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NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

(FSME-11-046, May, Program, Environmental Management Programs)

May 27, 2011

ALL AGREEMENT STATES, MICHIGAN

**OPPORTUNITY TO PROVIDE COMMENT ON INSPECTION MANUAL CHAPTER 1 248  
“QUALIFICATION PROGRAMS FOR OFFICE OF FEDERAL AND STATE MATERIALS AND  
ENVIRONMENTAL MANAGEMENT PROGRAMS” AND QUALIFICATION JOURNALS FOR  
MATERIALS LICENSE REVIEWERS AND MATERIALS HEALTH PHYSICS INSPECTORS  
(FSME-11-046)**

**Purpose:** To provide the Agreement States with the opportunity to comment\* on the Office of Federal and State Materials and Environmental Management Program’s (FSME) Inspection Manual Chapter (IMC) 1248 and qualification journals for Materials License Reviewers (license reviewers) and Materials Health Physics Inspectors (inspectors).

**Background:** The current qualification journals were published in January 2001 and are under IMC 1246. There have been many changes in the materials program since 2001, including the creation of FSME. The Nuclear Regulatory Commission (NRC) established a working group in accordance with [Management Directive 5.3](#), “Agreement State Participation in Working Groups,” to assess and revise the qualification requirements in IMC 1246 for license reviewers and inspectors within FSME’s program. The IMC 1246 Working Group has drafted a new IMC and qualification journals for license reviewers and inspectors to reflect changes since the last publication of the IMC and qualification journals. The working group has developed Individual Study Activities (ISAs) and On-the-Job Training (OJT) qualification cards to provide more focused training. The working group has also incorporated recommendations made by the Independent External Review Panel (IERP) and the Materials Program Working Group (MPWG) on incorporating security into licensing and inspection training.

**Discussion:** In October 2006, FSME was created in a reorganization of the NRC. As a result of that reorganization the qualification journals related to the materials program currently found under IMC 1246, will be separated from the Office of Nuclear Material Safety and Safeguards qualification journals, and consolidated under a new inspection manual chapter. Once completed the qualification journals will fall under IMC 1248, this number assigned to FSME for its formal qualification program.

The draft IMC 1248 and qualification journals have been submitted to the Standing Committee for Compatibility. The committee will determine the compatibility between the NRC and the Agreement States as a written procedure under the Technical Staffing and Training program element. Technical Staffing and Training is a Compatibility Category C. If the committee determines that the revised qualification journals continue to be a matter of compatibility

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\* This information request has been approved by OMB 3150-0029 expiration 11/30/2013. The estimated burden per response to comply with this voluntary collection is approximately 8 hours. Send comments regarding the burden estimate to the Records and FOIA/Privacy Services Branch (T-5F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to [infocollects@nrc.gov](mailto:infocollects@nrc.gov), and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202 (3150-0029), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

then the Agreement States should implement the revised journals within six (6) months of NRC's implementation in accordance with [Management Directive 5.9](#) "Adequacy and Compatibility of Agreement State Programs." Integrated Materials Performance Evaluation Program (IMPEP) teams will incorporate review of the manual chapter and qualification journals after the six month implementation period. The changes to the manual chapter and qualification journals are not meant to supersede the "NRC/OAS Training Working Group Recommendations for Agreement State Training Programs" report dated October 1997 but to update the qualification journals and to provide security concepts to license reviewers and inspectors.

This letter encloses drafts of IMC 1248 and the qualification journals for materials license reviewers and health physics inspectors. If you wish to make detailed written comments, please send them to the points of contact listed below. The working group asks that comments be limited to the framework and concept of the training instead of requests for the NRC to reinstitute the 5-Week Health Physics course. The IMC 1246 Working Group is still developing its recommendation on the 5-Week Health Physics course. **We request a written response within 45-days from the date of this of this letter.** We look forward to receiving your input.

**NRC Point of Contact:** If you have any questions on this correspondence, please contact me at 301-415-3340 or the individuals named below.

POINT OF CONTACT: Jack Foster  
TELEPHONE: (301) 415-6250

INTERNET: [Jack.Foster@nrc.gov](mailto:Jack.Foster@nrc.gov)  
FAX: (301) 415-5955

POINT OF CONTACT: Tomas Herrera  
TELEPHONE: (301) 415-7138

INTERNET: [Tomas.Herrera@nrc.gov](mailto:Tomas.Herrera@nrc.gov)  
FAX: (301) 415-5955

**/RA/**

Terrence Reis, Acting Director  
Division of Materials Safety and State Agreements  
Office of Federal and State Materials  
and Environmental Management Programs

Enclosures:

1. IMC 1248, "Qualification Programs for Federal and State Materials and Environmental Management Programs"
2. Appendix A, "Materials License Reviewer Qualification Journal"
3. Appendix B, "Materials Health Physics Inspector Qualification Journal"

# **NRC INSPECTION MANUAL**

FSME

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## **MANUAL CHAPTER 1248**

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**QUALIFICATION PROGRAMS FOR FEDERAL AND STATE MATERIALS AND  
ENVIRONMENTAL MANAGEMENT PROGRAMS**

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## 1248-01 PURPOSE

01.01 To define training and qualification requirements for personnel in the Federal and State Materials and Environmental Management Programs (FSME) programs.

01.02 To establish the requirements for maintaining qualification.

## 1248-02 OBJECTIVES

02.01 To ensure that FSME program personnel meet minimum knowledge and qualification standards.

02.02 To provide standardized methodology for determining that FSME program personnel has met the minimum knowledge and qualification requirements.

## 1248-03 DEFINITIONS

03.01 Equivalency Examination. An examination administered through the Human Resources Training and Development (HRTD) organization or designated Nuclear Regulatory Commission (NRC) staff, in lieu of specific course attendance.

03.02 Inspector, License Reviewer, Project Manager, or Technical Reviewer Qualification. A certification by the Regional Administrator or Office Director, the basis of which is a recommendation by the qualification board. Inspector, License Reviewer, Project Manager, and Technical Reviewer are titles indicating that an individual has completed one of the "Qualification Journals" in the appendices to this chapter. Completing a qualification allows an individual to be assigned the full scope of FSME program activities in their specific discipline. The assigned tasks are performed independently performed with routine oversight and supervision. The Regional Administrator or Office Director certifies individuals based on the recommendation from the individuals board.

03.03 Candidate. A staff member who is working to complete one of the qualification journals in this chapter.

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

03.05 Discipline. A specific qualification (e.g. Materials License Reviewer) being sought by a candidate.

03.06 Required Core Training Courses. Minimum classroom training required for candidates seeking qualification.

03.07 Required Online Training Courses. Minimum online training required for candidates seeking qualification.

03.08 Specialized Training Courses. Additional training courses beyond the Required Core Training Courses. The candidate's supervisor determines additional training requirements depending on the candidate's previous work experience and planned activities.

03.09 Individual Study Activity (ISA). A training method candidates use to perform a self-study of certain topics in a specific discipline.

03.10 On-the-job Training (OJT). A training method using structured hands-on activities to develop the required job-related knowledge and skills.

03.11 Refresher Training. Additional training required after qualification which allows a staff member to maintain a "qualified" status.

03.12 Qualification Journal. A document used by a candidate to record completion of the minimum training requirements for qualification in a discipline.

03.13 Qualification Board. A board established to assess the qualifications of a candidate to conduct the prescribed FSME program activities. The board membership consists of regional or program office personnel.

03.14 Qualified Staff. A staff member who has successfully completed a qualification journal from this chapter and passed the qualification board.

#### 1248-04 RESPONSIBILITIES AND AUTHORITIES

04.01 Chief Learning Officer (CLO) for Human Resources Training and Development, Office of Human Resources (or designee). Administers and implements the training programs for the FSME program. Provides the HRTD training courses required in the Qualification Journals found in the Appendices to this chapter.

04.02 Director, Office of Federal and State Materials and Environmental Management Programs (or designee). Establishes the training requirements needed for FSME program personnel to perform independent FSME program activities. Ensures that appropriate headquarters staff maintains qualifications in accordance with the guidelines provided in this chapter. Develops and implements procedures for FSME staff. Certifies that identified FSME staff are qualified under this chapter.

04.03 Regional Administrator (or designee). Ensures that regional candidates achieve and qualified staff members maintain qualifications in accordance with the guidelines

provided in this chapter. Develops and implements procedures for regional staff. Certifies that regional staff is qualified under this chapter.

04.04 Directors, FSME and Regional Divisions (or designee). Assist the appropriate HRTD staff in developing, monitoring and reviewing classroom training for the FSME qualification program. Identify and document in a candidate's Qualification Journal, Specialized Training Courses necessary to supplement Required Core Training Courses.

## 1248-05 BASIC REQUIREMENTS

FSME program personnel must understand the facilities, equipment, processes, and activities of the programs they inspect, license, oversee, or review, as well as the criteria, techniques, and mechanics of the specific discipline. The qualification process provides candidates with sufficient information to perform a specific discipline in the FSME program that is technically correct and in accordance with NRC regulations, policies, and procedures.

FSME personnel assigned to positions that require specific discipline qualifications must successfully complete the appropriate qualification journal(s) found in the appendices to this document. In addition to the requirements of this chapter, other training may be necessary to supplement or enhance the development of the candidate.

The Qualification Journal(s) in the appendices to this chapter specify the minimum qualification requirements for the specific disciplines in FSME's program. Regions and Headquarters Offices may customize specific Qualification Journals to add other requirements as appropriate. Before customizing a specific Qualification Journal the supervisor must consider whether the change is needed in order for the candidate to perform their assigned function. Any customization must be documented to include the reason for the change. Both the candidate and their supervisor must agree to any changes to the Qualification Journals.

Upon completion of the training identified in the Qualification Journal, the qualification board evaluates the candidate's understanding of the material. Qualification boards will be convened using the guidance in Section 1248-08.

In situations where qualification is delayed as a result of the unavailability of required classroom training, or for other compelling reasons, the Regional Administrator (or designee) or Office Director (or designee) may provide the candidate written interim qualification under the provisions of Section 1248-09 for those categories in which the candidate is considered qualified.

A candidate that changes disciplines must meet or complete the requirements for the new discipline. In such cases, the candidate need not repeat previous equivalent training requirements in common between the two disciplines. The current qualification journals shall indicate credit for similar training taken previously.

Special circumstances (e.g., budget reductions, delays in establishing replacement contracts, or unavailability of critical instructors) may result in the temporary unavailability of courses required for qualification. In this case, the appropriate HRTD staff will communicate with the cognizant FSME or Regional Division Directors explaining the situation. This does not remove the candidate's requirement to attend the course(s). The candidate's schedule will be adjusted as appropriate to allow and require the candidate to attend the required training when available.

Temporary Instructions (TIs) or Policy and Procedures (P&Ps) that focus on a specific discipline may require special training before personnel perform specific job functions. The FSME program division responsible for preparing the TI or P&Ps shall identify these special training requirements, and communicate the training needs to the appropriate HRTD staff as necessary. The schedule for special training should allow enough time for the FSME division to prepare the required training course and implement it in coordination with HRTD, before inspection or licensing is performed using the TI or P&Ps.

Exemption from specific requirements may be granted in accordance with Section 1248-11 of this chapter.

## 1248-06 TRAINING ACTIVITIES

06.01 Candidates assigned to the FSME program must successfully complete the requirements in the Qualification Journal.

a. Written examinations for designated courses evaluate the candidate's understanding of the material. The passing grade for most examinations is 70 percent.

b. Not all courses have examinations. In these cases, satisfactory course completion requires attendance and completion of class activities. For incomplete attendance, satisfactory course completion requires determination on a case-by-case basis according with established HRTD policy.

c. Candidates or qualified staff, taking refresher training, who fail examinations may be given the opportunity to review the material through self-study and may then be reexamined. If deemed desirable, candidates or qualified staff who do not complete the course or fail the courses examination may repeat the course in accordance with established HRTD policy. The staff member's direct supervisor and HRTD staff will determine of whether the staff member can review the material through self-study and



then retake the exam, if there is one associated with the course, or if the staff member must repeat the entire course.

d. HRTD staff will document the completion of classroom training in iLearn.

#### 1248-07 QUALIFICATION JOURNAL COMPLETION

07.01 The qualification journals contain a detailed series of activities and study areas. The candidate will complete the activities in the qualification journals within a specific period, usually in the first two (2) years after the assignment. If candidates need more time to complete their qualification journal, an extension may be granted management. The justification and approval for the extension must be documented in the candidate's training record.

07.02 Supervisors may designate a senior staff member to sign and certify the signature (qualification) cards for the training activities completed by the candidate.

#### 1248-08 QUALIFICATION BOARD

08.01 Final Qualification Activity. A candidate must be recommended by a qualification board and certified by a Regional Administrator, Office Director, or designee, to be qualified.

- a. Qualification Board. The qualification board evaluates how well a candidate can integrate and apply the specific qualification competencies to real-life scenarios. Upon completion of all requirements identified in the candidate's qualification journals, a qualification board will confirm that the candidate has the necessary competencies to independently conduct the prescribed FSME program responsibilities in the candidate's specific discipline. The list of assessed by the qualification board is contained in the appendices to this chapter.
  1. Members. A qualification board consists of at least three members. The board should contain a cross-section of knowledgeable staff ranging from a peer to a Division Director. Each board shall contain a manager of at least the Branch Chief level. The board chairperson shall be at the Branch Chief level as a minimum but cannot be the candidate's immediate supervisor.
  2. Board Conduct.
    - (a) The board chairperson assigns topics for questioning to each of the board members to ensure that the questioning will address the competencies requiring verification by the board. Prior to the qualification board, the board members coordinate questions or scenarios to ensure the competencies are covered.
    - (b) Specific questions can be selected from those used in previous qualification boards or new questions can be written. Each question

must relate to at least one of the competencies to be verified by the board. Questions should be “open-ended” to allow and encourage the candidate to provide answers that demonstrate competency of NRC policy and philosophy, as they relate to the licensee and in particular to the implementation of the FSME programs.

- (c) Technical questions should be limited in number, pertain to the discipline in which qualification is being sought, and should not be the primary focus of the board’s assessment. Technically based scenarios and examples can be used to determine how well a candidate can translate their technical knowledge into appropriate inspector actions. However, questioning merely to determine if a candidate can recall specific technical facts should be minimized.
  - (d) The board typically requires about two (2) hours to complete its assessment, but the time may vary based on the individual board and the candidate.
3. Board Recommendations. The board documents the results of its assessment in writing to the Regional or FSME Division Director each time the board examines a candidate.
- (a) If the board’s assessment of the candidate is favorable, the board will recommend granting the qualification.
  - (b) If the board identifies minor areas of weakness that can be remediated by additional review and the provision of a “look-up” report, the candidate will perform the assigned remediation to the satisfaction of the board chairperson or by an assigned member of the board, who will then recommend qualification.
  - (c) If the board has identified areas of weakness requiring more extensive remediation, the board will identify the areas for improvement in writing and recommend that the candidate appear before a board for reexamination when the remediation activities are complete. The board and the candidate’s supervisor will agree on a schedule for reexamination.
  - (d) If the board has identified performance deficiencies that could not be successfully addressed with a remediation effort, the board will document the full scope of the deficiencies and recommend that the candidate not be remediated or reexamined. The documentation will be forwarded to the candidate’s Division Director and the Office Director or Regional Administrator.
  - (e) The candidate will receive a copy of the board’s findings and recommendation.

4. Re-examination Board. A reexamination board must include at least one member from the original board. The board's questioning during reexamination will focus on the areas of identified weakness. The board may explore any area where weakness is identified during the conduct of the reexamination.
5. Board Documentation. The Board's recommendations are forwarded by memorandum (or e-mail documented as an official agency record) to the candidate's Division Director and supervisor for approval. The Division Director will inform the Regional Administrator or Office Director when the employee is qualified. If the candidate's Division Director acted as Board Chairperson, the Board results shall be documented in a memorandum to file. A copy of the memorandum will be provided to the candidate and forwarded to the Office of Human Resources by the division training coordinator to be included in the employee's personnel file. The division training coordinator will create and issue a qualification certificate signed by the Regional Administrator or Office Director. The certificate will identify the effective date of the certification. This date determines when refresher training is due for each qualified staff member.

#### 1248-09 INTERIM QUALIFICATIONS

A candidate who has not completed all of the requirements for final certification in their qualification program may obtain interim qualification to independently perform their specific work activities in the discipline for which prescribed training has been completed. The candidate's supervisor, in consultation with the senior staff assigned to work with the candidate will determine whether to grant the candidate an interim certificate after evaluating the candidate's qualifications. The candidate's supervisor and senior staff will identify the categories for which interim qualification is appropriate. The candidate's supervisor will generate a request for interim qualification in the identified areas. The request shall be approved by the Regional Administrator, Office Director, or their designee. Approval of interim qualification will be documented and a record kept in the candidate's training file.

#### 1248-10 PROGRAM REVISIONS

This chapter and qualification journals are periodically revised to reflect the training needs of candidates and staff already qualified as determined by changes to FSME's program procedures. When new revisions are issued, personnel who qualified under previous requirements shall remain qualified, but must complete any new required classroom training requirements in their discipline within three years from the date of the revision. Candidates in the process of qualifying when new revisions are issued will transition to and complete their qualification under the new program. Candidates will be given credit in the new program for training activities completed under the old program. Waivers to specific new training requirements and extensions to the three year period can be granted using the procedures outlined in Section 1248-11.

Staff who qualified under IMC 1246 will retain their qualifications following the publication of IMC 1248. However, staff will be held accountable for completing any new required core and online training courses described in the revised qualification journals. Staff will be allowed three years from the date of the revision to complete any new required core or online training, however, staff should note that some online training may be required sooner based on internal office metrics.

## 1248-11 EXCEPTIONS

11.01 Candidates possessing sufficient knowledge to meet minimum requirements, through education and prior experience, may be waived from any and all requirements, including the qualification board. Requests for such exemptions should be made from the candidate's supervisor to the Division Director. Such requests should consider the candidate's ability to perform work activities without the benefit of the additional knowledge and regulatory perspective gained by completing the training requirements of the qualification journals. The Division Director will approve or deny the exemption request and document the decision in a memorandum to the candidate. If the waiver is granted a copy will be placed in candidate's training file.

11.02 Staff qualified for one discipline covered in this chapter, such as those for Materials License Reviewer need not duplicate qualification requirements that are common for another discipline, such as a Materials Health Physics Inspector. The candidate, after completing the additional training required, for the new discipline, may receive qualification in writing from the Regional Administrator, Office Director, or their designee without the need of a qualification board, provided that the common requirements (such as refresher training) have been kept up-to-date. However, the Regional Administrator, Office Director, or their designee reserve the right to require the candidate to have a qualification board if they feel the discipline they are currently qualified for is too different from the discipline they are seeking qualification in.

If a candidate has passed a qualification board under another chapter, then the candidate's division director has the authority to accept previous experience for meeting the requirements contained in this chapter. Justification for accepting previous experience and training to meet program requirements must be documented in the candidate's training record. Forms for documenting the equivalency justification are located in each qualification journal.

11.03 Candidates possessing sufficient knowledge to meet minimum requirements through prior experience and education may validate specific classroom training through satisfactory completion of equivalency examinations. Requests for equivalency examinations should be made from the candidate's supervisor to HRTD. Such requests should consider the candidate's ability to perform their work activities without the benefit of the additional knowledge and regulatory perspective gained by attending the course.

11.04 The Regional Administrator or Office Director or their designee has the authority to waive any requirement, including the qualification board, or extend the time period for any requirement listed in this manual chapter. Justification for the waiver or extension will be documented, and entered into the candidate's training file.

## 1248-12 REFRESHER TRAINING

Qualified staff personnel are expected to maintain their qualification by completing refresher training in the established requalification cycle. The specific refresher training requirements are found in the appendices to this document.

Refresher training may consist of either health and safety or security topics. The qualified staff member's supervisor will determine which training courses are needed 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 staff member's supervisor.

Prior to taking refresher training the qualified staff member 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 whether the training will be beneficial to the qualified staff member. 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.).

Any requests to create a Health Physics Topics (H-401) course as refresher training must be coordinated through the appropriate division in FSME. Depending on the topic, this would either be the Division of Materials Safety and State Agreements or Division of Waste Management and Environmental Protection. The lead FSME division will coordinate with the requestors to determine which refresher topic will be developed as an H-401 refresher training course. The lead division will need to approve the topic before it requests technical assistance from HRTD to develop the training. FSME will coordinate with the requestor and HRTD to develop the H-401 course.

END

Appendices:

Appendix A, Materials License Reviewer

Appendix B, Materials Health Physics Inspector

Revision History Sheet for IMC 1248

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

## **Appendix A**

### **Materials License Reviewer Qualification Journal**



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## Introduction

The U.S. Nuclear Regulatory Commission (NRC) Materials License Reviewer (license reviewer) qualification program requires completion of a variety of activities, each of which are designed to help you, the license reviewer 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 license reviewer. The role of a license reviewer is not to set policy in the areas of health and safety or security. A license reviewer should refer policy questions to management as well as the program office.

A competent license reviewer 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 license reviewer qualification process develops your awareness of the role of the agency, your role and skill as a license reviewer, and your technical expertise for reviewing licensing actions for the purposes of health and safety and security. 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 a license reviewer. Upon successful completion of all the activities in the qualification journal, including the qualification board, you become a qualified license reviewer eligible to receive the *Materials License Reviewer Qualification Certification*.

## Qualification Journal Organization

The qualification journal identifies training courses, 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 a license reviewer qualification requirement(s). The signature cards, certification, and equivalency justification pages form the permanent record of completing the license reviewer qualification program and will be placed in your official file.

Your supervisor should consider assigning a senior materials license reviewer 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

- Licensing Practices and Procedures (G-109)
- 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)
- 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**

- Inspection Procedures (G-108)
- Root Cause/Incident Investigation Workshop (G-205)
- 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)
- OSHA Training for Materials Inspectors (MC-1248) - the curriculum is on iLearn

- Media Training Workshop

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

**NOTE:** The Required Core Training Courses are the minimum recommended courses that you should take in order to complete the Materials License Reviewer 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 frequency of well logging licensing actions in your Region.

All license reviewers 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 a license reviewer. Document the reason for the waiver on Form 1: Materials License Reviewer Equivalency Justification. While your supervisor may waive certain classes, your qualification still requires certification by your Regional Administrator or their designee.

## Refresher Training

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

The qualified license reviewer 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 license reviewer's supervisor will determine which training courses the reviewer needs and will coordinate with HRTD staff, as 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 license reviewer'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 license reviewer 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 license reviewer. 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:** A license reviewer may retake a course that they had taken previously. A supervisor should consider whether it would be beneficial for the license reviewer 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 license reviewer took the course before allowing a course to be retaken as refresher training. If the supervisor allows the license reviewer to retake the course, the license reviewer 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 license reviewer 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 license reviewer's management will resolve the concern. The use of iLearn will assist the license reviewer 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 License Reviewer 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 license reviewer 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 a license reviewer 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 License Reviewer 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 the 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 the 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 License Reviewer 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. License reviewers must routinely review a variety of documents to support their licensing 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 who begin their qualifications after WBL is online must 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 License Reviewer Individual Study Activity

**TOPIC:** (ISA-3) Materials License Reviewer Objectivity, Protocol, and Professional Conduct

**PURPOSE:** The purpose of this activity is to acquaint you with the NRC's expectations of a license reviewer conduct and protocol. Professionalism is essential to the agency's ability to fulfill its goals of protecting public health and safety. A license reviewer's conduct is a vital component of NRC's credibility as an effective regulator. As a license reviewer, 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 a license reviewer conduct. This activity will also help you develop the professional conduct that you will need to be an effective NRC license reviewer.

**COMPETENCY AREAS:** LICENSING ACTIVITIES  
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 interactions with applicants or licensees 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 materials license reviewers:
    - 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 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 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 License Reviewer 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:** LICENSING ACTIVITIES  
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 a licensing issue) 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 License Reviewer 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 predecisional 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 License Reviewer 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 a qualified license reviewer, 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:** LICENSING ACTIVITIES  
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 License Reviewer Individual Study Activity

**TOPIC:** (ISA-7) NRC Interagency Agreements

**PURPOSE:** While performing licensing activities, license reviewers may identify important issues that could adversely affect health and safety, but are not under the direct regulatory authority of the NRC. Examples include industrial safety 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. 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 may interact with your organization.

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 license reviewer, or the above liaison representative to discuss two licensing issues, if possible, 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 License Reviewer 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 License Reviewer 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 License Reviewer 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:** LICENSING ACTIVITIES  
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 License Reviewer 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 License Reviewer 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 License Reviewer 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:**

LICENSING ACTIVITIES  
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 License Reviewer 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 the 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 or 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 License Reviewer 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 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 a license reviewer 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 License Reviewer 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. 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:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 40 hours

- REFERENCES:**
1. Panoramic and Underwater Irradiator Orders
  2. Manufacturers and Distributors (M&D) Orders
  3. Transportation of Radioactive Materials Quantities of Concern (RAMQC) Orders
  4. Increased Controls (IC) Orders
  5. IC Toolbox
  6. 10 CFR 20.1801 and 20.1802
  7. 10 CFR Part 37
  8. 10 CFR Part 73
  9. Fingerprinting Orders for access to SGI and unescorted access to 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.

**EVALUATION  
CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of the different types 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 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 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 License Reviewer 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:** LICENSING ACTIVITIES

**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 information that is included in the NMED Annual Reports.
3. 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. Review the most recent NMED Annual Report.

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 ISA-17

## Materials License Reviewer Individual Study Activity

**TOPIC:** (ISA-18) NUREG-1556, "Consolidated Guidance About Materials Licenses"

**PURPOSE:** The purpose of this activity is to familiarize you with the NUREG-1556 Series. The NUREG documents are program-specific guidance designed to be used by applicants, licensees, and NRC staff. Applicants and licensees use the NUREG volumes to prepare license applications, amendments, and other licensing actions. NRC staff will use the NUREG volumes in their review of requests for licensing actions. In this ISA, you will review each of the volumes and become familiar with the different types of programs-specific guidance available to licensees and NRC staff.

**COMPETENCY AREA:**

LICENSING ACTIVITIES  
REGULATORY FRAMEWORK

**LEVEL OF EFFORT:**

80 hours

**REFERENCES:**

1. NUREG-1556 Series, "Consolidated Guidance About Materials Licenses"

**EVALUATION CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your general understanding of NUREG-1556 Series by successfully addressing the following:

1. Describe the purpose of the NUREG-1556 Series.
2. Be able to identify the different program-specific topics covered by the Series.
3. Describe the type of information found in the NUREG-1556 Series.

**NOTE:** This ISA should be completed in conjunction with OJT-2, Licensing Case Work. It would be more beneficial to the staff member in training to become familiar with the NUREGS as they are performing license reviews.

**TASKS:**

1. Obtain a paper copy of the NUREG-1556 Series or locate the documents on the NRC Web site.
2. Read and familiarize yourself with the NUREG-1556 Series.

3. Meet with and discuss the NUREG Documents with subject matter experts within your Region.
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-18.

## Materials License Reviewer Individual Study Activity

**TOPIC:** (ISA-19) Pre-Licensing Guidance

**PURPOSE:** The purpose of this activity is to familiarize you with NRC's Pre-Licensing process and with the use of the guidance.

**COMPETENCY AREA:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 12 hours

**REFERENCES:**

1. NRC Pre-Licensing Guidance
2. Government Accountability Office (GAO) Report:  
<http://www.gao.gov/new.items/d071038t.pdf>

**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 understanding of the NRC Pre-Licensing Guidance and be able to explain its purpose and how it is used as part of the licensing process:

1. Be able to explain how to use the screening criteria.
2. Discuss the purpose of the pre-licensing visit
3. If given an example discuss how to use the additional screening criteria
4. Discuss the GAO's report on nuclear security.

**TASKS:**

1. Review and become familiar with the NRC Pre-Licensing Guidance.
2. Become familiar with the different steps involved in the guidance
3. Learn where to obtain the necessary information needed for the additional screening criteria.
4. Become familiar with the GAO report and understand why pre-licensing guidance is such an important component to the security of radioactive materials

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

**Materials License Reviewer On-the-Job Activities**

## Materials License Reviewer On-the-Job Activities

The on-the-job training (OJT) activities require you to conduct license reviews and inspection accompaniments under the supervision of a senior materials license reviewer (senior license reviewer) or senior materials health physics inspector (senior inspector) respectively. The activities allow you to observe and perform key license reviewer and materials health physics inspector (inspector) 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 license reviews requires a minimum number of reviews to complete the module.

However, your supervisor and any senior license reviewers or inspectors 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 OJT modules by completing Form 1: Materials License Reviewer Equivalency Justification, found at the end of this qualification journal.

Since each Region is organized differently, you may not need to complete all of the OJTs modules since some license reviewers may not review licenses for each program code. Your supervisor will need to document the reasons certain OJTs were not completed.

The Regions may not have every category of program code discussed in the OJTs. In cases where there is not a certain category of license 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 specific program code to be completed in order for the candidate to complete their qualification. Alternatively, a supervisor can have a candidate conduct “license reviews” of previous casework. If a supervisor decides to waive a certain program code, the supervisor must document the reason for the waiver in the candidates file.

Each of the OJTs contains examples of the different program codes that fall under the different types of licenses. The different program codes identified in each of the OJTs are examples and may not capture every type of license issued by the NRC. The candidate’s supervisor may identify additional program codes that the candidate must perform under each of the OJTs. In addition, the supervisor should consider any new technology, different modalities, or program codes 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 license reviewer, or a senior inspector 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 other senior license reviewers 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 or senior license reviewer or senior inspector for evaluation.

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-1) Inspection Accompaniments

**PURPOSE:** The purpose of this activity is to (1) acquaint you with the different types of materials users, (2) familiarize you in the types of use of radioactive material in industrial, medical, and commercial environments, (3) familiarize you with the security requirements imposed on certain licensees, and (4) provide you with the opportunity to observe how inspectors use licensing documents issued by the regions or headquarters to inspect materials licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES  
INSPECTION

**LEVEL OF EFFORT:** 150 hours

**REFERENCES:**

1. Licensee radioactive materials possession license
2. Appropriate IMCs and IPs
3. Previous inspection report
4. Security Orders
5. Pre-Licensing Guidance

**EVALUATION CRITERIA:** Upon completion of this activity, you will be asked to demonstrate your understanding of the type of inspection conducted at the licensees' facilities as well as any type of security inspection conducted:

1. Identify the types of licensees that were inspected.
2. Describe how the inspector used the reference documents to conduct the inspection.
3. Describe how the inspections were conducted for the security requirements.
4. Explain the potential violations that were cited by the inspector. Explain why the licensee was cited.
5. Describe the focus of the Pre-Licensing visit.

**TASKS:**

1. Accompany a senior inspector on the following:
  - a. Health and safety inspections, your supervisor will determine the actual number of inspections.
  - b. A minimum of one security inspection of a licensee possessing category 1 or category 2 radioactive material
  - c. A minimum of one Pre-Licensing visit

**NOTE:** An individual who has already completed the requirements for the Materials Health Physics Inspector/or is currently a qualified inspector may take credit for the training or the experience that they have had as an inspector as long as they have met the above minimum criteria.

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

2. 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).
3. Review NMED for any recent events involving the licensee as all as any potential generic issues.
4. Locate and review the inspection procedures that will be used during the inspection.
5. Use the appropriate Inspection Procedure to conduct your inspection.
6. Become familiar with the scope of the inspection.
7. Participate in the Entrance/Exit Interviews with the licensee.
8. Become familiar with the documentation of inspection results discussed in IMC 2800.
9. Assist the inspector in developing the inspection report following the appropriate IMC.
10. 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 accompaniment:

Licensee Name:  
License Number:  
Docket Number:  
Date(s):

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-2) Radiography Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for industrial radiography licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 12 hours

**REFERENCES:**

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

### **EVALUATION CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
03310: Industrial Radiography - Fixed Locations  
03320: Industrial Radiography - Temporary Job Sites
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee's response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-2.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

- Licensee Name:
- License Number:
- Docket Number:
- Mail Control Number:
- Program Code:

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-3) Industrial Measuring Systems (e.g. portable and fixed gauges, gas chromatographs, analytical instruments); Civil Defense; Self-Shielded Irradiators; and Panoramic Irradiator Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for industrial measuring systems, civil defense, self-shielded irradiators, and panoramic irradiator licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 40 hours

- REFERENCES:**
1. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
  2. 10 CFR 36, "Licenses and Radiation Safety Requirements for Irradiators"
  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"
  5. NUREG-1556, Vol. 6 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About 10 CFR 36 Irradiator Licenses"
  6. NUREG-1556, Vol. 7 "Program-Specific Guidance About Academic, Research and Development, and Other Licenses of Limited Scope Including Gas Chromatographs and X-Ray Fluorescence Analyzers"

### EVALUATION

**CRITERIA:** Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.

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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:
  - 03120: Measuring Systems - Fixed Gauges
  - 03121: Measuring Systems - Portable Gauges
  - 03122: Measuring Systems - Analytical Instruments
  - 03123: Measuring Systems - Gas Chromatographs
  - 03124: Measuring Systems – Other
  - 03510: Irradiators Self-Shielded Less Than 10,000 Curies
  - 03511: Irradiators Other Less Than 10,000 Curies
  - 03520: Irradiators Self-Shielded Greater Than 10,000 Curies
  - 03521: Irradiators Other Greater Than 10,000 Curies
  - 03710: Civil Defense
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee's response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.



3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-3.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

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

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-4) Well Logging and Field Flooding Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for well logging and field flooding licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 12 hours

- REFERENCES:**
1. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
  2. 10 CFR 39, "Licenses and Radiation Safety Requirements for Well Logging"
  3. 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 this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.

7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:

03110: Well Logging Byproduct and/or SNM Tracer and Sealed Sources

03111: Well Logging Byproduct and/or SNM Sealed Sources Only

03112: Well Logging Byproduct Only - Tracers Only

03113: Field Flooding Studies

2. You will be responsible for the following:

a. Reviewing the licensee's initial application, license renewal, or amendment request

b. Developing the request for additional information

c. Evaluating the applicant/licensee's response to the request for additional information

d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.

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 OJT-4.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

Licensee Name:

License Number:

Docket Number:

Mail Control Number:

Program Code:

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-5) Broad Scope: Non-Medical Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for broad scope non-medical licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 60 hours

**REFERENCES:**

1. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
2. NUREG-1556, Vol. 11 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Licenses of Broad Scope"

### **EVALUATION CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
01100: Academic Type A Broad  
01110: Academic Type B Broad  
01120: Academic Type C Broad  
03211: Manufacturing and Distribution Type A Broad  
03212: Manufacturing and Distribution Type B Broad  
03213: Manufacturing and Distribution Type C Broad  
03235: Incineration - non-commercial (secondary code)  
03610: Research and Development Type A Broad  
03611: Research and Development Type B Broad  
03612: Research and Development Type C Broad  
03613: Research and Development - Multisite-Multiregional
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee's response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-5

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

Licensee Name:

License Number:

Docket Number:

Mail Control Number:

Program Code:

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-6) Nuclear Pharmacy Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for nuclear pharmacy licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 12 hours

- REFERENCES:**
1. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
  2. 10 CFR 31, "General Domestic Licenses for Byproduct Material"
  3. 10 CFR 32, "Specific Domestic Licenses to Manufacturer or Transfer Certain Items Containing Byproduct Material"
  4. NUREG-1556, Vol. 13 "Consolidated Guidance About Materials Licenses: Program-Specific Guidance About Commercial Radiopharmacy Licenses"

### EVALUATION CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the type of licensee in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.



6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
02500: Nuclear Pharmacies
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee's response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for this type of license will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the type of license in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-6.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

- Licensee Name:
- License Number:
- Docket Number:
- Mail Control Number:
- Program Code:

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-7) Medical (including pacemakers but excluding programs of broad scope, HDRs, and teletherapy) Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for medical licensees including pacemakers but excluding programs of broad scope, HDRs, and teletherapy.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 48 hours

**REFERENCES:**

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

**EVALUATION CRITERIA:** Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.

7. Discuss the information that is required in a specific license.\

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:

02120: Medical Institution – Limited

02121: Medical Institution – Custom

02200: Medical Private Practice – Limited

02201: Medical Private Practice – Custom

02210: Eye Applicators - Strontium-90

02220: Mobile Nuclear Medicine Service

22160: Pacemaker Byproduct and/or SNM - Medical Institution

22161: Pacemaker Byproduct and/or SNM - Individual

2. You will be responsible for the following:

a. Reviewing the licensee's initial application, license renewal, or amendment request

b. Developing the request for additional information

c. Evaluating the applicant/licensee's response to the request for additional information

d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.

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 OJT-7.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

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

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-8) Other Medical (Teletherapy, HDRs) Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for other medical licensees including teletherapy and HDRs.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 24 hours

**REFERENCES:**

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

### **EVALUATION CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
02230: High Dose Rate Remote Afterloader  
02231: Mobile High Dose Rate Remote Afterloader  
02240: Mobile Therapy  
02300: Teletherapy  
02310: Stereotactic Gamma Knife
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee's response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-8.

**LICENSE REVIEWS:**

Complete the following licensee information for each license review:

- Licensee Name:
- License Number:
- Docket Number:
- Mail Control Number:
- Program Code:

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-9) Broad Scope Medical Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for broad scope medical licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 24 hours

**REFERENCES:**

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

### **EVALUATION CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.

6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:
  - 02110: Medical Institution – Broad
  - 03235: Incineration - non-commercial (secondary code)
2. You will be responsible for the following:
  - a. Reviewing the licensee’s initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee’s response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-9.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

- Licensee Name:
- License Number:
- Docket Number:
- Mail Control Number:
- Program Code:



## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-10) Research and Development (non-broad), In-Vitro Testing; Type C broad-scopes; Manufacturing (non-broad); Unsealed SNM Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for research and development, in-vitro testing, type C broad-scopes, manufacturing (non-broad), unsealed SNM licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 60 hours

**REFERENCES:**

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

**EVALUATION CRITERIA:** Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.

5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:
  - 01120: Academic Type C Broad
  - 02400: Veterinary Non-Human
  - 02410: In-Vitro Testing Laboratory
  - 03213: Manufacturing and Distribution Type C Broad
  - 03214: Manufacturing and Distribution Other
  - 03620: Research and Distribution Other
  - 22110: SNM Plutonium - Unsealed Less Than a Critical Mass
  - 22111: SNM U-235 and/or U-233 Less Than a Critical Mass
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee's response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-10.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

Licensee Name:

License Number:

Docket Number:

Mail Control Number:

Program Code:

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-11) Distribution Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for distribution licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 60 hours

- REFERENCES:**
1. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
  2. 10 CFR 32, "Specific Domestic Licenses to Manufacture or Transfer Certain Items Containing Byproduct Material"
  3. NUREG-1556, Vol. 13 "Program-Specific Guidance About Commercial Radiopharmacy Licenses"
  4. NUREG-1556, Vol. 16 "Program-Specific Guidance About Licenses Authorizing Distribution to General Licensees"
  5. NUREG-1556, Vol. 17 "Program-Specific Guidance About Licenses for Special Nuclear Material of Less than Critical Mass"

### **EVALUATION CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.

6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
02511: Medical Product Distribution - 32.72 - Prepared Pharmaceuticals  
02513: Medical Product Distribution - 32.74 - Sources and Devices  
03240: General License Distribution - 32.51  
03241: General License Distribution - 32.53  
03242: General License Distribution - 32.57  
03243: General License Distribution - 32.61  
03244: General License Distribution - 32.71  
22162: Pacemaker Byproduct and/or SNM -Manufacturing and Distribution  
22170: SNM General License Distribution
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee's response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-11.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

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

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-12) Sealed Special Nuclear Material and Byproduct Material Power Sources Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for sealed special nuclear material and byproduct material power sources licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 40 hours

**REFERENCES:**

1. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
2. NUREG-1556, Vol. 17 "Program-Specific Guidance About Licenses for Special Nuclear Material of Less than Critical Mass"

**EVALUATION CRITERIA:** Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
22120: PuBe sources  
22130: Power Sources – Byproduct  
22140: Plutonium - Sealed Sources in Devices  
22150: Plutonium - Sealed Sources Less Than a Critical Mass  
22151: Uranium-235 and/or uranium-233 Less Than a Critical Mass
  
2. You will be responsible for the following:
  - a. Reviewing the licensee’s initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee’s response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
  
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 OJT-12.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

- Licensee Name:
- License Number:
- Docket Number:
- Mail Control Number:
- Program Code:



## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-13) Source Material Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for source material licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 40 hours

**REFERENCES:** 1. 10 CFR 40, "Domestic Licensing of Source Material"

### **EVALUATION CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on source material licensees.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
11220: Source Material Military Munitions Indoor Testing  
11221: Source Material Military Munitions Outdoor Testing  
11230: Source Material General License Distribution - 40.34  
11300: Source Material Other Greater Than 150 Kilograms  
11700: Rare Earth Extraction and Processing
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee's response to the request for additional information.
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-13.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

- Licensee Name:
- License Number:
- Docket Number:
- Mail Control Number:
- Program Code:

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-14) Source Material: Shielding and Less than 150 kilograms Possession Only Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for source material: shielding and less than 150 kilograms possession only licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 40 hours

**REFERENCES:** 1. 10 CFR 40, "Domestic Licensing of Source Material"

**EVALUATION CRITERIA:** Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
03800: Byproduct Material Possession Only  
03810: Byproduct Material Standby - No Operations  
11200: Source Material Other Less Than 150 Kilograms  
11210: Source Material Shielding  
11800: Source Material Possession Only  
11810: Source Material Standby - No Operations  
23300: SNM Possession Only - Other Than Reactor Fuel  
23310: SNM Possession Only - Other Than Reactor Fuel – No Operations
2. You will be responsible for the following:
  - a. Reviewing the licensee’s initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee’s response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-14.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

Licensee Name:

License Number:

Docket Number:

Mail Control Number:

Program Code:

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-15) Service Licenses

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for service licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 30 hours

**REFERENCES:**

1. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
2. NUREG-1556, Vol. 17 "Program-Specific Guidance About Service Provider Licenses"

### **EVALUATION CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
03218: Nuclear Laundry  
03219: Decontamination services  
03220: Leak Test Service Only  
03221: Instrument Calibration Service Only, Source Less Than 100 Curies  
03222: Instrument Calibration Service Only, Source Greater Than 100 Curies  
03225: Other Services
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant's/licensee's response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-15.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

Licensee Name:

License Number:

Docket Number:

Mail Control Number:

Program Code:



## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-16) Decommissioning

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for decommissioning licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 30 hours

**REFERENCES:**

1. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
2. 10 CFR 40, "Domestic Licensing of Source Material"
3. Appropriate NUREG-1556 Series Volume
4. NUREG-1757, "Consolidated Decommissioning Guidance"
5. 2002 MOU between the EPA and NRC, "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites"  
<http://www.nrc.gov/reading-rm/doc-collections/news/2002/mou2fin.pdf>

### EVALUATION CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.

6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
03900: Decommissioning of Byproduct Material Facilities  
11900: Decommissioning of Source Material Facilities  
22200: Decommissioning of Other SNM Material Facilities
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee's response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-16.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

Licensee Name:

License Number:

Docket Number:

Mail Control Number:

Program Code:

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-17) Waste Disposal

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for waste disposal licensees.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 40 hours

- REFERENCES:**
1. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
  2. 10 CFR 40, "Domestic Licensing of Source Material"
  3. 10 CFR 61, "Licensing Requirements for Land Disposal of Radioactive Waste"
  4. 10 CFR 62, "Criteria and Procedures for Emergency Access to Non-Federal and Regional Low-Level Waste Disposal Facilities"
  5. Policy and Guidance Directive FC 84-21, "Incineration by Materials Licensees"
  6. NUREG-0119, "Standard Format and Content of a License Application for a Low-Level Radioactive Waste Disposal Facility"
  7. NUREG-1200, "Standard Review Plan for the Review of a License Application for a Low-Level Radioactive Waste Disposal Facility"
  8. NUREG-1241, "Licensing of Alternative Methods of Disposal of Low-Level Radioactive Waste (NUREG-1241)"
  9. NUREG-1300, "Environmental Standard Review Plan for the Review of a License Application for a Low-Level Radioactive Waste Disposal Facility"
  10. Appropriate NUREG-1556 Series Volume
  11. NUREG-1757, "Consolidated Decommissioning Guidance"

**EVALUATION  
CRITERIA:**

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the types of licensees in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.
6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
03231: Waste Disposal (Burial)  
03232: Waste Disposal Service - Prepackaged Only  
03233: Waste Disposal Service Incineration  
03234: Waste Disposal Service Processing and/or Repackaging  
03236: Waste Treatment Service
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant's/licensee's response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for these specific types of licenses will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the different types of licenses in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-17.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

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

## Materials License Reviewer On-the-Job Activity

**TOPIC:** (OJT-18) Radionuclide Production Using an Accelerator

**PURPOSE:** The purpose of this activity is to provide you with the skills needed to perform license reviews for licensees using an accelerator for radionuclide production.

**COMPETENCY AREAS:** LICENSING ACTIVITIES

**LEVEL OF EFFORT:** 40 hours

- REFERENCES:**
1. 10 CFR 30, "Rules of General Applicability to Domestic Licensing of Byproduct Material"
  2. 10 CFR 31, "Specific Domestic Licenses to Manufacture or Transfer Certain Items Containing Byproduct Material"
  3. 10 CFR 32, "Specific Domestic Licenses of Broad Scope for Byproduct Material"
  4. NUREG-1556, Vol. 21 "Program-Specific Guidance About Possession of Licenses for Production of Radioactive Material Using an Accelerator"

### EVALUATION CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC licensing process and demonstrate your ability to review applications and submit requests for additional information:

1. Discuss the NRC's licensing process.
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 the security requirements imposed, if any, on the type of licensee in this module.
5. Explain what information can be found in the Sealed Source and Device Registry and how it is helpful to license reviewers.

6. Discuss the request for additional information process/development of the request for additional information.
7. Discuss the information that is required in a specific license.

**TASKS:**

1. Complete one new application or renewal and one license amendment for each of the following Program Codes:  
  
03210: Radionuclide Production Using an Accelerator
2. You will be responsible for the following:
  - a. Reviewing the licensee's initial application, license renewal, or amendment request
  - b. Developing the request for additional information
  - c. Evaluating the applicant/licensee's response to the request for additional information
  - d. Drafting or amending the specific license

**NOTE:** Your supervisor and the senior license reviewer assigned to work with you for this type of license will decide when you have demonstrated sufficient competency to recommend you for interim qualification status for signature authority for the type of license in this module.

You are responsible for keeping track of license reviews that you work on.

3. Use the appropriate NUREG-1556 Volume to assist you in your license review.
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 OJT-18.

**LICENSE REVIEWS:** Complete the following licensee information for each license review:

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



## Materials License Reviewer Competencies

The training and qualification program detailed in this qualification journal ensures that every license reviewer 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)<sup>1</sup>
- 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)

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<sup>1</sup> Specific competency areas are listed in parenthesis following each item

- Working independently, exercising judgment, and exhibiting flexibility in the completion of activities including during difficult or challenging situations (Self-Management)
- Using technology to locate, gather, manipulate, and share Information (Information Technology)



<i>Materials License Reviewer's Name:</i> _____	<i>Employee Initials/Date</i>	<i>Supervisor's Signature/Date</i>
ISA-17 Review of Significant Events at Material Licensees		
ISA-18 NUREG-1556, "Consolidated Guidance About Materials Licensees"		
ISA-19 Pre-Licensing Guidance		
<b>C. On-the-Job Training Activities</b>		
OJT-1 Inspection Accompaniments		
OJT-2 Radiography Licenses		
OJT-3 Industrial Measuring Systems (e.g. portable and fixed gauges, gas chromatographs, analytical instruments); Civil Defense; Self-Shielded Irradiators; and Panoramic Irradiator Licenses		
OJT-4 Well Logging and Field Flooding Licenses		
OJT-5 Broad Scope: Non-Medical Licenses		
OJT-6 Nuclear Pharmacy Licenses		
OJT-7 Medical (including pacemakers but excluding programs of broad scope, HDRs, and teletherapy) Licenses		
OJT-8 Other Medical (Teletherapy, HDRs) Licenses		
OJT-9 Broad Scope Medical Licenses		
OJT-10 Research and Development (non-broad), In-Vitro Testing; Type C broad-scopes; Manufacturing (non-broad); Unsealed SNM Licenses		
OJT-11 Distribution Licenses		
OJT-12 Sealed Special Nuclear Material and Byproduct Material Power Sources Licenses		
OJT-13 Source Material Licenses		
OJT-14 Source Material: Shielding and Less than 150 kilograms Possession Only Licenses		
OJT-15 Service Licenses		
OJT-16 Decommissioning		
OJT-17 Waste Disposal		
OJT-18 Radionuclide Production Using an Accelerator		

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

## Materials License Reviewer Certification

\_\_\_\_\_  
(name)

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

# MATERIALS LICENSE REVIEWER

Supervisor Signature \_\_\_\_\_  
Date: \_\_\_\_\_

# Form 1: Materials License Reviewer Equivalency Justification

Materials License Reviewer's Name:  
\_\_\_\_\_

*Identify equivalent training and experience for which the materials license reviewer is to be given credit.*

**A. Required Core and Specialized Training (Title and course number)**

Training:	
Training:	
Training:	
Training:	
Training:	
Training:	
Training:	
Training:	
Training:	
Training:	
Training:	
Training:	
Training:	

**B. Individual Study Activities**

ISA-1 History and Organization of the U.S. Nuclear Regulatory Commission	
ISA-2 Navigating the NRC's Internal and External Web Sites	
ISA-3 Materials License Reviewer Objectivity, Protocol, and Professional Conduct	
ISA-4 Allegations	
ISA-5 The Enforcement Program	
ISA-6 The Office of Investigations	
ISA-7 NRC Interagency Agreements	
ISA-8 Interactions with the Public and the Media	
ISA-9 Hearings	
ISA-10 Proprietary Information and Determinations	
ISA-11 The Freedom of Information Act and the Privacy Act	
ISA-12 Generic Communications	
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	

## Form 1: Materials License Reviewer Equivalency Justification

<b>Materials License Reviewer's Name:</b> _____	<b>Identify equivalent training and experience for which the materials license reviewer is to be given credit.</b>
ISA-17 Review of Significant Events at Material Licensees	
ISA-18 NUREG-1556, "Consolidated Guidance About Materials Licensees"	
ISA-19 Pre-Licensing Guidance	
<b>C. On-the-Job Training Activities</b>	
OJT-1 Inspection Accompaniments	
OJT-2 Radiography Licenses	
OJT-3 Industrial Measuring Systems (e.g. portable and fixed gauges, gas chromatographs, analytical instruments); Civil Defense; Self-Shielded Irradiators; and Panoramic Irradiator Licenses	
OJT-4 Well Logging and Field Flooding Licenses	
OJT-5 Broad Scope: Non-Medical Licenses	
OJT-6 Nuclear Pharmacy Licenses	
OJT-7 Medical (including pacemakers but excluding programs of broad scope, HDRs, and teletherapy) Licenses	
OJT-8 Other Medical (Teletherapy, HDRs) Licenses	
OJT-9 Broad Scope Medical Licenses	
OJT-10 Research and Development (non-broad), In-Vitro Testing; Type C broad-scopes; Manufacturing (non-broad); Unsealed SNM Licenses	
OJT-11 Distribution Licenses	
OJT-12 Sealed Special Nuclear Material and Byproduct Material Power Sources Licenses	
OJT-13 Source Material Licenses	
OJT-14 Source Material: Shielding and Less than 150 kilograms Possession Only Licenses	
OJT-15 Service Licenses	
OJT-16 Decommissioning	
OJT-17 Waste Disposal	
OJT-18 Radionuclide Production Using an Accelerator	

Supervisor's Recommendation      Signature/Date \_\_\_\_\_

Division Director's Approval      Signature/Date \_\_\_\_\_

Revision History Sheet for IMC 1248, Appendix A

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



## **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)<sup>1</sup>
- 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

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<sup>1</sup> 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)		
<b>C. On-the-Job Training Activities</b>		
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

<b>Materials Health Physics Inspector Inspector's Name:</b> _____	<b>Identify equivalent training and experience for which the materials health physics inspector is to be given credit.</b>
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)	
<b>C. On-the-Job Training Activities</b>	
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