. Locate the Ethics area.
 - i. Review the information available.
 - ii. Note the various sources of ethics advice.
 - b. Locate the Library Services area (NRC Technical Library)
 - i. Review the information available.
 - c. Locate your region's home page and review the region's functions.
 - i. Identify the Regional Administrator, NRC Regional Office.
 - ii. Find and review the office organization, and Office Instructions.
 - d. Locate the Office of Federal and State Materials and Environmental Management Programs' home page and review the functions of this program office
 - i. Identify the Director, FSME.
 - ii. Find and review the office organization, and Office Instructions.
 - e. Locate the following Offices' home pages and review the functions of the office:
 - i. Regions
 - ii. Office of Nuclear Materials Safety and Safeguards
 - iii. Office of Enforcement
 - iv. Office of Nuclear Security and Incident Response
 - v. Office of International Programs
 - vi. Office of the General Counsel
 - vii. Office of Nuclear Reactor Regulation
 - viii. Office of New Reactors
 - ix. Office of Nuclear Regulatory Research
 - f. Locate the Office of the Executive Director for Operations (OEDO) home page
 - i. Review the OEDO's Communications Web Site.
 - ii. Review Guidance on Communication Tools and Plans.
 - iii. Review the Public Meeting Policy.

- g. Locate the SECY home page
 - i. Review the functions of the office.
 - ii. Review the purpose of a SECY paper.
 - iii. Review the purpose of staff requirements memoranda.
 - h. Locate the site for NRC management directives (MDs).
 - i. Find the MD dealing with the NRC Incident Investigation Program; review the purpose of the program.
 - ii. Find the MD dealing with the management of allegations; describe the general policy on disclosure of the identity of an allegor.
 - iii. Find the MD dealing with the NRC Medical Event Assessment Program; review the purpose of the program.
 - i. Locate the agency's iLearn Web site.
 - i. Locate the course schedule and catalog and browse the offerings for course availability.
 - ii. Review how to enroll in a course.
 - iii. Locate the Self-Paced Learning area.
 - iv. Find the Web-based allegation management training.
 - v. Review the list of available Web-based learning opportunities.
 - vi. Review the list of other available self-paced learning opportunities.
2. Explore the NRC's external (public) server.
- a. Go to the Electronic Reading Room.
 - i. Find the Glossary (Basic References).
 - ii. Find the NRC Inspection Manual and bookmark it (Collection of Documents).
 - iii. Find Regulatory Guides. Read about the purpose of a regulatory guide (RG).
 - iv. Locate Generic Communications documents. Review the purpose of each of the types of generic communications documents.
 - v. Find NUREGs. Read about the different types of NUREG documents and determine how you can tell the difference.
 - vi. Find the NRC Regulations contained in Title 10 of the CFR.
 - How many volumes comprise Title 10? What parts are applicable to the NRC?
 - Use the search feature and search on "radiation protection." View one of the documents to read about what a recent change to the CFR involved.
 - View a part of the CFR. Look for the information

that indicates when the regulation was issued and amended.

- vii. Find and review the general purposes and procedures associated with the Privacy Act and the Freedom of Information Act (FOIA).
 - b. Go to About NRC. Locate and review the rulemaking process under How We Regulate.
 - c. Go to Nuclear Materials.
 - i. Generally review the information found under Byproduct Material.
 - ii. Generally review the information found under Med, Academic, & Ind Uses Current.
 - d. Go to Nuclear Security.
 - i. Generally review the information found under Radioactive Material Security.
 - ii. Generally review the information found in the Security Orders and Requirements.
 - iii. Generally understand what the National Source Tracking System (NSTS) is and what it is used for.
3. Explore and become familiar with the NRC's online License Tracking System (LTS) and Web-Based Licensing (WBL) system

NOTE: WBL will not be operable when the qualification journal is published. Staff beginning their qualifications after WBL is operable should become familiar with the system.

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

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-3) Materials Health Physics Inspector Objectivity, Protocol, and Professional Conduct

PURPOSE: The purpose of this activity is to acquaint you with the NRC's expectations of an inspector's 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 an inspector, you will often be representing the agency in interactions with a licensee or applicant. This ISA 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

LEVEL OF EFFORT: 8 hours

REFERENCES:

1. MD 7.5, "Ethics Counseling and Training"
2. IMC 1201, "Conduct of Employees"
3. Regional guidance related to employee conduct.

EVALUATION CRITERIA: Upon completion of the tasks in this activity, you will be asked to demonstrate your understanding of proper NRC employee conduct during inspections at licensee 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 a licensee
 - b. attending social functions essentially limited to licensee and

- contractor attendance
 - c. coffee clubs, cafeterias, credit unions
 - d. property and neighborhood relationships
 - e. community activities
 - f. 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
 - f. misuse of power
 - g. outside activities
 4. What are NRC employees supposed to do if they receive an allegation of improper action by an NRC staff member or contractor involved in oversight activities?

TASKS:

1. Complete the Ethics Overview for Employees and Ethics Training for NRC Employees courses. To access the training, use the NRC's iLearn Web site. Be sure to print the completion record at the end of the online ethics course in the event that completion of the course does not register in the iLearn system.
2. Locate and review the material specifically listed in the reference section of this activity. Although the agency has a code for employee conduct, not all regions or offices have specific guidance in this area. You should closely review the guidance applicable to your position. Some of this guidance may be located in directives, which describe the duties and responsibilities of specific positions (e.g., resident staff or project engineer guidance).
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 Qualification Journal Certification Signature Card Item ISA-3.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-4) 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 interact effectively with individuals bringing concerns to the NRC and to respond appropriately to those concerns.

COMPETENCY

AREAS: INSPECTION
SELF-MANAGEMENT
COMMUNICATION

LEVEL OF

EFFORT: 24 hours

REFERENCES:

1. MD 8.8, "Management of Allegations"
2. Allegation Guidance Memorandum 2008-001 (ML083640272)
3. NUREG/BR-0313, Revision 1, "Pre-Investigation Alternative Dispute Resolution Program"

NOTE: Please note that the link above is subject to change and is there for your convenience. You are responsible for locating the information.

4. FSME Policy and Procedures 8-4 (ML092540482)
5. NRC Form 613, "Disclosure of Allegor's Identity"
6. 10 CFR Part 30.9, "Completeness and Accuracy of Information"
7. 10 CFR Part 30.10, "Deliberate Misconduct"
8. Regional 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 addressing the following:

1. State the criteria used to evaluate a statement to determine if the information in the statement is a potential 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 steps taken, to prepare an Allegation Review Board (ARB) briefing sheet.
5. State the information that should be provided to an ARB.
6. Discuss the criteria used to determine whether there is sufficient information to close an allegation.
7. State the purpose of, and the information needed, to prepare allegation closure documentation.
8. Discuss the proper handling of allegation material.
9. Discuss the NRC policy for protecting the identity of the Concerned Individual.
10. Discuss the interim guidance in Allegation Guidance Memorandum 2008-001.
11. Describe the Pre-Investigation Alternative Dispute Program

TASKS:

1. Review the applicable regulations and guidance listed in the reference section.
2. Complete the Web-based Allegation Training module. To access the training, use the NRC's iLearn Web site. Be sure to print the completion record at the end of the online course in the event that completion of the course does not register in the iLearn system.
3. Review the applicable regional or office guidance for allegations.

4. Meet with the OAC and have him/her 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 the associated ARB briefing sheets, particularly the determination of safety significance and the proposed action plan.
 - c. Review the associated allegation closeout memorandum or closeout letter to understand the rationale and basis for an allegation closeout.
6. Discuss with your supervisor or OAC the options available to the NRC to follow-up on an allegation and the circumstances when each is appropriate.
7. Obtain the inspection results and/or licensee review information for a concern that has been referred. Discuss the precautions and limitations associated with referrals with your supervisor or the OAC.
8. Attend two ARB meetings if practical.
9. Working with your supervisor or OAC:
 - a. Simulate receiving an allegation and 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 simulated allegation.
 - c. Obtain the inspection and/or investigation results; 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 allegor.

10. Meet with your supervisor or the OAC to discuss any questions that you may have regarding 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 Qualification Journal Certification Signature Card Item ISA-4.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-5) The Enforcement Program

PURPOSE: The purpose of this activity is to provide you with an overview of the NRC enforcement program. This ISA 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

LEVEL OF EFFORT: 24 hours

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, the enforcement process diagram, and the alternative dispute resolution program
2. Regional policy guide for enforcement

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. Define a minor violation and state the policy on documenting and correcting these violations.
7. Define non-cited violation.
8. Define escalated enforcement action.
9. Understand how to use the enforcement process diagram to disposition violations.
10. Describe what pre-decisional enforcement conferences and management conferences are and why, when, and with whom they are conducted.
11. Describe the Alternative Dispute Resolution Program
12. Discuss the purpose of civil penalties, when the NRC considers issuing them, and how the NRC determines the amount of penalties.
13. Recognize the purpose of the different types of Orders and when they are used.
14. Discuss the purpose and use of Enforcement Guidance Memoranda (EGMs)
15. Describe how NRC Form 591 is used. Identify the types of violations that can and cannot be cited on the form.

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. Locate the most recent escalated enforcement action for a materials licensee on the Enforcement Web page of the NRC external Web site. Review the transmittal letter and attached

notice of violation.

6. Review your region's guidance on implementing the enforcement policy.
7. Meet with the enforcement specialist in your region to discuss the current enforcement guidance.
8. 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 Qualification Journal Certification Signature Card Item ISA-5.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-6) The Office of Investigations

PURPOSE: The purpose of this activity is to familiarize you with the Office of Investigations (OI). As an inspector you may be assigned to work with OI by providing technical support. This ISA will help you understand the role of OI, its functions, and your responsibilities if you are assigned to assist OI during the conduct of an investigation.

COMPETENCY AREAS: INSPECTION
REGULATORY FRAMEWORK

LEVEL OF EFFORT: 4 hours

REFERENCES:

1. MD 9.8, "Organization and Functions, Office of Investigations"
2. Regional OI
3. OI Web page on the NRC external Web site
4. NRC OI on internal NRC Web site

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 OI.
3. Describe what your role would be in assisting OI.
4. Describe the authorities of an OI investigator.

TASKS:

1. Review MD 9.8.
2. Study the OI Web page and associated organizational charts.
3. Meet with an experienced OI criminal investigator or your supervisor and discuss two materials 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 Qualification Journal Certification Signature Card Item ISA-6.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-7) NRC Interagency Agreements

PURPOSE: While performing inspection activities, inspectors 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 issues, transportation questions, and issues involving security. Conversely, other Federal and State agencies may identify issues of concern to the NRC. To ensure that the proper regulatory authority addresses these items, the NRC has established agreements, called memoranda of understanding (MOUs), with other Federal and State agencies that outline how these issues should be addressed.

This activity will introduce you to the major interagency agreements that the NRC has entered into 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

LEVEL OF EFFORT: 4 hours

REFERENCES:

1. IMC 1007, "Interfacing Activities between Regional Offices of NRC and OSHA"
2. 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 materials licensee facility. Be able to state where the guidance for these actions is provided.

4. 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. Department of Homeland Security (DHS)
 - i. Federal Emergency Management Administration (FEMA)
 - d. Department of Energy (DOE)
 - i. National Nuclear Security Administration (NNSA)
 - e. Environmental Protection Agency (EPA)
 - f. State agencies

NOTE: The list of Federal agencies that the NRC coordinates with and has interagency agreements with may change. Determine with your supervisor, which agencies your organization may interact.

There may not be an NRC point of contact for each Federal agency in your organization. The point of contact may be in another Office.

TASKS:

1. Identify where the current NRC MOUs are available in your region or office. You can find electronic versions of these documents on the NRC internal Web site under Enforcement.
2. Review the MOUs to develop a general understanding of the agreements between the NRC and OSHA, DOT, FEMA, and DOE. For regional staff, 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.
4. Meet with your supervisor, a senior materials health physics inspector, or the above liaison representative to discuss two licensee 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 Qualification Journal Certification Signature Card Item ISA-7.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-8) Interactions with the Public and the Media

PURPOSE: The purpose of this activity is to provide you with an understanding of the importance of communicating with the public and the 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 the media.

COMPETENCY AREAS: COMMUNICATION
SELF-MANAGEMENT
REGULATORY FRAMEWORK

LEVEL OF EFFORT: 24 hours

- REFERENCES:**
1. NUREG/BR-0215, "Public Involvement in the Nuclear Regulatory Process," - Revision 2
 2. NUREG/BR-0202, "Guidelines for Interviews with the News Media"
 3. NUREG/BR-0224, "Guidelines for Conducting Public Meetings"
 4. NUREG/BR-0297, "NRC Public Meetings"
 5. MD 3.4, "Release of Information to the Public"
 6. MD 3.5, "Public Attendance at Certain Meetings Involving the NRC Staff"
 7. MD 8.11, "Review Process for 10 CFR 2.206 Petitions"
 8. Public meeting checklist available at:
<http://www.internal.nrc.gov/communications/checklist.html>
 9. Plain Language:
<http://www.internal.nrc.gov/NRC/PLAIN/index.html>

10. Communication Plan Guidance under “How Do I...”:
<http://www.internal.nrc.gov/communications/>
11. Management Directive 12.6, “NRC Sensitive Unclassified Information Security Program”
12. NRC Sensitive Unclassified Non-Safeguards Information (SUNSI)
Website:
<http://www.internal.nrc.gov/ois/divisions/irsd/sunsi/index.html>
13. Regional 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).

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

**EVALUATION
CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of proper interaction with the public and news media by successfully addressing the following:

1. Describe what is meant by “Plain Language.” Identify where examples and guidance related to plain language can be found.
2. Explain what a “2.206 petition” is. Describe how it is handled by the NRC.
3. Define a NRC-sponsored public meeting.
4. Identify the different meeting categories and their purposes.
5. Identify what type of NRC meetings are generally open to the public. List some that are not usually open to the public.
6. Describe how members of the public can find out about NRC public meetings. Discuss the expectations on timeliness of meeting notices and summaries.
7. Describe the restrictions regarding the release of information to the public including specific types of information that is not to be released.
8. Discuss the importance of controlling your speech, including what

words to not use, not speculating, not guessing, not answering the “what if” questions, not giving your opinion or repeating any other persons opinion, and not talking off the record.

9. Discuss what a Communication Plan is and how it can impact you.
10. Explain what information regarding the security of radioactive materials may be discussed with a member of the media or member of the public.

NOTE: You may request copies of the NUREG references used in this activity that cannot be found on the NRC external Web site from your public affairs office.

TASKS:

1. Review the references to understand the principles discussed in the evaluation criteria.
2. Visit the NRC’s “Plain Language Action Plan” on the internal web site, including some of the links to resource materials.
3. Visit Office of the Executive Director for Operations (OEDO) NRC Internal Web site and find the link to the Communication Web site. Review the public meeting policy and checklist.
4. If possible, attend a public meeting and observe the protocols used in the meeting.
5. Meet with the person designated to be a resource for this activity or supervisor and discuss the items listed in the evaluation criteria section.
6. Review the SUNSI requirements on the website or Management Directive and become familiar with the type of information that may not be shared with the public.

DOCUMENTATION:

Obtain your supervisor’s signature in the line item for Qualification Journal Certification Signature Card Item ISA-8.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-9) Hearings

PURPOSE: The purpose of this activity is to become familiar with the hearing process.

COMPETENCY AREA: REGULATORY FRAMEWORK

LEVEL OF EFFORT: 8 hours

REFERENCES:

1. 10 CFR Part 2, Subpart C, "Rules of General Applicability: Hearing Requests, Petitions to Intervene, Availability of Documents, Selection of Specific Hearing Procedures, Presiding Officer Powers, and General Hearing Management for NRC Adjudicatory Hearings"
2. NRC adjudication web site

EVALUATION CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your general understanding of the types of hearings, public involvement, and the hearing process.

1. Describe the types of hearings.
2. Describe public involvement in hearings.
3. Describe the hearing process.
4. State the types of Office activities/processes that have hearings.
5. State the types of hearings, if any, which are required or could, occur that affects your specialty area.

TASKS:

1. Review the references to understand the principles discussed in the evaluation criteria.
2. Attend Atomic Safety and Licensing Board proceedings, if possible.
3. Meet with the person designated to be a resource for this activity or supervisor and discuss the items listed in the evaluation criteria section.

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

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-10) Proprietary Information and Determinations

PURPOSE: The purpose of this activity is to become familiar with requirements and procedures for withholding proprietary information from public disclosure. In addition, all employees need to know how to handle proprietary information.

COMPETENCY AREA: INSPECTION
REGULATORY FRAMEWORK

LEVEL OF EFFORT: 8 hours

REFERENCES:

1. 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding"
2. Management Directive 3.4, "Release of Information to the Public"
3. Management Directive 3.5, "Attendance at NRC Staff-Sponsored Meetings"
4. Management Directive 12.6, "NRC Sensitive Unclassified Information Security Program"
5. NRC Sensitive Unclassified Non-Safeguards Information (SUNSI) Website:
<http://www.internal.nrc.gov/ois/divisions/irsd/sunsi/index.html>

NOTE: Please note that the link above is subject to change and is there for your convenience. You are responsible for locating the information.

EVALUATION

CRITERIA: Upon completion of this activity, you will be asked to demonstrate your general understanding of proprietary information and the exceptions for withholding information as well as an understanding of NRC SUNSI requirements.

1. Describe how to handle proprietary material in accordance with Agency requirements and procedures.
2. Describe the process for handling an incoming request to withhold materials stated to be proprietary from public disclosure.

3. Describe the process by which an entity may request to meet privately with the NRC staff to discuss proprietary matters.
4. Describe requirements on timeliness for making a proprietary determination.
5. Describe actions required in the event of an inadvertent release of proprietary information.

TASKS:

1. Review the references to understand the principles discussed in the evaluation criteria.
2. Meet with the person designated to be a resource for this activity or supervisor and discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

Obtain your supervisor's signature in the line item for Qualification Journal Certification Signature Card Item ISA-10.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-11) The Freedom of Information Act 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

**LEVEL OF
EFFORT:**

16 hours

REFERENCES:

1. 10 CFR Part 9, "Public Records"
2. MD 3.1, "Freedom of Information Act"
3. MD 3.2, "Privacy Act"
4. SUNSI Web Site – Privacy Act/Personally Identifiable Information (PII)
5. MD 3.4, "Release of Information to the Public"
6. Regional instructions establishing the policy and procedure for processing FOIA requests for agency records

**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 addressing 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 withholdable information 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, predecisional, 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.

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. Complete the annual Personally Identifiable Information (PII) Responsibilities training. To access the training, use the NRC's iLearn Web site. Be sure to print the completion record at the end of the online course in the event that completion of the course does not register in the iLearn system.
4. Review the agency guidance on how to implement FOIA without releasing predecisional information and other information covered under the Privacy Act.
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 Qualification Journal Certification Signature Card Item ISA-11.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-12) 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: REGULATORY FRAMEWORK

LEVEL OF EFFORT: 4 hours

- REFERENCES:**
1. Review the "About Generic Communication" web page <http://www.nrc.gov/about-nrc/regulatory/gencomms.html>
 2. IMC 0730, "Generic Communications Regarding Materials and Fuel Cycle Issues"
 3. Management Directive 8.18, "NRC Generic Communications Program"

NOTE: Please note that the link above is subject to change and is there for your convenience. You are responsible for locating the 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 reference to understand the principles discussed in the evaluation criteria.
2. Identify with your supervisor and review Information Notices and Regulatory Issue Summaries that are pertinent to your position.
3. Meet with the person designated to be a resource for this activity or supervisor and discuss the items listed in the evaluation criteria section.

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

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-13) Differing Views Programs

PURPOSE: The purpose of this activity is to communicate expectations for establishing and maintaining an open, collaborative working environment 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 open, collaborative working environment (OCWE) that encourages all employees and contractors to promptly voice differing views without fear of retaliation. At the NRC, we encourage trust, respect, and open communication to foster and promote a positive work environment that maximizes the potential of all individuals and improves our regulatory decision-making. We expect individuals to be NRC Team Players. In addition to informal discussions, which should be sufficient to resolve most issues, individuals have various mechanisms for expressing and having their differing views heard by decision-makers, including the Open Door Policy, the Non-Concurrence Process (NCP), and the Differing Professional Opinions (DPO) Program. This activity will provide you with an understanding of the expected behaviors for being an NRC Team Player that support an OCWE and key features of the Open Door Policy, the NCP, and the DPO Program.

**COMPETENCY
AREAS:**

INSPECTION
SELF-MANAGEMENT
COMMUNICATION

**LEVEL
OF EFFORT:** 8 hours

- REFERENCES:**
1. OCWE web site:
<http://www.internal.nrc.gov/OE/dva/index.html>
 2. NCP web site:
<http://www.internal.nrc.gov/OE/nonconcur/index.html>
 3. DPO Program web site:
<http://www.internal.nrc.gov/OE/dpo/index.html>
 4. MD 10.160, "Open Door Policy"
 5. Draft MD 10.158, "NRC Non-Concurrence Process"
 6. MD 10.159, "The NRC Differing Professional Opinions Program"

7. Complete the annual No Fear Act training. To access the training, use the NRC's iLearn Web site. Be sure to print the completion record at the end of the online course in the event that completion of the course does not register in the iLearn system.
8. Regional instructions establishing additional implementing guidance for raising differing views.

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

EVALUATION

CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC Open, Collaborative Working Environment & Ways to Raise Differing Views Program by successfully addressing the following:

1. State the expectations for an 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 what circumstances the various methods available for expressing differing views would be used.
6. Describe where summaries of closed DPOs are published and where DPO Program reviews are available.
7. Identify your Region's Differing Views Office Liaison.

TASKS:

1. Attend a seminar (if possible) on an Open, Collaborative Working Environment & Ways to Raise Differing Views, or review seminar slides.
2. Explore information and guidance for OCWE, Open Door Policy, NCP, and DPO Program on identified web sites.
3. Review MD 10.160, draft MD 10.158, and MD 10.159.

DOCUMENTATION:

Obtain your supervisor's signature in the line item for Qualification Journal Certification Signature Card Item ISA-13.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-14) Overview of Title 10 of the Code of Federal Regulations

PURPOSE: The purpose of this activity is to acquaint you with the regulations that specify the requirements for all aspects of the NRC including the use of radioactive materials, disposal, fees, and export and import of nuclear material and equipment. This ISA will help you to understand the regulations and become familiar with specific requirements in the regulations.

COMPETENCY

AREA: REGULATORY FRAMEWORK

LEVEL OF

EFFORT: 160 hours

REFERENCES:

1. NRC internal home page
2. Paper copy of the latest revisions to 10 CFR Parts 1 through 50
3. Paper copy of the latest revisions to 10 CFR Parts 51 through 199

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 by successfully discussing the following:

1. State the purpose of 10 CFR Parts 1, 2, 9, 19, 20, 21, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 61, 70, 71, 73, 110, 150, 170, and 171.
2. Given a specific subject, identify which section in 10 CFR discusses the requirements for that subject by using the search feature on the NRC Regulations and Nuclear Regulatory Legislation Web pages.
3. Discuss in detail the parts of the regulations that were identified as the focus area for your discipline

4. Successfully answer the problems/questions regarding the regulations provided to you by your supervisor.

NOTE: The problems/questions may be developed by your supervisor or senior technical staff member.

Your supervisor may also request self-study quizzes from HRTD through iLearn. The quizzes are located under the title, "General Radioactive Materials Overview of Title 10 of the Code of Federal Regulations (H-130S)".

TASKS:

1. Become familiar with, and be able to use, the search feature to locate the information available in NRC Regulations and Nuclear Regulatory Legislation Web pages found on the NRC internal Web site.
2. Read and be familiar with the following parts of 10 CFR Part: 1, 2, 9, 19, 20, 21, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 61, 70, 71, 73, 110, 150, 170, and 171.
3. Identify with your supervisor what parts of the regulations you should focus on during your review.
4. Answer the problems/questions regarding the regulations provided by your supervisor and discuss your answers with your supervisor and a senior technical staff member.

NOTE: As of the date of the publication of this document the NRC is developing 10 CFR Part 37 for materials security. When Part 37 is finalized, it will supersede the Orders that were issued to enhance materials security. When Part 37 is finalized, you should begin to use the new regulations as a reference. This change will be reflected in a future revision to this document.

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 Qualification Journal Certification Signature Card Item ISA-14.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-15) Agencywide Documents Access and Management System (ADAMS)

PURPOSE: The Agencywide Documents Access and Management System (ADAMS) maintains appropriate NRC unclassified, non-Safeguards, official program-related records in a centralized electronic records repository. NRC's publicly available documents are made available to the public via NRC's external Web site and the ADAMS public libraries. This ISA activity will help you become familiar with ADAMS and provide you with the basic knowledge of how to use the system.

COMPETENCY AREA: REGULATORY FRAMEWORK

LEVEL OF EFFORT: 24 hours

REFERENCES:

1. MD 3.53, "NRC Records and Document Management Program"
2. NUREG/BR-0273, "ADAMS Desk Reference Guide"

EVALUATION CRITERIA: Upon completion of this activity, you will be asked to demonstrate your general understanding of ADAMS by successfully addressing the following:

1. Describe the purpose of ADAMS.
2. Discuss how ADAMS is used by the agency.
3. Discuss why it is important for an inspector to be familiar and proficient with ADAMS.
4. Describe the functions of ADAMS (i.e. searches, profiling, ML numbers, and how to add documents).

TASKS:

1. Obtain an ADAMS login and password.
2. Using the iLearn web site sign up and complete ADAMS Overview for NRC Staff.
3. Review MD 3.53.
4. Review NUREG/BR-0273.

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 Qualification Journal Certification Signature Card Item ISA-15.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-16) Materials Security

PURPOSE: The purpose of this activity is to familiarize you with the security requirements imposed on certain licensees as well as the pre-licensing process. This ISA will not make you a security expert, but will provide you with a good understanding of the security requirements the NRC has in place. This activity will also require training on the appropriate handling of sensitive information and information protection.

COMPETENCY

AREA: INSPECTION

LEVEL OF

EFFORT: 40 hours

- REFERENCES:**
1. Panoramic and Underwater Irradiator Orders
 2. Inspection Procedure (IP) 87135, "Panoramic and Underwater Irradiator Security Program"
 3. Manufacturers and Distributors (M&D) Orders
 4. IP 87136, "Manufacturing and Distribution (M&D) Security Program"
 5. Transportation of Radioactive Materials Quantities of Concern (RAMQC) Orders
 6. IP 81120, "Inspection Requirement and Guidance for Additional Security Measures for the Physical Protection in Transit for Radioactive Material Quantities of Concern"
 7. Increased Controls (IC) Orders
 8. IC Toolbox
 9. Temporary Instruction (TI) 2800/038, "Inspection of the Implementation of the Increased Controls for Licensees Authorized to Possess Risk Significant Radioactive Material" –
 10. 10 CFR 20.1801 and 20.1802
 11. 10 CFR Part 37
 12. 10 CFR Part 73

13. Fingerprinting Orders for access to SGI and unescorted access to radioactive material
14. NRC Pre-Licensing Guidance

NOTE: The Inspection Procedures and Temporary Instructions used for the materials security inspections are not publicly available.

As of the date of the publication of this document the NRC is developing 10 CFR Part 37 for materials security. When Part 37 is finalized, it will supersede the Orders that were issued to enhance materials security. When Part 37 is finalized, you should begin to use the new regulations as a reference. This change will be reflected in a future revision to this document.

Use the Inspection Procedures and Temporary Instructions referenced above until they have been superseded.

**EVALUATION
CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of the different type of security requirements imposed by the NRC, know the thresholds of when licensees must implement the security requirements, understand the purpose of the pre-licensing guidance, and know how to protect certain types of information including SUNSI and Safeguards Information (SGI):

1. Discuss the proper handling of SGI and SUNSI and how the NRC handles this type of information with regards to ADAMS.
2. Discuss the purposes for and the requirements in the Panoramic and Underwater Irradiator, M&D, RAMQC, IC, and Fingerprinting Orders (for access to SGI and unescorted access to radioactive material) as well as the thresholds at which a licensee must implement the requirements.
3. Discuss 10 CFR 20.1801 and 20.1802
4. Discuss 10 CFR Part 37.
5. Describe how the NRC uses its Pre-Licensing Guidance.

TASKS:

1. Complete the Information Security (INFOSEC) Awareness course. To access the training, use the NRC's iLearn Web site. Be sure to print the completion record at the end of the online course in the event that completion of the course does not register in the iLearn system.

2. Review the instructions for handling SUNSI material found at: <http://www.internal.nrc.gov/sunsi/>
3. Review the NRC Orders for Panoramic and Underwater Irradiators, M&D, RAMQC, ICs, and Fingerprinting (access to SGI and unescorted access to radioactive material) unless superseded by 10 CFR 37.

NOTE: Access to SGI is based on a need-to-know your supervisor will have to determine that need based on your job duties.

4. Review and become familiar with the NRC Pre-Licensing Guidance.
5. Gain access to the IC Toolbox <http://nrc-stp.ornl.gov/controls.html>
6. 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.

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

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

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-17) 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

LEVEL OF EFFORT: 12 hours

REFERENCES:

1. NMED website: <http://nmed.inl.gov/>
2. NMED Annual Reports
(Hint: Use the drop down menu on the NMED website to access reports)
3. Review cases of events as directed by your supervisor

EVALUATION CRITERIA: Upon completion of this activity, you will be asked to demonstrate your understanding of how the NRC handles materials events 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 that is included in the NMED Annual Reports.
4. Describe and discuss the information stored in NMED and how it is used by the NRC.

TASKS:

1. Obtain an NMED login and password by following the instructions at: <http://nmed.inl.gov/>.
2. Review the historical events, recommendations made, lessons learned, and changes identified to prevent recurrence as identified by your supervisor or person designated to be your resource for this activity.

3. Discuss with your 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.
4. Review the most recent NMED Annual Report.
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.

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

DOCUMENTATION: Obtain your supervisor's signature in the line item for Qualification Journal Certification Signature Card Item ISA-17.

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-18) Generally Licensed Devices

PURPOSE: This ISA will help you become familiar with how the NRC handles generally licensed devices. You will also become familiar with the generally licensed device program, generally licensee registration, and the General License Tracking System (GLTS).

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: 12 hours

REFERENCES:

1. GLTS
2. General License Registration and Tracking:
<http://www.nrc.gov/materials/miau/miau-reg-initiatives/gen-license.html>
3. 10 CFR 31.5
4. NUREG-1556, Vol. 16, "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Licenses Authorizing Distribution to General Licensees"

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

EVALUATION

CRITERIA: Upon completion of this activity, you will be asked to demonstrate your understanding of the general license program.

1. Discuss what a general license (GL) is and what types of devices are commonly used as generally licensed devices.
2. Describe the GL registration program.
3. Describe and discuss the information stored in GLTS and how it is used by the NRC.

TASKS:

1. Obtain access to GLTS, if you are required to by your supervisor.
2. Review the reference material and be able to address 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.

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

Materials Health Physics Inspector Individual Study Activity

TOPIC: (ISA-19) NRC Inspection Manual Chapters (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.

COMPETENCY AREA: INSPECTION

LEVEL OF EFFORT: 80 hours

- REFERENCES:**
1. IMC 0300, "Announced and Unannounced Inspections"
 2. IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports"
 3. IMC 0620, "Inspection Documents and Records"
 4. IMC 0730, "Generic Communications Regarding Materials and Fuel Cycle Issues"
 5. IMC 1007, "Interfacing Activities Between Regional Offices of NRC and OSHA"
 6. IMC 1220, "Processing of NRC Form 241 and Inspection of Agreement State Licensees Operating Under 10 CFR 150.20"
 7. IMC 1248, "Formal Qualification Programs in the Federal and State Materials and Environmental Management Programs"
 8. IMC 1301, "Response to Radioactive Material Incidents that do not Require Activation of the NRC Incident Response Plan"
 9. IMC 1302, "Follow-Up Actions and Action Levels for Radiation Exposures Associated with Materials Incidents Involving Members of the Public"
 10. IMC 1303, "Requesting Emergency Acceptance of Radioactive Material by the U.S. Department of Energy (DOE)"
 11. IMC 1330, "Response to Transportation Accidents Involving Radioactive Materials"
 12. IMC 1360, "Use of Physicians and Scientific Consultants in the Medical Consultant Program"

13. IMC 2800, "Materials Inspection Program"
14. IMC 2810, "Master Material License Inspection Program"
15. IMC 2815, "Construction and Preoperational Inspection of Panoramic, Wet-Source-Storage Gamma Irradiators"
16. IP 40002, "Inspections to Review Allegations"
17. IP 86740, "Inspection of Transportation Activities"
18. IP 87102, "Maintaining Effluents from Materials Facilities As Low As Is Reasonably Achievable (ALARA)"
19. IP 87103, "Inspection of Materials Licensees Involved in an Incident or Bankruptcy Filing"
20. IP 87104, "Decommissioning Inspection Procedure for Materials Licensees"
21. IP 87121, "Industrial Radiography Programs"
22. IP 87122, "Irradiator Programs"
23. IP 87123, "Well Logging Programs"
24. IP 87124, "Fixed and Portable Gauge Programs"
25. IP 87125, "Materials Processor/Manufacturer Programs"
26. IP 87126, "Industrial/Academic/Research Programs"
27. IP 87127, "Radiopharmacy Programs"
28. IP 87129, "Master Materials Program"
29. IP 87130, "Nuclear Medicine Programs, Written Directive Not Required"
30. IP 87131, "Nuclear Medicine Programs, Written Directive Required"
31. IP 87132, "Brachytherapy Programs"
32. IP 87133, "Medical Gamma Stereotactic Radiosurgery and Teletherapy Programs"
33. IP 87134. "Medical Broad-Scope Programs"

34. IP 87250, "Locating Missing Materials Licensees"
35. IP 92703, "Follow Up of Confirmatory Action Letters or Orders"
36. IP 93001, "OSHA Interface Activities"
37. Other IMCs or IPs identified for review by your supervisor
38. NUREG-1757, "Consolidated Decommissioning Guidance"

**EVALUATION
CRITERIA:**

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.

1. Discuss the IMCs and IPs you have reviewed.
2. Describe the purpose of the IMCs.
3. Describe how the IPs are used during inspection.

TASKS:

1. Locate electronic versions of the IMCs and IPs at: <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/>.
2. Review the IMCs and IPs.
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.

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

DOCUMENTATION: Obtain your supervisor's signature in the line item for Qualification Journal Certification Signature Card Item ISA-19.

Materials Health Physics Inspector On-the-Job Activities

Materials Health Physics Inspector On-the-Job Activities

The on-the-job training (OJT) activities require you to conduct inspection-related work and materials license reviews under the supervision of a senior materials health physics inspector (senior inspector) or a senior materials license reviewer (senior license reviewer) respectively. The activities are designed to allow you to observe and perform key inspector and materials license reviewer (license reviewer) tasks. Like the ISAs, each of the OJT activities informs you why the activity is important, how much time you might need to complete the assignment, and what you are expected to complete successfully during the activity.

Note: Each of the OJTs for inspections requires a minimum number of accompaniments and inspections to complete the module.

However, your supervisor and any senior inspectors or license reviewers that have been working with you through your qualifications may design the OJTs to fit your circumstances (i.e. require additional inspections in order to demonstrate your competency).

Your supervisor has the authority to waive any of the OJTs by completing Form 1: Materials Health Physics Inspector Equivalency Justification.

Since each Region is organized differently, you may not need to complete all of the OJTs since some inspectors may not perform all categories of inspections. Your supervisor will need to document the reasons certain OJTs were not completed.

The Regions may not have every category of inspection discussed in the OJTs. In cases where there is not a certain category of licensee or very limited numbers such that it may not be possible for the candidate to complete the qualification journal in the two-year period, the supervisor may decide whether the certain category of inspection needs to be completed in order for the candidate to complete their qualification. If a supervisor decides to waive a certain category of inspection, the supervisor must document the reason for the waiver in the candidates file.

Each of the OJTs contains examples of the different categories of inspections that fall under the different Inspection Procedures. The different inspections identified in each of the OJTs are examples and may not capture every inspection performed in a certain category. The candidate's supervisor may identify additional inspections that the candidate must perform under each of the OJTs. In addition, the supervisor should consider any new technology or different modalities that may be developed and used following the publication of this qualification journal before the OJT is completed.

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

- ✓ Complete all parts of each activity.
- ✓ Your supervisor, a senior inspector, or a senior 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. Your supervisor will also designate senior inspectors to work with you as you complete the various activities.
- ✓ 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 supervisor, senior inspector or senior license reviewer for evaluation.

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-1) Industrial Radiography Programs

PURPOSE: The purpose of this activity is to provide you with the skills needed to perform an inspection of an industrial radiography licensee.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 72 hours

REFERENCES:

1. IP 87121, "Industrial Radiography Programs"
2. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
3. 10 CFR 34, "Licenses for Industrial Radiography and Radiation Safety Requirements for Industrial Radiographic Operations"
4. NUREG-1556, Vol. 2 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Industrial Radiography Licenses"

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

1. Describe the procedures for conducting an inspection of an industrial radiography licensee.
2. Describe how the inspector used the other reference documents to conduct the inspection.
3. Explain why/what type of potential violations were cited by the inspector.
4. Demonstrate competency in performing health and safety inspections.
5. Given a scenario, be able to describe what actions you would take in response to your observation of unsafe practices by the licensee.

TASKS:

1. Accompany a senior inspector on a minimum of one inspection of an industrial radiography licensee's home office, an inspection of a temporary job site, and an inspection of one permanent radiographic location.
2. Acting as the lead inspector, perform at least one industrial radiography inspection at a licensee's home office, a temporary job site, and one permanent radiographic location in the presence of a senior inspector.

NOTE: Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent inspections for industrial radiography licensees.

You are responsible for keeping track of the inspections that you conduct.

3. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
4. Review NMED for any recent events involving the licensee for any potential generic issues.
5. Locate and review the inspection procedures that will be used during the inspection.
6. Use the appropriate Inspection Procedure to conduct your inspection.
7. Become familiar with the scope of the inspection.
8. Participate in the Entrance/Exit Interviews with the licensee.
9. Become familiar with the documentation of inspection results discussed in IMC 2800.
10. Assist the senior inspector in developing the inspection report following the appropriate IMC.
11. 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 Qualification Journal Certification Signature Card Item OJT-1.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:

License Number:

Docket Number:

Accompaniment or Inspection:

Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-2) Irradiator Programs

PURPOSE: The purpose of this activity is to provide you with the skills needed to perform inspections on panoramic and self-contained dry storage irradiators.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 48 hours

REFERENCES:

1. IP 87122, "Irradiator Programs"
2. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
3. 10 CFR 36, "Licenses and Radiation Safety Requirements for Irradiators"
4. NUREG-1556, Vol. 6 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About 10 CFR 36 Irradiator Licenses"

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

1. Describe the procedures for conducting an inspection of a panoramic or self-contained dry storage irradiator.
2. Describe how the senior inspector used the other reference documents to conduct the inspection.
3. Explain why/what type of potential violations were cited by the senior inspector.
4. Demonstrate competency in performing health and safety inspections.
5. Given a scenario, be able to describe what actions you would take in response to your observation of unsafe practices by the licensee.

TASKS:

1. Accompany a senior inspector on a minimum of one panoramic irradiator and one self-contained dry storage irradiator.

2. Acting as the lead inspector, perform at least one panoramic irradiator and one self-contained dry storage irradiator in the presence of a senior inspector.

NOTE: Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent inspections for irradiator licensees.

You are responsible for keeping track of the inspections that you conduct.

3. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
4. Review NMED for any recent events involving the licensee for any potential generic issues.
5. Locate and review the inspection procedures that will be used during the inspection.
6. Use the appropriate Inspection Procedure to conduct your inspection.
7. Become familiar with the scope of the inspection.
8. Participate in the Entrance/Exit Interviews with the licensee.
9. Become familiar with the documentation of inspection results discussed in IMC 2800.
10. Assist the senior inspector in developing the inspection report following the appropriate IMC.
11. 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 Qualification Journal Certification Signature Card Item OJT-2.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:

License Number:

Docket Number:

Accompaniment or Inspection:

Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-3) Well Logging Programs

PURPOSE: The purpose of this activity is to provide you with the skills needed to perform an inspection of a well logging licensee.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 48 hours

REFERENCES:

1. IP 87123, "Well Logging Programs"
2. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
3. 10 CFR 39, "Licenses and Radiation Safety Requirements for Well Logging"
4. NUREG-1556, Vol. 14 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Well Logging, Tracer, and Field Flood Study Licenses"

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

1. Describe the procedures for conducting an inspection of a well logging licensee.
2. Describe how the senior inspector used the other reference documents to conduct the inspection.
3. Explain why/what type of potential violations were cited by the senior inspector.
4. Demonstrate competency in performing health and safety inspections.
5. Given a scenario, be able to describe what actions you would take in response to your observation of unsafe practices by the licensee.

TASKS:

1. Accompany a senior inspector on a minimum of one well logging inspection where the licensee uses sealed sources and one where the licensee uses tracer material.

2. Acting as the lead inspector, perform at least one well logging Inspection where the licensee uses sealed sources and one where the license uses tracer material.

NOTE:

Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent inspections for well logging licensees.

You are responsible for keeping track of the inspections that you conduct.

3. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
4. Review NMED for any recent events involving the licensee for any potential generic issues.
5. Locate and review the inspection procedures that will be used during the inspection.
6. Use the appropriate Inspection Procedure to conduct your inspection.
7. Become familiar with the scope of the inspection.
8. Participate in the Entrance/Exit Interviews with the licensee.
9. Become familiar with the documentation of inspection results discussed in IMC 2800.
10. Assist the senior inspector in developing the inspection report following the appropriate IMC.
11. 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 Qualification Journal Certification Signature Card Item OJT-3.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:

License Number:

Docket Number:

Accompaniment or Inspection:

Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-4) Fixed and Portable Gauge Programs

PURPOSE: The purpose of this activity is to provide you with the skills needed to perform inspections of fixed and portable gauges.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 36 hours

REFERENCES:

1. IP 87124, "Fixed and Portable Gauge Programs"
2. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
3. NUREG-1556, Vol. 1 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Portable Gauges"
4. NUREG-1556, Vol. 4 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Fixed Gauge Licensees"

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

1. Describe the procedures for conducting an inspection of fixed and portable gauge licensees.
2. Describe how the senior inspector used the other reference documents to conduct the inspection.
3. Explain why/what type of potential violations were cited by the senior inspector.
4. Demonstrate competency in performing health and safety inspections.
5. Given a scenario, be able to describe what actions you would take in response to your observation of unsafe practices by the licensee.

TASKS:

1. Accompany a senior inspector on a minimum of one fixed and one portable gauge inspection.

2. Acting as the lead inspector, perform at least one fixed gauge and one portable gauge inspection.

NOTE: Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent inspections for fixed and portable gauge licensees.

The candidate should note that you might encounter fixed gauges that are generally licensed while you are conducting inspections of fixed gauges that are specifically licensed.

You are responsible for keeping track of the inspections that you conduct.

3. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
4. Review NMED for any recent events involving the licensee for any potential generic issues.
5. Locate and review the inspection procedures that will be used during the inspection.
6. Use the appropriate Inspection Procedure to conduct your inspection.
7. Become familiar with the scope of the inspection.
8. Participate in the Entrance/Exit Interviews with the licensee.
9. Become familiar with the documentation of inspection results discussed in IMC 2800.
10. Assist the senior inspector in developing the inspection report following the appropriate IMC.
11. 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 Qualification Journal Certification Signature Card Item OJT-4.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:

License Number:

Docket Number:

Accompaniment or Inspection:

Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-5) Materials Processor/Manufacturer Programs

PURPOSE: The purpose of this activity is to provide you with the skills needed to perform inspections of materials processors and manufacturer programs.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 48 hours

- REFERENCES:**
1. IP 87125, "Materials Processor/Manufacturer Programs"
 2. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
 3. 10 CFR 32, "Specific Domestic Licenses to Manufacture or Transfer Certain Items Containing Byproduct Material"
 4. 10 CFR 33, "Specific Domestic Licenses of Broad Scope For Byproduct Material"
 5. NUREG-1556, Vol. 12 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Possession Licenses for Manufacturing and Distribution"

- EVALUATION CRITERIA:** Upon completion of the tasks, you should be able to do the following:
1. Describe the procedures for conducting an inspection of a materials processor/manufacturer.
 2. Describe how the senior inspector used the other reference documents to conduct the inspection.
 3. Explain why/what type of potential violations were cited by the senior inspector.
 4. Demonstrate competency in performing health and safety inspections.
 5. Given a scenario, be able to describe what actions you would take in response to your observation of unsafe practices by the licensee.

TASKS:

1. Accompany a senior inspector on a minimum of one materials processor and one manufacturer.
2. Acting as the lead inspector, perform at least one materials processor and one manufacturer inspection.

NOTE: Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent inspections of materials processors and manufacturers.

You are responsible for keeping track of the inspections that you conduct.

3. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
4. Review NMED for any recent events involving the licensee for any potential generic issues.
5. Locate and review the inspection procedures that will be used during the inspection.
6. Use the appropriate Inspection Procedure to conduct your inspection.
7. Become familiar with the scope of the inspection.
8. Participate in the Entrance/Exit Interviews with the licensee.
9. Become familiar with documentation of inspection results discussed in IMC 2800.
10. Assist the senior inspector in developing the inspection report following the appropriate IMC.
11. 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 Qualification Journal Certification Signature Card Item OJT-5.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:

License Number:

Docket Number:

Accompaniment or Inspection:

Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-6) Industrial/Academic/Research Programs

PURPOSE: The purpose of this activity is to provide you with the skills needed to perform inspections of non-medical broad scope programs and limited scope programs. This OJT is used for licensee inspections when other programs do not apply.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 48 hours

REFERENCES:

1. IP 87126, "Industrial/Academic/Research Programs"
2. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
3. NUREG-1556, Vol. 7 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope Including Gas Chromatographs and X-Ray Fluorescence Analyzers"
4. NUREG-1556, Vol. 11 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Licenses of Broad Scope"

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

1. Describe the procedures for conducting an inspection of a non-medical broad scope licensee.
2. Describe how the senior inspector used the other reference documents to conduct the inspection.
3. Explain why/what type of potential violations were cited by the senior inspector.
4. Demonstrate competency in performing health and safety inspections.
5. Given a scenario, be able to describe what actions you would take in response to your observation of unsafe practices by the licensee.

TASKS:

1. Accompany a senior inspector on a minimum of one non-medical broad scope inspection, one limited scope program, and other inspections as assigned by your supervisor.
2. Acting as the lead inspector, perform at least one non-medical broad scope inspection, limited scope program, and other inspections as assigned by your supervisor.

NOTE: Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent inspections of non-medical broad scope licensees.

You are responsible for keeping track of the inspections that you conduct.

3. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
4. Review NMED for any recent events involving the licensee for any potential generic issues.
5. Locate and review the inspection procedures that will be used during the inspection.
6. Use the appropriate Inspection Procedure to conduct your inspection.
7. Become familiar with the scope of the inspection.
8. Participate in the Entrance/Exit Interviews with the licensee.
9. Become familiar with the documentation of inspection results discussed in IMC 2800.
10. Assist the senior inspector in developing the inspection report following the appropriate IMC.
11. 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 Qualification Journal Certification Signature Card Item OJT-6.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:

License Number:

Docket Number:

Accompaniment or Inspection:

Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-7) Radiopharmacy Programs

PURPOSE: The purpose of this activity is to provide you with the skills needed to perform inspections of radiopharmacy programs.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 36 hours

REFERENCES:

1. IP 87127, "Radiopharmacy Programs"
2. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
3. 10 CFR 31, "General Domestic Licenses for Byproduct Material"
4. 10 CFR 32, "Specific Domestic Licenses to Manufacturer or Transfer Certain Items Containing Byproduct Material"
5. NUREG-1556, Vol. 13 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Commercial Radiopharmacy Licenses"
6. NUREG-1556, Vol. 21 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Possession Licenses for Production of Radioactive Material Using an Accelerator"

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

1. Describe the procedures for conducting an inspection of a radiopharmacy licensee.
2. Describe how the senior inspector used the other reference documents to conduct the inspection.
3. Explain why/what type of potential violations were cited by the senior inspector.
4. Demonstrate competency in performing health and safety inspections.

5. Given a scenario, be able to describe what actions you would take in response to your observation of unsafe practices by the licensee.

TASKS:

1. Accompany a senior inspector on a minimum of one radiopharmacy inspection.
2. Acting as the lead inspector, perform at least one radiopharmacy inspection.

NOTE: Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent inspections of radiopharmacy licensees.

You are responsible for keeping track of the inspections that you conduct.

3. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
4. Review NMED for any recent events involving the licensee for any potential generic issues.
5. Locate and review the inspection procedures that will be used during the inspection.
6. Use the appropriate Inspection Procedure to conduct your inspection.
7. Become familiar with the scope of the inspection.
8. Participate in the Entrance/Exit Interviews with the licensee.
9. Become familiar with the documentation of inspection results discussed in IMC 2800.
10. Assist the senior inspector in developing the inspection report following the appropriate IMC.
11. 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 Qualification Journal Certification Signature Card Item OJT-7.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:

License Number:

Docket Number:

Accompaniment or Inspection:

Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-8) Nuclear Medicine Programs

PURPOSE: The purpose of this activity is to provide you with the skills needed to perform inspections of nuclear medicine programs, small hospitals, private practices, and limited scope programs.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 48 hours

- REFERENCES:**
1. IP 87130, "Nuclear Medicine Programs, Written Directive Not Required"
 2. IP 87131, "Nuclear Medicine Programs, Written Directive Required"
 3. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
 4. 10 CFR 35, "Medical Use of Byproduct Material"
 5. NUREG-1556, Vol. 9 "Consolidated Guidance About Materials Licenses: Program - Specific Guidance About Medical Use Licenses"

- EVALUATION CRITERIA:** Upon completion of the tasks, you should be able to do the following:
1. Describe the procedures for conducting an inspection of nuclear medicine program licensees.
 2. Describe how the senior inspector used the other reference documents to conduct the inspection.
 3. Explain why/what type of potential violations were cited by the senior inspector.
 4. Demonstrate competency in performing health and safety inspections.
 5. Given a scenario, be able to describe what actions you would take in response to your observation of unsafe practices by the licensee.

TASKS:

1. Accompany a senior inspector on a minimum of one inspection of a nuclear medicine program that does not require a written directive, one that requires a written directive, a small hospital, a private practice, a limited scope program, and other types of inspections deemed necessary by your supervisor.
2. Acting as the lead inspector, perform inspections on at least one nuclear medicine program that does not require a written directive, one that requires a written directive, a small hospital, a private practice, a limited scope program, and other types of inspections deemed necessary by your supervisor.

NOTE: Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent inspections of nuclear medicine licensees.

You are responsible for keeping track of the inspections that you conduct.

3. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
4. Review NMED for any recent events involving the licensee for any potential generic issues.
5. Locate and review the inspection procedures that will be used during the inspection.
6. Use the appropriate Inspection Procedure to conduct your inspection.
7. Become familiar with the scope of the inspection.
8. Participate in the Entrance/Exit Interviews with the licensee.
9. Become familiar with the documentation of inspection results discussed in IMC 2800.
10. Assist the senior inspector in developing the inspection report following the appropriate IMC.
11. 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 Qualification Journal Certification Signature Card Item OJT-8.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:
License Number:
Docket Number:
Accompaniment or Inspection:
Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-9) Brachytherapy Programs

PURPOSE: The purpose of this activity is to provide you with the skills needed to perform inspections of brachytherapy programs.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 60 hours

REFERENCES:

1. IP 87132, "Brachytherapy Programs"
2. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
3. 10 CFR 35, "Medical Use of Byproduct Material"
4. NUREG-1556, Vol. 9 "Consolidated Guidance About Materials Licenses: Program - Specific Guidance About Medical Use Licenses"

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

1. Describe the procedures for conducting an inspection of a brachytherapy licensee.
2. Describe how the senior inspector used the other reference documents to conduct the inspection.
3. Explain why/what type of potential violations were cited by the senior inspector.
4. Demonstrate competency in performing health and safety inspections.
5. Given a scenario, be able to describe what actions you would take in response to your observation of unsafe practices by the licensee.

TASKS:

1. Accompany a senior inspector on a minimum of one manual brachytherapy inspection, remote afterloading brachytherapy device inspection, and other types of inspections as deemed necessary by your supervisor.

2. Acting as the lead inspector, perform at least one manual brachytherapy inspection, one remote afterloading brachytherapy device inspection, and other types of inspections as deemed necessary by your supervisor.

NOTE: Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent inspections of brachytherapy licensees.

You are responsible for keeping track of the inspections that you conduct.

3. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
4. Review NMED for any recent events involving the licensee for any potential generic issues.
5. Locate and review the inspection procedures that will be used during the inspection.
6. Use the appropriate Inspection Procedure to conduct your inspection.
7. Become familiar with the scope of the inspection.
8. Participate in the Entrance/Exit Interviews with the licensee.
9. Become familiar with the documentation of inspection results discussed in IMC 2800.
10. Assist the senior inspector in developing the inspection report following the appropriate IMC.
11. 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 Qualification Journal Certification Signature Card Item OJT-9.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:

License Number:

Docket Number:

Accompaniment or Inspection:

Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-10) Medical Gamma Stereotactic Radiosurgery and Teletherapy Programs

PURPOSE: The purpose of this activity is to provide you with the skills needed to perform inspections of medical gamma stereotactic radiosurgery and teletherapy programs.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 60 hours

REFERENCES:

1. IP 87133, "Medical Gamma Stereotactic Radiosurgery and Teletherapy Programs"
2. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
3. 10 CFR 35, "Medical Use of Byproduct Material"
4. NUREG-1556, Vol. 9 "Consolidated Guidance About Materials Licenses: Program - Specific Guidance About Medical Use Licenses"

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

1. Describe the procedures for conducting an inspection of a medical gamma stereotactic radiosurgery and teletherapy licensee.
2. Describe how the senior inspector used the other reference documents to conduct the inspection.
3. Explain why/what type of potential violations were cited by the senior inspector.
4. Demonstrate competency in performing health and safety inspections.
5. Given a scenario, be able to describe what actions you would take in response to your observation of unsafe practices by the licensee.

TASKS:

1. Accompany a senior inspector on a minimum of an inspection of one gamma knife and one teletherapy unit.
2. Acting as the lead inspector, perform at least one inspection of a gamma knife and one inspection of a teletherapy unit.

NOTE: Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent inspections for medical gamma stereotactic radiosurgery and teletherapy licensees.

You are responsible for keeping track of the inspections that you conduct.

3. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
4. Review NMED for any recent events involving the licensee for any potential generic issues.
5. Locate and review the inspection procedures that will be used during the inspection.
6. Use the appropriate Inspection Procedure to conduct your inspection.
7. Become familiar with the scope of the inspection.
8. Participate in the Entrance/Exit Interviews with the licensee.
9. Become familiar with the documentation of inspection results discussed in IMC 2800.
10. Assist the senior inspector in developing the inspection report following the appropriate IMC.
11. 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 Qualification Journal Certification Signature Card Item OJT-10.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:

License Number:

Docket Number:

Accompaniment or Inspection:

Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-11) Medical Broad-Scope Programs

PURPOSE: The purpose of this activity is to provide you with the skills needed to perform inspections of medical broad-scope programs.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 48 hours

- REFERENCES:**
1. IP 87134, "Medical Broad-Scope Programs"
 2. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
 3. 10 CFR 35, "Medical Use of Byproduct Material"
 4. NUREG-1556, Vol. 9 "Consolidated Guidance About Materials Licenses: Program - Specific Guidance About Medical Use Licenses"
 5. NUREG-1556, Vol. 11 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Licenses of Broad Scope"

- EVALUATION CRITERIA:** Upon completion of the tasks, you should be able to do the following:
1. Describe the procedures for conducting an inspection of a Medical broad-scope licensee.
 2. Describe how the senior inspector used the other reference documents to conduct the inspection.
 3. Explain why/what type of potential violations were cited by the senior inspector.
 4. Demonstrate competency in performing health and safety inspections.
 5. Given a scenario, be able to describe what actions you would take in response to your observation of unsafe practices by the licensee.

TASKS:

1. Accompany a senior inspector on a minimum of one medical broad-scope inspection.
2. Acting as the lead inspector, perform at least one medical broad scope inspection.

NOTE: Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent inspections of medical broad-scope licensees.

You are responsible for keeping track of the inspections that you conduct.

3. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
4. Review NMED for any recent events involving the licensee for any potential generic issues.
5. Locate and review the inspection procedures that will be used during the inspection.
6. Use the appropriate Inspection Procedure to conduct your inspection.
7. Become familiar with the scope of the inspection.
8. Participate in the Entrance/Exit Interviews with the licensee.
9. Become familiar with the documentation of inspection results discussed in IMC 2800.
10. Assist the senior inspector in developing the inspection report following the appropriate IMC.
11. 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 Qualification Journal Certification Signature Card Item OJT-11.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:

License Number:

Docket Number:

Accompaniment or Inspection:

Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-12) Security Inspection Program

PURPOSE: The purpose of this activity is to familiarize you with the pre-licensing guidance, security requirements imposed on certain licensees possessing International Atomic Energy Agency Category 1 and Category 2 radioactive materials, and provide you with the opportunity to accompany and conduct security inspections under a senior inspector.

COMPETENCY AREAS: INSPECTION

LEVEL OF EFFORT: 36 hours

- REFERENCES:**
1. Licensee radioactive materials possession license
 2. Appropriate IMCs and IPs
 3. Previous inspection report
 4. Security Orders
 5. Pre-Licensing Guidance
 6. 10 CFR 37
 7. Panoramic and Underwater Irradiator Orders
 8. Inspection Procedure (IP) 87135, "Panoramic and Underwater Irradiator Security Program"
 9. Manufacturers and Distributors (M&D) Orders
 10. IP 87136, "Manufacturing and Distribution (M&D) Security Program"
 11. Transportation of Radioactive Materials Quantities of Concern (RAMQC) Orders
 12. IP 81120, "Inspection Requirement and Guidance for Additional Security Measures for the Physical Protection in Transit for Radioactive Material Quantities of Concern"
 13. Increased Controls (IC) Orders

14. Temporary Instruction (TI) 2800/038, “Inspection of the Implementation of the Increased Controls for Licensees Authorized to Possess Risk Significant Radioactive Material” –

NOTE: As of the date of the publication of this document the NRC is developing 10 CFR Part 37 for materials security. When Part 37 is finalized, it will supersede the Orders that were issued to enhance materials security. When Part 37 is finalized, you should begin to use the new regulations as a reference. This change will be reflected in a future revision to this document.

IP 81120 has been designated as containing “Safeguards Information – Modified Handling” and is therefore not available to the public.

Use the Inspection Procedures or Temporary Instruction referenced above until they have been superseded.

**EVALUATION
CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of the pre-licensing visits and security inspections by doing the following:

1. Describe what an inspector should look for when conducting a pre-licensing visit.
2. Describe the procedures for conducting security inspections
3. Describe how the senior inspector used the other reference documents to conduct the inspection.
4. Explain why/what type of potential violations were cited by the senior inspector.
5. Demonstrate competency in performing security inspections.
6. Given a scenario, be able to describe what actions you would take in response to your observation of potential security gaps at a licensee’s facility.

TASKS:

1. Accompany a senior inspector on a minimum of three security inspections of licensees possessing Category 1 or Category 2 radioactive material. If possible, at least one inspection should be of a panoramic or underwater irradiator, manufacturer or distributor (M&D), or of a licensee who ships Category 1 radioactive materials.

2. Acting as the lead inspector, perform at least three security inspections of licensees possessing Category 1 or Category 2 radioactive material. If possible, at least one inspection should be of a panoramic or underwater irradiator, M&D, or of a licensee who ships Category 1 radioactive materials.
3. Accompany a senior inspector on a minimum of two pre-licensing visits. The visits should include a new applicant for radioactive materials and of a licensee seeking an amendment to expand their possession limits to include Category 1 or Category 2 radioactive materials.
4. Acting as the lead inspector, perform at least two pre-licensing visits. The visits should include a new applicant for radioactive materials and of a licensee seeking an amendment to expand their possession limits to include Category 1 or Category 2 radioactive materials.

NOTE: Your supervisor and accompanying senior inspector will decide when you have demonstrated sufficient competency to recommend you for interim qualification status to perform independent pre-licensing visits and security inspections.

You are responsible for keeping track of the inspections that you conducted.

5. You will help in the inspection preparation activities (i.e. collect background information as necessary; identify any follow-up that may be required from previous inspections, or allegations).
6. Locate and review the inspection procedures that will be used during the inspection.
7. Use the appropriate Inspection Procedure to conduct your inspection.
8. Become familiar with the scope of the inspection.
9. Participate in the Entrance/Exit Interviews with the licensee.
10. Become familiar with the how inspections for the security requirements are documented.
11. Assist the senior inspector in developing the inspection report.
12. 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 Qualification Journal Certification Signature Card Item OJT-12.

INSPECTIONS: Complete the following Licensee and Inspection Information for each inspection:

Licensee Name:

License Number:

Docket Number:

Accompaniment or Inspection:

Date(s):

Materials Health Physics Inspector On-the-Job Activity

TOPIC: (OJT-13) Licensing Case Work

PURPOSE: The purpose of this activity is to (1) acquaint you with the NRC licensing process and the different types of materials users, (2) provide you with the opportunity as an inspector in training to review completed NRC licensing actions, and (3) to provide you with the opportunity to perform simulated license reviews in order to become familiar with the information that licenses contain.

COMPETENCY

AREAS: LICENSING ACTIVITIES
INSPECTION

LEVEL OF

EFFORT: 150 hours

- REFERENCES:**
1. NUREG-1556 Series, "Consolidated Guidance About Materials Licenses"
 2. Sealed Source and Device Registry:
<http://nrc-stp.ornl.gov/ssdr.html>
 3. Licensing Toolkits:
<http://www.internal.nrc.gov/FSME/OpE/>

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

EVALUATION

CRITERIA: Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process, distinguish between the different types of licenses issued by the NRC (i.e. Broad Scope, M&D, Industrial Radiography), demonstrate your ability to review applications and submit request for additional information, and be able to discuss how a materials license affects the inspection:

1. Discuss the NRC's licensing process (i.e. what type of licenses should be issued for specific programs, discuss the internal NRC process from receiving an application, amendment, renewal, or termination, internal metrics for issuing licensing actions).
2. Discuss the licensing actions that you reviewed regarding the applicant /licensee's request as well as the request for additional information if necessary.

3. Describe how and in what instances you used the Pre-Licensing Guidance.
4. Discuss if any of the licensing actions required the licensee/applicant to implement the security requirements. How did you determine if they needed to implement the requirements?
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.

TASKS:

1. At a minimum you should work on
 - a. Two new applications or renewals;
 - b. Two license amendments;
 - c. Two licensing actions that require the implementation of security requirements; and
 - d. Two licensing actions that require the use of the pre-licensing guidance checklist.

You are responsible for reviewing the licensing actions and developing simulated requests for additional information as necessary. The trainee should use the NUREG-1556 guidance documents as a reference as well as the senior license reviewer designated by your supervisor to be your resource during your training.

NOTE: An individual who has already completed the requirements for the Materials License Reviewer/or is currently a qualified Materials License Reviewer may take credit for the training or the experience that they have had as a license reviewer as long as they have met the above minimum criteria.

You are responsible for keeping track of the licensing actions that you have worked on.

2. Visit the Sealed Source and Device Registry at: <http://nrc-stp.ornl.gov/ssdr.html> and follow the instructions on how to obtain a login and password. Familiarize yourself with the registry and the information it contains.
3. Visit the FSME Materials OpE Gateway at: <http://www.internal.nrc.gov/FSME/OpE/> under the Materials Groups tab to familiarize yourself with the different toolkits.

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.

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

DOCUMENTATION: Obtain your supervisor's signature in the line item for Qualification Journal Certification Signature Card Item OJT-13.

LICENSING ACTIONS: Complete the following Licensee Information for each licensing casework:

Licensee Name:
License Number:
Docket Number:
Mail Control Number:

Materials Health Physics 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 USNRC 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: Master 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)
- Evaluate a licensing information by conducting an objective review (Licensing Activities)
- Determining acceptability of information by comparing to established criteria (Inspection and Licensing Activities)
- Objectively analyzing and integrating information using a safety 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:

- Clearly expressing ideas or thoughts, carefully listening, and speaking and writing with appropriate safety focus and context (Communication)
- Working collaboratively with others toward common objectives (Teamwork)
- Working independently, exercising judgment, and exhibiting flexibility

¹ Specific competency areas are listed in parenthesis following each item

in the completion of activities including during difficult or challenging situations (Self-Management)

- Using technology to locate, gather, manipulate, and share information (Information Technology)

<i>Materials Health Physics Inspector's Name:</i> _____	<i>Employee Initials/Date</i>	<i>Supervisor's Signature/Date</i>
ISA-16 Materials Security		
ISA-17 Review of Significant Events at Material Licensees		
ISA-18 Generally Licensed Devices		
ISA-19 NRC Inspection Manual Chapters (IMC) and Inspection Procedures (IP)		
C. On-the-Job Training Activities		
OJT-1 Industrial Radiography Programs		
OJT-2 Irradiator Programs		
OJT-3 Well Logging Programs		
OJT-4 Fixed and Portable Gauge Programs		
OJT-5 Materials Processor/Manufacturer Programs		
OJT-6 Industrial/Academic/Research Programs		
OJT-7 Radiopharmacy Programs		
OJT-8 Nuclear Medicine Programs		
OJT-9 Brachytherapy Programs		
OJT-10 Medical Gamma Stereotactic Radiosurgery and Teletherapy Programs		
OJT-11 Medical Broad-Scope Programs		
OJT-12 Security Inspection Accompaniments		
OJT-13 Licensing Case Work		

This signature card and certification must be accompanied by the appropriate Form 1, Materials Health Physics Inspector Equivalency Justification, if applicable.

Materials Health Physics Inspector Certification

(name)

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

MATERIALS HEALTH PHYSICS INSPECTOR

Supervisor Signature _____
Date: _____

Form 1: Materials Health Physics Inspector Equivalency Justification

Materials Health Physics Inspector Inspector's Name: _____	Identify equivalent training and experience for which the materials health physics inspector is to be given credit.
ISA-13 Differing Views Programs	
ISA-14 Overview of Title 10 of the Code of Federal Regulations	
ISA-15 Agencywide Documents Access and Management System (ADAMS)	
ISA-16 Materials Security	
ISA-17 Review of Significant Events at Material Licensees	
ISA-18 Generally Licensed Devices	
ISA-19 NRC Inspection Manual Chapters (IMC) and Inspection Procedures (IP)	
C. On-the-Job Training Activities	
OJT-1 Industrial Radiography Programs	
OJT-2 Irradiator Programs	
OJT-3 Well Logging Programs	
OJT-4 Fixed and Portable Gauge Programs	
OJT-5 Materials Processor/Manufacturer Programs	
OJT-6 Industrial/Academic/Research Programs	
OJT-7 Radiopharmacy Programs	
OJT-8 Nuclear Medicine Programs	
OJT-9 Brachytherapy Programs	
OJT-10 Medical Gamma Stereotactic Radiosurgery and Teletherapy Programs	
OJT-11 Medical Broad-Scope Programs	
OJT-12 Security Inspection Accompaniments	
OJT-13 Licensing Case Work	

Supervisor's Recommendation Signature/Date _____

Division Director's Approval Signature/Date _____

Revision History Sheet for IMC 1248, Appendix B

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number