IMC 1246, APPENDIX B3, TRAINING REQUIREMENTS AND QUALIFICATION JOURNAL FOR INDEPENDENT SPENT FUEL STORAGE INSTALLATION INSPECTOR

Introduction

The U.S. Nuclear Regulatory Commission (NRC) inspector qualification program requires completion of activities designed to develop or enhance skills relevant to performing the job of an inspector. Candidate inspectors should complete the qualification process and demonstrate the competencies of an independent spent fuel storage installation (ISFSI) inspector.

This ISFSI Qualification Journal of the Office of Nuclear Material Safety and Safeguards (NMSS), Division of Spent Fuel Storage and Transportation (SFST), implements the NRC Inspection Manual Chapter (IMC) 1246, "Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area," Appendix B3, by establishing the minimum training requirements for a staff member qualifying as an ISFSI inspector.

This ISFSI Qualification Journal implements the NRC Inspection Manual Chapter (IMC) 1246, "Formal Qualification Programs in the Nuclear Material Safety and Safeguards Program Area," Appendix B3, by establishing the minimum training requirements for a staff member qualifying as an ISFSI inspector. This qualification journal is managed by the Office of Nuclear Material Safety and Safeguards (NMSS), Division of Spent Fuel Storage and Transportation (SFST), Rules, Inspections and Operations Branch (RIOB).

A staff member completing this Qualification Journal should be able to understand the following:

- (1) the NRC organizational structure and regulatory objectives, as well as the basis for the authority of the agency
- (2) the technology and application of concepts in various technical areas related to the design, construction, and operation of an ISFSI to allow the NRC to carry out its overall responsibilities in the following way:
 - (a) Understand science and engineering fundamentals related to basic ISFSI design and operations to protect the public health and safety and the environment.
 - (b) Use technical knowledge of ISFSI design, construction, and operation to identify, address, and resolve regulatory issues.
- (3) the techniques and skills needed to collect, analyze, and integrate information using a safety focus to develop a supportable regulatory conclusion by doing the following:
 - (a) Independently gather information through objective review, observation, and open communications.
 - (b) Determine the acceptability of information by comparing to established regulatory criteria.
 - (c) Respond to events or conditions involving a potential or actual adverse

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- safety consequence.
- (d) Approach problems objectively, gather and integrate information, and develop a comprehensive understanding before reaching a conclusion.
- (e) Objectively analyze and integrate information using a safety focus to identify the appropriate regulatory conclusion and regulatory response.

The qualifying individual should also be able to develop personal and interpersonal skills necessary to carry out assigned regulatory activities, either individually or as part of a team. The required training should prepare the staff to clearly express ideas or thoughts, but also to carefully listen, speak, and write with an appropriate safety focus and context. The staff should be able to work collaboratively with others or independently during difficult or challenging situations in order to achieve a common goal, the safe operation of an ISFSI.

Program Organization

The ISFSI Inspector Qualification Journal establishes the minimum training requirements consistent with IMC 1246. The Qualification Journal must provide traceable documentation to show that each ISFSI inspector has met minimum requirements. The employee's supervisor has the discretion to modify the requirements, as needed, based on the employee's previous experience, education, and course availability. The employee's supervisor may add, delete, or substitute with other material for training course(s) that will not be available during the qualification period. For exceptions to the ISFSI inspector qualification process (e.g., grandfathering and individuals qualified under other NRC divisions), refer to Section 11 of the introduction of IMC 1246 (Forms A-2 and B-2) and SFST Office Instruction No. 6 (SFST-06). In addition, the journal also contains forms that the candidate inspector will complete to document the justification for accepting equivalent training or experience as a means of meeting an inspector qualification requirement.

The inspector qualification process is divided into two levels: (1) Basic Level and (2) Technical Proficiency Level. The Basic-Level activities are designed to help the candidate inspector develop awareness of the agency's role and the inspector's role. Successfully completing the basic-level work will provide the candidate with a context for meaningful learning during onsite work and a foundation for indepth learning at the Technical Proficiency Level. The Technical Proficiency activities are designed to develop the technical expertise through the review of ISFSI design, construction, and operational activities. These two levels of the ISFSI Inspector Qualification Journal consist of a series of independent study activities (ISAs) and on-the-job training (OJT) activities. Each ISA and OJT is used to document task completion, as indicated by the appropriate signature block(s).

The ISFSI Security Inspector Qualification Journal is under development by the Office of Nuclear Security and Incident Response. Inspectors who are responsible for performing ISFSI security inspections must complete the ISFSI Security Inspector Qualification Journal when available.

Discussion

This SFST Qualification Journal contains a qualification summary sheet and signature

cards. The supervisor should discuss the scope of this regional ISFSI Inspector Qualification Journal and expected knowledge level, as described later in this journal, with the inspector in training before he or she starts the qualification process. Usually, the candidate's immediate supervisor signs the material completed during the qualification process. The candidate's supervisor may also delegate this responsibility to a qualified inspector as needed. The inspector in training is expected to complete all ISAs and OJTs. At the supervisor's discretion, requirements may be deleted or added, depending on the candidate inspector's previous experience, and shall be documented in the form found in Forms A-2 and B-2 to this Qualification Journal.

The inspector in training is expected to use the current version or revision of each document cited in this Qualification Journal. Most of the documentation is readily available on either the (1) NRC's internal Web site, (2) NRC's Agencywide Documents Access and Management System (ADAMS), or (3) regional library.

Some of the required formal training courses may not be immediately available. The supervisor may substitute an alternative course, or substitute another method to meet the requirement, or delete the requirement altogether. Any such change should be documented in this Qualification Journal and justified in the form found in Forms A-2 and B-2 to this Qualification Journal.

The time necessary to complete this SFST Qualification Journal will vary, depending on the candidate's previous experience and education, but management expects completion within 24 months. However, the availability of required training courses and the candidate inspector's assigned workload may also prolong the time period, which should be approved by the candidate's immediate supervisor.

QUALIFICATION BOARD CERTIFICATION

IMC 1246, Section 08, "Oral Qualification Board," provides guidance for Board members to use in conducting the oral qualification. Additional guidance provided below explains how to document possible Board outcomes.

Upon approval from the Division Director, the oral board may be waived based on previous qualification.

Board Recommendations

The Board will document the results of its assessment, in writing, to the Division Director, each time a Board examines an individual, as follows:

- a. If the Board's assessment is favorable, the recommendation will be to grant Full Qualification. Any areas where additional review is required (lookup items) must be completed by the individual and verified by an assigned member of the Board, before the Board forwards its decision to the Division Director.
- b. If the Board has identified areas of weakness requiring formal remediation, the Board will identify the areas for improvement in writing and recommend that the individual appear before a Board for reexamination when the remediation activities are complete. The Board and the individual's supervisor will agree on a schedule for reexamination.
- c. If the Board has identified performance deficiencies that could not be (in the Board's opinion), or cannot likely be, successfully addressed with a thorough remediation effort, the Board will document the full scope of the deficiencies and recommend that the individual not be remediated or reexamined.
- d. A copy of each Qualification Board's results, identifying any weaknesses and deficiencies, will be placed in the individual's personnel file. The individual will receive a copy of the Board's findings and recommendation.

Reexamination Board: A Reexamination Board must include at least one individual from the original Board. The Board questioning during reexamination will focus on the areas of identified weakness.

Board Documentation: The Board's decisions are forwarded to the Division Director for information. The form on the following page shall be used to document the Board's decision.

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RESULT OF QUALIFICATION BOARD FOR INSPECTOR

Date of Oral Board:	
Successful or Unsuccessful (circle	outcome) Completion of Oral Board:
Chairperson	Date
Member	Date
Member	Date
Qualification Completion Certification	on Memo Issued:
Supervisor	Date
Qualification Completion Certificate	e Issued/Ordered:
Supervisor	 Date

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Basic-Level Training and Qualification Journal

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Part I. Basic-Level Individual Study Activities

The individual study activities (ISAs) are designed to direct and focus your efforts as you begin reviewing documents that will be important to the performance of your job. Each study activity begins with a **purpose** statement explaining why the activity is important and how it relates to the job of an inspector. The **level of effort** has been noted so that you have an idea of how much effort should be expended in completing the activity. (The amount of time is an estimate.) The **evaluation criteria** are listed up front to allow you to review them first and better understand the expectations when you are completing the activity. The evaluation criteria should help you to focus on the relevant information. The **tasks** outline the process to successfully understand the information required to complete the ISA.

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

- Complete the first two ISAs first. Becoming familiar with the agency and the overall
 role of an inspector is important for successfully completing the remaining activities.
 You should also become familiar with the content of the remaining activities, which
 will allow you to complete the activities as opportunities arise.
- Your immediate supervisor or a qualified inspector, as designated by your immediate supervisor, will act as a resource to assist you in completing each activity and signing off the qualification journal requirements as you complete the material.
 You should discuss the material in the ISA with your immediate 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 or designee for evaluation.

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 the commercial nuclear industry and the evolution of the regulatory framework under which the staff of today's U.S. Nuclear Regulatory Commission (NRC) functions. During this activity, you will review the organization of the agency and its staff and the relationships

between the major offices.

COMPETENCY

AREA: REGULATORY FRAMEWORK

LEVEL OF

EFFORT: 8 hours

REFERENCES: 1. Title 10 of the *Code of Federal Regulations* (10 CFR)

NUREG-1350, "Information Digest," August 2006

3. NUREG/BR-0175, "A Short History of Nuclear Regulations," Revision 1, June 2000 (http://www.nrc.gov/who-we-are/

short-history.html)

EVALUATION CRITERIA:

Upon completion of this activity, you will be asked to demonstrate an understanding of the agency's regulatory history and development of the commercial applications of nuclear energy 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. Outline the major offices (and regions) and briefly describe the functioning of the Commission, the Office of the Inspector General, Office of the Secretary, the Atomic Safety and Licensing Board, the Advisory Committee on Reactor Safeguards, and Commission staff and program offices, including the Chief Financial Officer and Executive Director for Operations.
- 4. Describe the regions' and offices' organization, as well as key management positions.

- 5. Discuss the relationship between the NRC and the U.S. Department of Energy (DOE).
- 6. Describe the organization and the function and types of issues that each branch deals with in the Division of Spent Fuel Storage and Transportation (SFST).

- Obtain paper or electronic copies of the above-listed 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 items discussed in the evaluation criteria.
- 3. Review and discuss the evaluation criteria with your supervisor or designee.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-1.

TOPIC: (ISA-2) Inspector Objectivity, Protocol, and Professional Conduct

PURPOSE: The purpose of this activity is to acquaint you with the NRC's

expectations of inspector conduct and protocol. Professionalism is essential to the agency's ability to fulfill its goals of protecting public health and safety. Inspector conduct is a vital component of the NRC's credibility as an effective regulator. As a qualified inspector, you will often be representing the agency in interactions with licensee management and workers, local officials, media, and the public. This ISA will help you to understand NRC procedures, policies, and expectations related to inspector conduct. This activity will also help you to 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. NRC Inspection Manual Chapter (IMC) 0102, "Oversight and Objectivity of Inspectors and Examiners at Reactor Facilities"
- 2. Management Directive (MD) 7.5, "Ethics Counseling and Training"
- 3. IMC 1201, "Conduct of Employees"
- 4. NUREG/BR-0075, "Field Policy Manual, No. 10, Conduct of Employees"
- 5. NUREG/BR-0075, "Field Policy Manual, No. 13, Witnessing of Unsafe Situations"
- 6. Regional or office guidance related to inspector/employee conduct

EVALUATION CRITERIA:

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

1. What is expected 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 that 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
- Explain the Office of Government Ethics (http://www.usoge.gov) 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 actions are NRC personnel expected to perform when they identify unsafe work practices or violations that could lead to an unsafe situation?
- 5. What are the overall requirements used by NRC managers to verify the performance and objectivity of individual inspectors and team leaders during onsite activities at reactor facilities?
- How do NRC managers with responsibility for oversight of inspectors assess the performance and objectivity of those inspectors? The answer should include discussion of the specific areas that NRC management should focus on in assessing inspectors.
- 7. What are the expectations of inspector conduct in a reactor control room during normal, transient, and emergency conditions?
- 8. What are NRC employees supposed to do if they receive an allegation of improper action by an NRC staff member or contractor involved in inspection or other oversight activities?

- Complete the ethics training. To access the training, go to the Office of the General Counsel (OGC) Web site (http://www.internal.nrc.gov/ogc/) and click on the word Ethics. Then, in the "Ethics" page, click on New Employee Ethics Training. Be sure to print the completion record at the end of the online ethics course. You must present evidence to your supervisor of the completion of this training course.
- 2. Locate and review the material specifically listed in the reference section of this activity. Although the agency has a code for employee/inspector conduct, not all regions or offices have specific guidance in this area. You should closely review the guidance applicable to your position. Some of this guidance may be located in directives that describe the duties and responsibilities of specific positions (e.g., resident staff or project engineer guidance).
- 3. Meet with the regional or office counsel or other designated ethics expert, and discuss applications of ethics to your role as an NRC employee and any questions you may have as a result of this activity. You should demonstrate understanding of the guidance by explaining the answers to the first three questions listed in the evaluation criteria section of this activity.
- 4. Discuss the items listed under the evaluation criteria section of this study activity with your immediate supervisor or designee.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-2.

TOPIC: (ISA-3) Fitness-for-Duty Rule

PURPOSE: The purpose of this activity is to provide you with an understanding of

the fitness-for-duty (FFD) rule. Nuclear power plants and certain other NRC licensees are required to have FFD programs, which include drug and alcohol testing procedures and other measures to ensure that the

licensee staff is capable of operating the facilities safely.

Research and test reactors are not subject to 10 CFR Part 26, "Fitness for Duty Programs," but according to 10 CFR 55.53(j), each licensed operator is required to meet FFD performance standards, and according to 10 CFR 55.53(k), each licensed operator "...shall participate in any drug and alcohol testing program that may be established for that non-power facility."

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COMPETENCY

AREAS: INSPECTION

SELF-MANAGEMENT

LEVEL OF

EFFORT: 3 hours

REFERENCES: Enforcement Manual, Chapter 7.15, "Enforcement Actions Involving

Fitness-For-Duty (FFD)" (Research and test reactors (nonpower reactors) are subject to this enforcement guidance only if a program for drug and alcohol testing has been established for that nonpower

reactor.)

EVALUATION CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC's FFD rule by successfully addressing the following:

- 1. State the purpose of the NRC's FFD rule and which licensees are required to meet this rule.
- 2. Explain why the FFD rule (10 CFR Part 26) is not considered an "unwarranted" invasion of privacy and how licensees implement the requirements.
- 3. Discuss the enforcement policy related to violations of the FFD rule.
- 4. Answer the following questions related to FFD. To whom does the FFD rule apply? Can a licensee deny access to an NRC inspector whom it suspects has been drinking? If not, what can

the licensee do? What are the reporting requirements associated with FFD violations committed by licensed operators, supervisory personnel, and maintenance technicians?

TASKS:

- 1. On the NRC's external Web site, use the search function to find information on FFD.
- 2. Read the information on the history of the NRC's FFD program.
- 3. Explore all aspects of the FFD rule and drug testing program guidance provided on the NRC Web site.
- 4. Meet with your immediate supervisor, or the person designated to be the new employee resource for this activity, to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-3.

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 effectively interact with individuals bringing concerns to the

NRC and to appropriately respond to those concerns.

COMPETENCY

AREAS: INSPECTION

SELF-MANAGEMENT COMMUNICATION

LEVEL OF

EFFORT: 12 hours

REFERENCES: 1. MD 8.8, "Management of Allegations"

- 2. NRC Form 613, "Disclosure of Alleger's Identity"
- 3. Office of Nuclear Reactor Regulation (NRR) Pocket Form, "Questions to Ask the Alleger"
- 10 CFR 50.5, 10 CFR 72.12, "Deliberate Misconduct"
- 5. 10 CFR 50.7, "Employee Protection"
- 6. 10 CFR 50.9, 10 CFR 72.11, "Completeness and Accuracy of Information"
- 7. Regional or office guidance on allegations
- 8. NUREG/BR-0240, "Reporting Safety Concerns to the NRC"
- 9. Office of Enforcement Web page

EVALUATION CRITERIA:

- Upon completion of this activity, you will be asked to show your understanding of the NRC's allegation process by successfully addressing the following:
 - a. State the criteria used to evaluate a statement to determine if the information in the statement is a potential allegation.
 - b. State the information that is required to be obtained during the receipt of a potential allegation.

- c. State the role of the Office Allegation Coordinator (OAC).
- d. State the purpose of, and the steps taken to prepare, an Allegation Review Board (ARB) briefing sheet.
- e. State the information that should be provided to an ARB.
- f. Discuss the criteria used to determine whether there is sufficient information to close an allegation.
- g. State the purpose of, and the information needed to prepare, allegation closure documentation.

- 1. Review the applicable regulations and guidance listed in the reference section.
- Complete the Web-based training module on allegations. To access the allegations training, select *Training* on the NRC internal Web site and access *iLearn*. Then, log into *iLearn*, select *Web-Based* under *Training Courses*, and select *Allegations Training*. Print the completion certificate at the end of the online allegations training as evidence of successfully completing the course.
- 3. Review the applicable regional or office guidance for allegations.
- 4. Coordinate a meeting with the OAC to discuss 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):
 - 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.
 - Review the associated allegation closeout memorandum or closeout letter to understand the rationale and basis for an allegation closeout.
- 6. Discuss with your immediate supervisor or OAC the options available to the NRC to follow up an allegation and the circumstances when each option is appropriate.

- 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.
- Attend one or two ARB meetings.
- 9. Work with your immediate 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 and 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 immediate supervisor or the OAC how the inspection results addressed the concerns. Discuss whether the allegation concerns were substantiated and how you would respond to the alleger.
- 10. Meet with your immediate supervisor or the OAC to discuss any questions that you may have as a result of this activity and to demonstrate that you can meet the evaluation criteria listed above.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-4.

TOPIC: (ISA-5) NRC Response to an Emergency at a Nuclear Facility

PURPOSE: The purpose of this activity is to acquaint you with the actions taken by

the NRC in response to an emergency that may occur at a nuclear facility. Emergency response is vital to the agency, fulfilling one of its primary mandates: protecting the health and safety of the public. As a fully qualified inspector, you will be trained to perform specific emergency response activities. This ISA will help you to understand how the NRC meets its emergency response mandate and will begin to build the knowledge that you will need later to successfully meet

emergency response responsibilities.

COMPETENCY

AREA: EMERGENCY RESPONSE

LEVEL OF

EFFORT: 12 hours

REFERENCES: 1. NRC internal Web page (Program Office>Nuclear Security and Incident Response (NSIR))

2. MD 8.2, "NRC Incident Response Program"

3. Regional policy guide for emergency response

- 4. NUREG-0728, "NRC Incident Response Plan" (Note: This NUREG is revised periodically to reflect changes to the agency's activities. Be sure to obtain the most recent version.)
- Inspection Procedure (IP) 71153, "Followup of Events and Notices of Enforcement Discretion," Appendix B, "Limiting NRC Impact During Events"

EVALUATION CRITERIA:

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

- 1. Identify the types of emergency classifications and give examples of when the different classifications would be declared.
- 2. Identify the different modes of NRC emergency response and describe the purpose of each mode.

- 3. Discuss the capabilities (e.g., communications, information technology) provided in the Headquarters, regional, and onsite emergency response facilities.
- 4. Recognizing that these positions may not apply to all nuclear facilities and that the NRC will act with all available resources to respond to an emergency, identify the responsibilities of the following during a declared emergency event:
 - a. resident staff
 - b. region-based staff
 - c. Headquarters staff
 - d. Headquarters operations officer
 - e. licensee
 - f. State and local officials
 - g. site team
 - h. base team
- 5. If you are on site when an emergency is declared, explain the difference in your actions if the resident inspectors are on site or if they are not on site. Describe the protocol for limiting unnecessary impact on licensee activities during an event.

- Understand the role of the Office of Nuclear Safety and Incident Response by exploring the information presented on the NRC's internal home page.
- 2. Review your region or office's policy guidance on emergency response.
- 3. Review the NRC Incident Response Plan in order to address the evaluation criteria. Go to *Emergency Response* on the NRC external Web site and "tour" the Operations Center.
- 4. Regional inspectors should meet the incident response coordinator, tour the incident response center, and if possible, observe the region's response during a drill or event.
- 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:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-5.

TOPIC: (ISA-6) Enforcement Program

PURPOSE: The purpose of this activity is to provide an overview of the NRC

enforcement program. This ISA will assist you in learning and understanding the following: (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 concerning the enforcement program.

COMPETENCY

AREAS: REGULATORY FRAMEWORK

ENFORCEMENT

LEVEL OF

EFFORT: 16 hours

REFERENCES: 1.

1. Enforcement-related information found on the Enforcement Web page of the NRC public Web site, including the NRC enforcement policy, the enforcement manual, the enforcement program overview, and the enforcement process diagram

2. Regional policy guide for enforcement

EVALUATION CRITERIA:

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

- 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 that the NRC uses in the enforcement program.
- 5. State the four issues that the NRC considers in assessing the significance of a violation.
- 6. Describe the two types of significance categorization outcomes.

- 7. Define "minor violation" and state the policy on documenting and correcting these violations.
- 8. Define "noncited violation."
- Define "escalated enforcement action."
- 10. Understand how to use the enforcement process diagram to disposition violations.
- 11. Describe predecisional enforcement conferences and regulatory conferences and explain why, when, and with whom these are conducted.
- 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 these are used.

- Locate the Enforcement Web page on the NRC public Web site.
 (Hint: Look under About Us, 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.
- Read the memorandum from the Director, Office of Enforcement, titled "Dispositioning of Enforcement Issues in a Risk-Informed Framework," dated December 5, 2000 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML003777558).
- 6. Review your region or office's guidance on implementing the enforcement policy.
- 7. Meet with the enforcement specialist in your region or office to discuss the current enforcement guidance.
- 8. Meet with your immediate supervisor or the designated person and discuss the items listed in the evaluation criteria section.

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-6. **DOCUMENTATION:**

TOPIC: (ISA-7) Office of Investigations

PURPOSE: The purpose of this activity is to familiarize you with the role of the

Office of Investigations (OI). A qualified inspector may be assigned to work with OI by providing technical support. This ISA will help you to understand the role of OI, how it functions, and your responsibilities

during 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, Division, or OI Director (or as delegated)

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 the staff's role 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 and discuss two materials/reactors cases investigated by OI, one substantiated and one not substantiated.

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

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-7.

TOPIC: (ISA-8) Understanding How the Commission Operates

PURPOSE: The NRC Commissioners establish the approach that the NRC staff will

use to address a particular need of agency importance. Examples include the Commission policy statement regarding NRC staff use of probabilistic risk analysis in the decision-making process and resident inspector staffing requirements at power reactor facilities. Commission decisions can have a significant impact on the conduct of inspection activities, and inspectors should be familiar with the direction-setting

and policymaking activities of the Commission.

COMPETENCY

AREA: REGULATORY FRAMEWORK

LEVEL OF

EFFORT: 4 hours

REFERENCES: NRC external Web sites

EVALUATION CRITERIA:

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

- 1. Locate Commission-related documents on the internal and external agency Web sites.
- 2. Discuss how the Commission uses staff requirements memoranda to direct the staff.

TASKS:

- 1. Read about the Commission's direction-setting and policymaking activities under "Policymaking".
- 2. Read about the different kinds of decision documents issued by the Commission.
- 3. Find and read Chairman Meserve's speech given on December 11, 2001, about NRC programs and processes for safety oversight.
- 4. Meet with your immediate supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-8.

TOPIC: (ISA-9) Organization and Content of the NRC Inspection Manual

PURPOSE:

The purpose of this activity is to introduce you to the content and organization of the NRC Inspection Manual and how it relates to inspection programs, particularly the Independent Spent Fuel Storage Installation (ISFSI) Inspection Program. As an inspector, you will be following an inspection program that is defined by a chapter of the manual and implemented by its associated IPs. This study activity will help you to identify and locate IPs that are used in the operating inspection program and to recognize the limitations associated with applying the guidance in the procedures. This activity will also introduce you to manual chapters establishing policy that will govern some of your actions in implementing the inspection program.

COMPETENCY

AREAS: REGULATORY FRAMEWORK

INSPECTION

LEVEL OF

EFFORT: 4 hours

REFERENCES: 1. NRC internal home page (Program Office—NMSS)

- 2. IMC 0040, "Preparing, Revising and Issuing Documents for the NRC Inspection Manual"
- 3. IMC 9900, "Technical Guidance"

EVALUATION CRITERIA:

After completing this activity, you will demonstrate your understanding of the content and organization of the NRC Inspection Manual, as well as the limitations associated with applying the guidance in the manual, by successfully doing the following:

- 1. Identify the major parts of the NRC Inspection Manual.
- 2. State the purpose of each of the following types of documents located in the NRC Inspection Manual:
 - a. manual chapters
 - b. IPs
 - c. temporary instructions
 - d. IMC 9900 technical guidance
 - i. technical quidance
 - ii. 10 CFR guidance
 - e. change notices

- 3. Describe the numbering/identification process used for the items in Criterion 2 above.
- 4. Demonstrate the ability to locate copies of inspection documents contained in the NRC Inspection Manual on the NRC Web site.

- 1. Locate IMC 0040 from the Electronic Reading Room on the NRC external Web site.
- 2. Read in detail the first six sections of IMC 0040, and become familiar with the remainder of the document.
- 3. Locate the table of contents for the NRC Inspection Manual.
- 4. Become familiar with the table of contents, noticing in particular the following:
 - a. the date of issuance and latest change notice entered in the table of contents
 - b. the title associated with CFR part numbers
 - c. the number associated with each document
 - d. the issue date and change notice number associated with each document
- 5. Locate the section of the NRC Inspection Manual titled "Technical Guidance."
- 6. Become familiar with the titles of the individual guidance documents.
- 7. Meet with your supervisor or an experienced inspector to discuss two reactor facility issues that could involve use of the technical guidance in IMC 9900. Discuss the limitations that are associated with applying the guidance in the IPs.
- 8. Meet with your immediate supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-9

TOPIC: (ISA-10) NRC Interagency Agreements

PURPOSE:

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

This activity will introduce you to the major interagency agreements that the NRC has entered 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" (Note: Research and test reactor inspectors should use this guidance as applicable.)
- 2. "U.S. DOT/NRC Memorandum of Understanding," dated July 2, 1979 (*Federal Register* Notice 44 FR 8690)
- Federal Emergency Management Agency (FEMA) and NRC MOU (ADAMS Accession No. ML051680117)
- 4. Regional, division, 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 MOU 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 or she identifies an occupational health and safety issue at a facility. Be able to state where the guidance for these actions is provided.
- 4. Identify the regional or office point of contact for coordinating NRC activities with State agencies and the following Federal agencies:
 - a. Occupational Safety and Health Administration (OSHA)
 - b. Department of Transportation (DOT)
 - c. FEMA
 - d. DOE

- Identify where the current NRC MOU are available. You can find electronic versions of these documents on the NRC internal Web site under "Enforcement."
- Review the MOU to develop a general understanding of the agreements between the NRC and OSHA, DOT, FEMA, and DOE. For regional inspectors, review any MOU between the NRC and the States in your regions. Determine the major services or resources available to be coordinated with the NRC and these agencies.
- 3. Identify the designated liaison for those agencies and State agencies in your region or office.
- 4. Meet with your supervisor, an experienced inspector, or the above liaison representative to discuss two 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.
- Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-10.

TOPIC: (ISA-11) Interaction with the Public

PURPOSE: The purpose of this activity is to acquaint you with the expectations for

NRC inspectors when dealing with members of the public. Responsiveness and openness are essential to the agency's ability to fulfill its goal of enhancing openness. A qualified inspector will have many opportunities to interact with the public. This ISA will help you to understand NRC procedures, policies, and available resources related

to interaction with the public.

COMPETENCY

AREAS: COMMUNICATION

SELF-MANAGEMENT

REGULATORY FRAMEWORK

LEVEL OF

EFFORT: 6 hours

REFERENCES:

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

EVALUATION CRITERIA:

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

1. Describe the expectations of NRC employees regarding answering telephone calls that involve inquiries from a member of the public.

- 2. Name some resources available to assist you in responding to the following types of public inquiries:
 - a. general questions about NRC organization and functions
 - b. general questions about a technical topic such as radioactive particles
 - c. questions about a licensed facility's performance or an NRC inspection
 - d. questions on a specific technical issue of current interest
- 3. Describe what is meant by "plain language." Identify where examples and guidance related to plain language can be found.
- 4. Define a "2.206 petition." Describe how the NRC handles it and the role of the petition manager and the NRC's 2.206 Petitions Coordinator.
- 5. Describe how other public inquiries, including nonallegations, are handled in your region or office.
- Describe what an NRC employee should do if he or she is asked to speak (on an NRC-related topic) at a meeting, such as the Lions Club or the local chapter of the American Nuclear Society.
- 7. Identify the types of NRC meetings that are generally open to the public. List some that are not usually open to the public.
- Describe how members of the public can find out about NRC public meetings. Discuss the expectations for timeliness of meeting notices and summaries.
- Describe the restrictions regarding the release of information to the public, including specific types of information that are not to be released.

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

TASKS:

1. Review the information presented by the NRC Public Affairs Office on interactions with the public that can be found on the NRC internal and external Web sites. Review the information available on the external NRC Web site related to general topics of interest to the public, such as public involvement, school programs, and technical information papers.

- 2. Visit the NRC Plain Language Action Plan on the internal Web site, including some of the links to resource materials.
- Visit the "Communication and Public Meetings" page on the NRC internal Web site. Review the public meeting policy and checklist.
- 4. Locate and review the material specifically listed in the reference section of this activity. The NRR Project Manager's Handbook and NUREG/BR-0200, "Public Petition Process," may also be beneficial in understanding the processing of 10 CFR 2.206 petitions and "ticketed items." You should also know the point of contact for 10 CFR 2.206 petitions in your region or office.
- 5. Review the steps in the rulemaking process on the NRC external Web site under "How We Regulate."
- Identify, locate, and review the region's or office's policy guidance on the staff's receipt and processing of inquiries from the general public. Meet with your Public Affairs Officer (PAO) or immediate supervisor and discuss what is expected of an inspector who receives an inquiry.
- 7. Meet with your immediate supervisor or designee and discuss the types of public interactions that inspectors are likely to encounter and ensure that you understand the inspector's role. Discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-11.

TOPIC: (ISA-12) Contacts with the Media

PURPOSE: The purpose of this activity is to provide an understanding of the

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

COMPETENCY

AREAS: COMMUNICATION

SELF-MANAGEMENT

LEVEL OF

EFFORT: 4 hours

REFERENCES: 1. NUREG/BR-0202, "Guidelines for Interviews with the News Media"

2. MD 3.4, "Release of Information to the Public"

3. NUREG/BR-0224, "Guidelines for Conducting Public Meetings"

4. NUREG-1614, Volume 4, "FY 2008—2013 Strategic Plan"

5. NUREG/BR-0308, "Effective Risk Communication"

6. Regional or office instructions establishing the policy and process for receipt of inquiries from the public or media

EVALUATION CRITERIA:

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

- Discuss the NRC goal of improving public confidence and how good communication with the media contributes to achievement of this goal.
- 2. Identify the importance of communicating with the media in a manner that builds trust.
- 3. Discuss the importance of agency goals, onsite inspection staff, the agency's safety focus, risk-informed policies, trustworthiness,

- and limitations on particular subject knowledge with regard to communicating with the media.
- 4. Discuss the importance of planning ahead and preparing well for communicating with the media.
- 5. Discuss the importance of controlling your speech, including what words not to use, not speculating, not guessing, not answering the "what if" questions, not giving your opinion or repeating any other person's opinion, and not talking off the record.
- 6. Describe the policy and process for communicating to management any inquiries from, or unplanned interactions with, the news media and other members of the public.

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

TASKS:

- 1. Meet with the regional PAO or someone from the Office of Public Affairs at Headquarters to discuss the guidelines for interviews with the news media.
- 2. Explore all aspects of the importance of appropriate, accurate, and clear communications with the public as these aspects appear on the NRC Web site.
- 3. Review the agency guidance on how to communicate with the public and media.
- 4. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-12.

TOPIC: (ISA-13) 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 the Freedom of Information Act (FOIA) and the Privacy Act while guarding against the inadvertent and unauthorized release of information. While communication with the public is very important, it 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—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: 6 hours

REFERENCES: 1. 10 CFR Part 9, "Public Records"

MD 3.1, "Freedom of Information Act"

3. MD 3.2, "Privacy Act"

4. MD 3.4, "Release of Information to the Public"

5. Regional or office 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:

- Discuss the NRC's 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 an FOIA request and discuss how important this responsiveness is in building public trust.
- 3. Discuss the following responsibilities when responding to an 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.
- Explore the information made available to the public on the NRC Web site and within ADAMS.
- Review the agency guidance on how to implement FOIA without releasing predecisional information and other information covered under the Privacy Act.
- 4. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-13.

Basic-Level Individual Study Activity

TOPIC: (ISA-14) Entrance and Exit Meetings

PURPOSE: Effective communication is critical for overall agency success. For NRC

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

COMPETENCY

AREAS: COMMUNICATION

TEAMWORK INSPECTION

LEVEL OF

EFFORT: 6 hours

REFERENCES: 1. Inspection Procedure 30703, "Management Meetings: Entrance

and Exit Interviews"

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 various guidance documents for conducting NRC entrance and exit meetings.
- 2. Successfully conduct a mock entrance and exit meeting in accordance with NRC guidance.

TASKS:1. Locate and read the guidance for conducting NRC entrance and exit meetings contained in the regional or office instructions.

2. Observe at least one entrance and exit meeting. If possible, observe meetings that have been conducted for a wide range of inspection activities in a variety of locations, such as a public exit meeting.

- 3. Review an inspection report that was recently completed, and conduct a "mock" entrance and exit meeting to discuss the inspection report findings in the presence of your supervisor or a fully qualified inspector designated by your supervisor.
- 4. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-14.

Basic-Level Individual Study Activity

TOPIC: (ISA-15) Documenting Inspection Findings

PURPOSE:

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

COMPETENCY

AREAS:

INSPECTION

SELF-MANAGEMENT COMMUNICATION

TEAMWORK

ASSESSMENT AND ENFORCEMENT

LEVEL OF

EFFORT: 20 hours

REFERENCES:

- 1. IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports," or IMC 0612, "Power Reactor Inspection Reports"
- 2. "Plain Language Initiative" Web site, which references NUREG-1379, "NRC Editorial Style Guide," the directives from the President of the United States, and other related documents: http://www.internal.nrc.gov/NRC/PLAIN/index.html
- 3. IMC 0620, "Inspection Documents and Records"
- 4. IMC 0612, "Power Reactor Inspection Reports"
- 5. Regional or office guidance (as applicable)

EVALUATION CRITERIA:

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

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

applicable NRC guidance.

3. Explain the threshold for documenting licensee- and NRC-identified issues in NRC inspection reports.

TASKS:

- Locate and read the guidance for documenting inspection findings. NRC IMCs and regional or office instructions will contain the necessary information.
- Locate and read the guidance for documenting violations. NRC IMCs and regional or office instructions will contain the necessary information.
- 3. Select recently completed inspection reports prepared in your region or office that contain (1) an NRC-identified finding, (2) a licensee-identified finding, (3) an NRC-identified violation, and (4) a licensee-identified violation. Compare the inspection report format and content to the report preparation guidance contained in either NRC IMC 0610 or IMC 0612 and to any applicable regional or office guidance. Through review of the guidance, as well as conversations with the report author, verify that the report was prepared in accordance with the requisite report preparation guidance.
- 4. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-15.

Basic-Level Individual Study Activity

TOPIC: (ISA-16) Open, Collaborative Working Environment and Ways To Raise

Differing Views

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. The NRC encourages trust, respect, and open communication to foster and promote a positive work environment that maximizes the potential of all individuals and improves the agency's regulatory decisionmaking. The NRC expects individuals to be NRC team players. In addition to informal discussions, which should be sufficient to resolve most issues, various mechanisms exist for individuals to express and have their differing views heard by decisionmakers, 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 behaviors expected of an NRC team player who supports 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: 2 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

 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. Regional or office instructions establishing additional implementing guidance for raising differing views (if applicable)

EVALUATION CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC OCWE and ways to raise differing views program by successfully addressing the following:

- 1. Discuss under what circumstances the various methods available for expressing differing views would be used.
- 2. State the expectations for an OCWE and behaviors for being an NRC team player.
- Describe the Open Door Policy.
- Describe the key features of the NCP.
- 5. Describe the key features of the DPO Program.
- 6. Describe where summaries of closed DPOs are published and where DPO Program reviews are available.
- 7. Identify who is your office's Differing Views Office Liaison.

TASKS:

- 1. Attend a seminar (if possible) on OCWE and ways to raise differing views, or review seminar slides.
- 2. Explore information and guidance for the OCWE, Open Door Policy, NCP, and DPO Program on identified Web sites.
- 3. Review MD 10.160, MD 10.158, and MD 10.159.
- 4. Meet with your immediate supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-16.

Basic-Level Individual Study Activity

TOPIC: (ISA-17) Overview of 10 CFR Part 72

PURPOSE: The purpose of this activity is to acquaint you with the regulations that

specify the requirements for all aspects of the construction and operation of an ISFSI. This ISA will help you to understand the content of 10 CFR Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater than Class C Waste," and how to locate the

specific requirements related to these regulations.

COMPETENCY

AREA: REGULATORY FRAMEWORK

LEVEL OF

EFFORT: 4 hours

REFERENCES: 1. NRC internal home page

2. Paper copy of the latest revisions to 10 CFR Part 72

EVALUATION CRITERIA:

Upon completion of the tasks in this activity, you will be asked to demonstrate your understanding of the general content of 10 CFR Part 72 by successfully discussing the following:

- 1. State the purpose of 10 CFR Part 72.
- 2. Given a specific subject, identify which section in 10 CFR Part 72 discusses the requirements for that subject by using the search feature on the NRC "Regulations" and "Nuclear Regulatory Legislation" Web pages.

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.
- Read and be familiar with 10 CFR Part 72.
- 3. Discuss the differences between a general license and specific license under 10 CFR Part 72.
- 4. Meet with your immediate supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-17. **DOCUMENTATION:**

Basic-Level Individual Study Activity

TOPIC: (ISA-18) Overview of 10 CFR Part 19 and 10 CFR Part 20

PURPOSE: The purpose of this activity is to familiarize you with 10 CFR Part 19,

"Notices, Instructions and Reports to Workers: Inspection and Investigations," and 10 CFR Part 20, "Standards for Protection against Radiation." These regulations will provide a perspective on conducting inspections in the working environment of a nuclear reactor. This ISA will help you to understand the purpose of 10 CFR Part 19 and 10 CFR Part 20 and provide you with some basic knowledge that all NRC inspectors will use when conducting inspections in controlled

areas containing radioactive material.

COMPETENCY

AREA: REGULATORY FRAMEWORK

LEVEL OF

EFFORT: 4 hours

REFERENCES: 1. NRC internal Web page "Information Resources—Regs (10 CFR)

NRC Maintained—Parts 19 and 20"

2. A hard copy of 10 CFR Part 19 and 10 CFR Part 20

EVALUATION CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your general understanding of 10 CFR Part 19 and 10 CFR Part 20 and why these regulations are important for all inspectors by successfully addressing the following:

- 1. Describe the general purpose of 10 CFR Part 19.
- Identify the section of 10 CFR Part 19 that describes the rights of radiation workers if they believe a violation of radiological working condition requirements has occurred.
- 3. Identify the section of 10 CFR Part 19 that requires a licensee to report doses to workers.
- 4. Describe the purpose of 10 CFR Part 20.
- 5. Identify the relevant section of 10 CFR Part 20 and discuss the various radiological circumstances that would require a licensee to notify the NRC.
- 6. Discuss why it is important for every NRC inspector to have a general understanding of 10 CFR Part 19 and 10 CFR Part 20.

7. Discuss the posting requirements for areas containing radioactive materials.

TASKS:

- 1. Review 10 CFR Part 19 for a general understanding of the following:
 - a. the purpose of 10 CFR Part 19 (19.1)
 - b. requirements for document postings (19.11(d) and (e))
 - c. requirements for promptly identifying any condition that may cause unnecessary exposure (19.12(a)(4))
 - d. instructions for individuals in a restricted area that may experience unnecessary exposure to radiation and/or radioactive materials (19.12(a)(5))
 - e. the times the NRC is allowed to inspect a facility (19.14(a))
 - f. requests by workers for an NRC inspection (19.16(a))
- 2. Review 10 CFR Part 20 for a general understanding of the following:
 - a. the purpose of 10 CFR Part 20 (20.1001)
 - b. occupational dose limits for adults (20.1201)
 - c. occupational dose limits for members of the public (20.1301)
 - d. concepts of as low as is reasonably achievable (ALARA) (20.1101)
 - e. conditions requiring individual monitoring of external and internal occupational dose (20.1502)
- Meet with your immediate supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-18.

Basic-Level Individual Study Activity

TOPIC: (ISA-19) NRC Safety Culture Program

PURPOSE: The purpose of this study activity is for you to obtain general knowledge

of the NRC's Safety Culture Program. Upon completion of this study activity, you will have the necessary background to apply the Safety

Culture Program to the inspection process.

COMPETENCY

AREAS: ASSESSMENT

REGULATORY FRAMEWORK

LEVEL OF

EFFORT: 16 hours

REFERENCES:

- 1. IMC 0305, "Operating Reactor Assessment Program" (focus on cross-cutting issues topics)
- 2. NRC's external Web site: http://www.nrc.gov/about-nrc/regulatory/enforcement/safety-culture.html
- 3. Internal safety culture Web site:
 http://www.internal.nrc.gov/communications/plans/active/ML09
 http://www.internal.nrc.gov/communications/active/ML09
 <a href="http://www.internal.nrc.gov/communications/active/mlo.gov/communications/plans/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communications/active/mlo.gov/communicatio
- 4. NRR Safety Culture Web site: http://nrr10.nrc.gov/rop-digital-city/rop-safety-culture.htm
- 5. Safety Culture—NRR Case Studies: http://nrr10.nrc.gov/rop-digital-city/case-studies.html
- 6. Safety Culture Communication Plan: http://www.internal.nrc.gov/communications/plans/active/ML09 0690206.pdf"
- 7. IMC 0612, Appendix F, "Examples of Cross-Cutting Aspects": http://pbadupws.nrc.gov/docs/ML0607/ML060730204.pdf

EVALUATION CRITERIA:

After completing this study activity, you should demonstrate a general understanding of the Safety Culture Program by successfully doing the following:

- 1. State the purpose of the NRC's Safety Culture Program.
- Define "cross-cutting issue."

- 3. Describe a safety-conscious work environment.
- 4. Explain the role of the inspector in the NRC Safety Culture Program.
- 5. Explain how to document a safety-significant finding considering the expectations of the NRC's Safety Culture Program. (See the NRR Case Studies listed in the reference section.)

TASKS:

- 1. Review the information in the reference section of this ISA.
- 2. Locate and become familiar with the NRC Safety Culture Program Web sites (i.e., the NRC's external and internal Web sites, NRR's Web sites, and regional Web sites, if applicable).
- 3. Become familiar with the definitions in IMC 0305 and the information related to cross-cutting issues.
- 4. Discuss the following questions:
 - a. What is a "safety culture"?
 - b. What is a "cross-cutting issue" (in relation to the Safety Culture Program)?
 - c. How are cross-cutting issues addressed in an inspection?
 - d. How does the Safety Culture Program apply to the Inspection Program?
 - e. Why is applying the Safety Culture Program to the Inspection Program important?
 - f. What is a "safety culture work environment"?
- 5. Identify the safety culture point of contact in the region or office.
- 6. Meet with your immediate supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item ISA-19.

Part II. Basic-Level On-the-Job Activities

The on-the-job training (OJT) activities require you to conduct inspection-related work, under supervision, at an ISFSI. These activities are designed to allow you to observe and perform key inspector tasks under controlled circumstances. Like the ISAs, each of the OJT activities informs you about the following:

- why the activity is important
- how much time may be needed to complete the assignment
- what you are expected to complete successfully during the activity

Before beginning the activities in this section, you must successfully complete the course work for site access. You can do this in one of two ways: by completing the NRC site access course and the site-specific requirements for access, or by completing the site access requirements at a site. Your immediate supervisor will discuss with you the best way to meet the site access requirements.

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

- You should complete the activities in this section in the order in which they are presented.
- You should complete all parts of each activity.
- Your supervisor 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 may also designate other fully qualified inspectors to
 work with you as you complete the various activities and to sign off the material or
 training courses you have completed.
- You are responsible for keeping track of the tasks you have completed. Be sure to complete all aspects of an OJT activity before meeting with your supervisor for evaluation.

Basic-Level On-the-Job Activity

TOPIC: (OJT-1) Facility Familiarization Tour with a Qualified Inspector

PURPOSE: The purpose of this activity is to familiarize you with (1) the general

layout of a facility and identity of various major equipment, (2) the types of industrial and radiological personal protection requirements and the proper method of complying with these requirements, (3) the use of security procedures, and (4) the proper response to an emergency, if the emergency is declared while you are in the facility. Specific attention should be devoted to the spent fuel pool and ISFSI

facility.

COMPETENCY

AREAS: INSPECTION

COMMUNICATION

FUNDAMENTAL PLANT DESIGN AND OPERATION

EMERGENCY RESPONSE

NOTE: Complete at least two facility tours.

LEVEL OF

EFFORT: 40 hours

REFERENCES: 1. Licensee drawings of the site building layouts

- 2. Certificates of Compliance of the cask systems used at the facility
- 3. Cask system drawings used at the facility

EVALUATION CRITERIA:

Upon completion of this activity, you will be asked to demonstrate your understanding of the general plant layout and inspector behavior in the plant by successfully addressing the following:

- 1. Given a drawing of the site building layout, be able to locate the major facility areas.
- Identify the types of industrial personnel safety equipment that are available and the circumstances under which each piece of equipment should be used.
- 3. Explain how you would know what type or types of radiological protection equipment are required before entering a radiologically controlled area (RCA).

- 4. Given specific scenarios related to security situations, describe the actions the staff should take.
- 5. Given specific scenarios related to emergency response situations, describe the actions the staff should take.
- 6. Given specific scenarios related to health physics situations, describe the actions the staff should take.
- 7. Discuss the type of license (i.e., general or specific) for storing spent fuel in the facility.

TASKS:

- 1. Review a drawing(s) of the building layout for the site, including the ISFSI layout, and plan a route for a tour that will include the major areas on the site, such as the following:
 - a. spent fuel pool and pad
 - b. turbine building (for power reactor inspectors)
 - c. engineered safeguards equipment areas
 - d. RCA
 - e. emergency response facility
 - f. control room switchyard or electrical distribution system
 - g. diesel generator rooms or other emergency power supplies
 - h. other areas deemed appropriate by a qualified inspector
- 2. Before the tour, discuss the requirements for personal industrial safety equipment with a qualified inspector.
- Tour the facility with a qualified inspector and locate the major pieces of equipment and facility areas, including, but not limited to, those items described above.
- 4. Enter the RCA with a qualified inspector and tour the area to observe and/or discuss items such as different radiological control postings, methods of designating areas that have additional radiological control requirements for entry, different radiological control clothing requirements for different areas, use of portal monitors and personal friskers, and monitoring personal dosimetry.
- 5. During the tour, discuss the proper security procedures for entering the areas discussed above, including the actions to take if a procedural error or violation of security rules is committed or observed.
- 6. During the tour, discuss the proper response if an emergency is declared while you are in the facility.
- 7. During the tour, discuss the proper response in the event of a radiological control event or anomaly.

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

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item OJT-1.

Basic-Level On-the-Job Activity

TOPIC: (OJT-2) Documenting Inspection Findings

PURPOSE: The purpose of this activity is to give guidance on content, format, and

style for inspection reports. The objectives of this activity are to ensure that inspection reports (1) clearly communicate significant inspection results to licensees, NRC staff, and the public, (2) provide a basis for significance determination and enforcement action, and (3) present information associated with significant inspection findings in a manner that will be useful to NRC management in developing long-term, broad

assessments of licensee performance.

COMPETENCY

AREAS: FUNDAMENTAL PLANT DESIGN AND OPERATION

INSPECTION COMMUNICATION TEAMWORK

ASSESSMENT AND ENFORCEMENT

LEVEL OF

EFFORT: 32 hours

REFERENCES:

- 1. IMC 0330, "Guidance for NRC Review of Licensee Draft Documents"
- 2. IMC 0610, "Nuclear Material Safety and Safeguards Inspection Reports," or IMC 0612, "Power Reactor Inspection Reports"
- 3. IMC 0620, "Inspection Documents and Records"
- 4. Enforcement policy (refer to the NRC Web site)
- 5. NUREG/BR-0075, "Field Policy Manual"

EVALUATION CRITERIA:

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

- 1. Discuss the thresholds for determining which findings should be documented in an inspection report.
- 2. Describe the relationship between an issue of concern, performance deficiency, and cross-cutting aspect.

- Describe standards that could be used to define a performance deficiency and why deviating from these standards may not be a violation of NRC requirements.
- 4. Discuss how to write input to an inspection report.
- 5. Discuss how to write a violation. Contrast the differences in documenting a noncited violation, an apparent violation, and a violation that is not suitable for evaluation.
- 6. Compare the documentation for an inspector-identified violation to that required for a licensee-identified violation (in terms of format, threshold, cross-cutting aspects, tracking, etc.).

TASKS:

- 1. Use IMC 0610 or IMC 0612 to determine whether an identified issue is above the threshold for documentation.
- 2. Use IMC 0610 or IMC 0612 to process a finding.
- 3. Use IMC 0610 or IMC 0612, and other available guidance, to draft an inspection report input.
- 4. Given a violation of regulatory requirements and the enforcement policy and guidance, write the analysis and enforcement sections for a finding, a violation, a noncited violation, and a finding with a safety culture cross-cutting aspect.
- 5. Use IMC 0330 and IMC 0620 to describe how to determine the documents that must be included as attachments to an inspection report for the agency record.
- 6. Meet with your immediate supervisor or the person designated to be your resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature in the line item for Basic-Level Certification Signature Card Item OJT-2.

Form A-1: Basic-Level Signature Card and Certification

Inspector's Name:

Division: Branch:

Region or Headquarters: Immediate Supervisor:

Description of Qualification Requirement	Employee Initials/Date	Supervisor's Signature/Date
Part A-1. Training Courses		
H-100, Site Access Training		
G-104, Expectations for Inspectors		
NRC What It Is and What It Does		
Regulatory Process		
Gathering Information Through Interviews		
Effective Communication		
Media Training		
Industrial Safety/OSHA		
G-205, Root Cause		
Media Training		
Part A-2. Individual Study Activities		
ISA-1 History and Organization of the U.S. Nuclear Regulatory Commission		
ISA-2 Inspector Objectivity, Protocol, and Professional Conduct		
ISA-3 Fitness-for-Duty Rule		
ISA-4 Allegations		
ISA-5 NRC Response to an Emergency at a Nuclear Facility		
ISA-6 Enforcement Program		
ISA-7 Office of Investigations		
ISA-8 Understanding How the Commission Operates		
ISA-9 Organization and Content of the NRC Inspection Manual		
ISA-10 NRC Interagency Agreements		
ISA-11 Interactions with the Public		
ISA-12 Contacts with the Media		

Form A-1. Basic-Level Signature Card and Certification (continued)

Inspector's Name:

Division: Branch:

Region or Headquarters: Immediate Supervisor:

Description of Qualification Requirement	Employee Initials/Date	Supervisor's Signature/Date
Part A-2. Individual Study Activities (continue)		
ISA-13 The Freedom of Information Act and the Privacy Act		
ISA-14 Entrance and Exit Meetings		
ISA-15 Documenting Inspection Findings		
ISA-16 Open, Collaborative Working Environment and Ways To Raise Differing Views		
ISA-17 Overview of 10 CFR Part 72		
ISA-18 Overview of 10 CFR Part 19 and 10 CFR Part 20		
ISA-19 NRC Safety Culture Program		
Part A-3. On-the-Job Training Activities		
OJT-1 Facility Familiarization Tour with a Qualified Inspector		
OJT-2 Documenting Inspection Findings		

This signature card and certification must be accompanied by the appropriate Form A-2: Basic-Level Equivalency Justification, if applicable.

Form A-2. Basic-Level Equivalency Justification

Inspector's Name:	
Division:	
Branch:	
Region or Headquarters:	
Immediate Supervisor	

Description of Qualification Requirement	Identify equivalent training and experience for which the inspector is to be given credit.
Part A-1. Training Courses	
NRC What It Is and What It Does	
Regulatory Process	
Gathering Information	
Effective Communication	
G-104, Expectations for Inspectors	
Industrial Safety/OSHA	
Media Training	
G-205, Root Cause	
H-100, Site Access Training (or licensee site access)	
H-117, Introductory Health Physics, or H-201, Health Physics Fundamentals	
Part A-2. Individual Study Activities	
ISA-1 History and Organization of the U.S. Nuclear Regulatory Commission	
ISA-2 Inspector Objectivity, Protocol, and Professional Conduct	
ISA-3 Fitness-for-Duty Rule	
ISA-4 Allegations	
ISA-5 NRC Response to an Emergency at a Nuclear Facility	
ISA-6 Enforcement Program	
ISA-7 Office of Investigations	
ISA-8 Understanding How the Commission Operates	
ISA-9 Organization and Content of the NRC Inspection Manual	
ISA-10 NRC Interagency Agreements	
ISA-11 Interaction with the Public	
ISA-12 Contacts with the Media	

Description of Qualification Req	uirement	Identify equivalent training and experience for which the inspector is to be given credit.
Part A-2. Individual Study Activ	• •	
ISA-13 The Freedom of Information Privacy Act	on Act and the	
ISA-14 Entrance and Exit Meeting	js .	
ISA-15 Documenting Inspection F	indings	
ISA-16 Open, Collaborative Work and Ways To Raise Differing View		
ISA-17 Overview of 10 CFR Part	72	
ISA-18 Overview of 10 CFR Part 10 CFR Part 20	19 and	
ISA-19 NRC Safety Culture Progr	am	
Part A-3. On-the-Job Training A	ctivities	
OJT-1 Facility Familiarization Tou Inspector	r with a Qualified	
OJT-2 Documenting Inspection Fi	ndings	
Supervisor's Recommendation	Name Branch	Date
Division Director's Approval	Name	Date

Division

Name

Office

Date

Copies to:

Office Director's Approval

Qualifying Staff HR Office

Personnel File

Form A-3. Certificate for Basic Qualification for a Safety Inspector of Independent Spent Fuel Storage Installations



Certificate of Completion

This is to certify that



Has successfully completed all of the requirements for the

Basic Qualification for a Safety Inspector of Independent Spent Fuel Storage Installations

Date

Immediate Supervisor Name, Chief Branch

Part B—Technical Proficiency Training

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Technical Proficiency Training Courses

This part of the Qualification Journal focuses on technical training needed to understand the operations, regulatory requirements, and inspection process of an independent spent fuel storage installation (ISFSI). You may complete the Basic-Level Proficiency requirements together with the Technical Proficiency requirements.

Note: Before signing up for any training course, you should verify that you have met the prerequisites.

Technical Proficiency Individual Study Activities

The individual study activities (ISAs) are designed to direct and focus your efforts as you begin reviewing documents that will be important to the performance of your job. Each study activity begins with a **purpose** statement informing you of why the activity is important and how it relates to the job of an inspector. The **level of effort** has been noted so that you have an idea of how much effort should be expended in completing the activity. (These times are estimates. You may need a little more or a little less time.) You should review the **evaluation criteria** first to better understand what you should achieve as a result of completing the activity. The evaluation criteria should help you to focus on the relevant information. The **tasks** outline the items that you must complete to successfully address the evaluation criteria.

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

- You should complete all parts of each activity.
- Your immediate supervisor will act as a resource as you complete each activity.
 Your immediate supervisor may also designate other fully qualified individuals to work with you and sign off the qualification journal as you complete the material.
 You should discuss any questions with your supervisor or designated resource.
- You are responsible for keeping track of the tasks completed. You should complete
 all the tasks in each activity before meeting with your immediate supervisor or
 designee for evaluation.

Technical Proficiency Individual Study Activity

TOPIC: (ISA-Technical-1) ISFSI Inspection Procedures

PURPOSE: The purpose of this activity is to introduce you to the content and

organization of the U.S. Nuclear Regulatory Commission (NRC) Inspection Manual and how it relates to the ISFSI inspection program. As an inspector, you will be following an inspection program that is defined by an Inspection Manual chapter (IMC) and implemented by its associated inspection procedures (IPs). This study activity will help you identify and locate inspection procedures that are used in the ISFSI inspection program and to recognize the limitations associated with applying the guidance contained in the procedures. This activity will also introduce you to IMCs establishing policy that will govern some of your actions in implementing the inspection program.

COMPETENCY

AREA: INSPECTION

LEVEL

OF EFFORT: 12 hours

REFERENCES: 1. IP 60851, "Design Control of ISFSI Components"

- 2. IP 60852, "ISFSI Component Fabrication by Outside Fabricators"
- 3. IP 60853, "On-Site Fabrication of Components and Construction of an ISFSI"
- 4. IP 60854/60854.1, "Preoperational Testing of an ISFSI"
- 5. IP 60855/60855.1, "Operation of an ISFSI"
- 6. IP 60856/60856.1, "Review of 10 CFR 72.212(b) Evaluations"
- 7. IP 60857, "Review of 10 CFR 72.48 Evaluations"
- 8. IP 60858, "Away-From-Reactor ISFSI Inspection Guidance"
- 9. IMC 2690, "Inspection Programs for Dry Cask Storage of Spent Nuclear Fuel at ISFSIs"
- 10. Spent Fuel Storage and Transportation (SFST)-17, "Issuance, Processing, and Tracking of Security Related Orders"

EVALUATION CRITERIA:

After completing this activity, you should be able to successfully do the following:

- 1. Identify the NRC IMC that established the ISFSI inspection program.
- 2. State the purpose of each of the following types of documents located in the NRC IMC:
 - a. IMCs
 - b. IPs
- 3. Identify when each IP should be used and the purpose of IPs.
- 4. Discuss an IP used frequently in your region with your supervisor and demonstrate knowledge of the scope and activities required by this procedure.
- 5. Understand the region's role in the process of prior issuing a security order before the facility's spent fuel loading campaign.

TASKS:

- 1. Read in detail IMC 2690.
- 2. Read in detail the IPs used to perform ISFSI inspections.
- 3. Become familiar with SFST-17 and discuss the timelines associated with ISFSI security orders, as well as the role of the regions and other offices when issuing ISFSI security orders.
- 4. Meet with your supervisor or an experienced inspector to discuss the scope of an upcoming inspection and the inspection plan to carry out the requirements of the IP.
- 5. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature on Item ISA-Technical-1.

Technical Proficiency Individual Study Activity

TOPIC: (ISA-Technical-2) Quality Assurance Program

PURPOSE: This activity will provide you with a working knowledge of the contents

of Title 10 of the Code of Federal Regulations (10 CFR) Part 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel, High-Level Radioactive Waste, and Reactor-Related Greater than Class C Waste," Subpart G, "Quality Assurance Program," industry standards, and the associated licensee programs and documents that collectively establish the basis for the licensee's

quality assurance (QA) program.

COMPETENCY

AREA: INSPECTION

LEVEL

OF EFFORT: 12 hours

REFERENCES: 1. 10 CFR Part 72, Subpart G

- American National Standards Institute/American Society of Mechanical Engineers (ANSI/ASME) NQA-1-1983, "Quality Assurance Program Requirements for Nuclear Facilities"
- 3. Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operation)"
- 4. Licensee QA program documentation
- 5. NUREG/CR-6407, "Classification of Transportation Packaging and Dry Spent Fuel Storage System Components According to Importance to Safety"
- 6. NUREG/CR-6314, "Quality Assurance Inspections for Shipping and Storage Containers"
- 7. Information Notice (IN) 2000-11, "Licensee Responsibility for Quality Assurance Oversight of Contractor Activities Regarding Fabrication and Use of Spent Fuel Storage Cask Systems"
- 8. IN 2002-35, "Changes to 10 CFR Parts 71 and 72 Quality Assurance Programs"

EVALUATION CRITERIA:

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

- 1. Discuss the general content of 10 CFR Part 72, Subpart G, and the 18 criteria of a QA program.
- 2. Describe the relationship between the plant license, the ISFSI Certificate of Compliance (CoC), the final safety evaluation report (FSAR), the CoC technical specifications, and 10 CFR Part 72, Subpart G.
- 3. Outline the key elements of an effective QA program, and the licensee's implementation of those elements at a facility.

TASKS:

- 1. Review and discuss the 18 criteria of 10 CFR Part 72, Subpart G, with your immediate supervisor or designee, and communicate an understanding of their content and general application to field inspections.
- 2. Review the basic regulations that require a QA program. Review industry standards related to QA. Find the parts of the FSAR, technical specifications, and plant license that address QA. Review a licensee's QA program and the implementing procedures.
- 3. At a site, gain a general understanding of the licensee's QA program through a combination of discussions with a qualified resident inspector and a review of assessments/reports prepared by the licensee QA organization.
- 4. Explain if the facility QAP can be the same as the ISFSI QAP.
- 5. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature on Item ISA-Technical-2.

Technical Proficiency Individual Study Activity

TOPIC: (ISA-Technical-3) Problem Identification and Resolution

PURPOSE: The purpose of this activity is to familiarize you with the licensee

programs and documents that were established to meet the requirements for an effective problem identification and corrective action program (CAP), as outlined in 10 CFR 72.172, "Corrective

Action."

COMPETENCY

AREA: INSPECTION

LEVEL

OF EFFORT: 16 hours

REFERENCES: 1. IP 71152, "Identification and Resolution of Problems"

2. Site-specific documents that describe the licensee's CAP

3. 10 CFR 72.172

EVALUATION CRITERION:

At the completion of this activity, you should be able to discuss the principal steps in a site's CAP with respect to identification of a condition adverse to quality through final resolution.

TASKS:

- At a licensee site, gain a general understanding of the licensee's CAP through a combination of discussions with a qualified inspector and attendance at routine CAP meetings.
- 2. Using IP 71152 for guidance, review a sample of about six issues entered into the licensee's CAP within the past month, and compare the licensee's actions with regulatory requirements. Discuss the resolution of the issues with the qualified inspector.
- 3. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criterion section.

DOCUMENTATION: You should obtain your immediate supervisor's or designee's signature on Item ISA-Technical-3.

Technical Proficiency Individual Study Activity

TOPIC: (ISA-Technical-4) ISFSI Licensing

PURPOSE: The purpose of this activity is to familiarize you with some documents

used for the licensing of ISFSIs and ways to access these documents during an onsite inspection. These documents describe how a licensee complies with NRC regulations and requirements. This activity will acquaint you with the most common types of licensing documents and show how individual facilities may implement NRC requirements differently, but still comply with the intent of the NRC's

regulations.

COMPETENCY

AREA: INSPECTION

LEVEL

OF EFFORT: 24 hours

REFERENCES: 1. NUREG-1536, "Standard Review Plan for Dry Cask Storage Systems"

2. NUREG-1567, "Standard Review Plan for Spent Fuel Dry Storage Facilities"

- 3. NUREG-1864, "A Pilot Probabilistic Risk Assessment of a Dry Cask Storage System at a Nuclear Power Plant"
- 4. P&PL1-84, "10 CFR Part 72 Backfit Guidance for NMSS" (ADAMS Accession No. ML040330332 and ML050350399)
- 5. Sample CoC
- Sample technical specification for a CoC and specific ISFSI license
- 7. Sample ISFSI CoC safety evaluation report
- 8. Sample of a reactor plant's updated final safety analysis reports (any available) and ISFSI final safety analysis report
- 9. Regulatory Guide 1.33, "Quality Assurance Program Requirements (Operations)"
- 10. SFST procedures (office instructions), overview

EVALUATION CRITERIA:

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

- 1. Discuss the main areas of review during ISFSI licensing activities.
- 2. Identify the regulatory enforcement hierarchy that exists between CFR requirements, a facility-specific license, facility-specific technical specifications, a facility-specific updated final safety analysis report and safety evaluation report, and facility-specific procedures.
- 3. Locate where the following can generally be found:
 - a. safety limits (facility specific)
 - b. design-basis accident analysis
 - c. limiting conditions for operation
 - d. bases for limiting conditions for operation
 - e. NRC criteria for accepting a safety analysis
 - f. licensee commitments to various standards
 - g. licensee security plan
- 4. Demonstrate an understanding of risk-significant review topics and application of these risk insights to the inspection process.
- 5. Discuss some lessons learned related to the ISFSI program and interactions with SFST considering discussions in the ISFSI Counterpart Meeting.
- 6. Explain the purpose of the ISFSI Inspector Counterpart Meeting and the monthly phone call between the regional branch chiefs responsible for the ISFSI program and SFST representatives. Understand the inspector's and region's role at these meetings.
- 7. Explain the process to submit a technical assistance request to SFST to resolve issues encountered during inspections.

TASKS:

- 1. Locate all applicable reference documents.
- 2. Become familiar with the Standard Review Plans to understand aspects of ISFSIs subject to review by the Office of Nuclear Materials Safety and Safeguards.
- 3. Explain the enforceability of licensing documents.
- 4. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

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- 5. Attend an ISFSI Inspector counterpart meeting.
- 6. Participate in a least two monthly phone calls between the regional branch chiefs responsible for the ISFSI program and SFST representatives.
- 7. Become familiar with the location of SFST procedures.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature on Item ISA-Technical-4

Technical Proficiency Individual Study Activity

TOPIC: (ISA-Technical-5) ISFSI Control of Heavy Loads

PURPOSE: The purpose of this activity is to provide you with information used to

formulate and utilize the licensee's control of heavy loads program. This activity will also familiarize you with NRC technical documents and industry standards, as well as generic communications documenting the history and evolution of control of heavy loads at nuclear power

plants.

COMPETENCY

AREA: INSPECTION

LEVEL

OF EFFORT: 24 hours

REFERENCES: 1. ANSI B30.1, "Jacks, Industrial Rollers, Air Casters, and Hydraulic Gantries"

2. ASME B30.2, "Overhead and Gantry Cranes"

3. ASME B30.9, "Slings"

- 4. ANSI N14.6, "Radioactive Materials—Special Lifting Devices for Shipping Containers Weighing 10,000 Pounds (4500 kg) or More"
- 5. Branch Technical Position Auxiliary Systems Branch (ASB) 9-1, "Overhead Handling System for Nuclear Power Plants"
- 6. NUREG-0554, "Single-Failure-Proof Cranes for Nuclear Power Plants"
- 7. NUREG-0612, "Control of Heavy Loads at Nuclear Power Plants: Resolution of Generic Technical Activity A-36"
- 8. ASME NOG-1-2004, "Rules for Construction of Overhead and Gantry Cranes"
- 9. NUREG-1774, "Survey of Crane Operating Experience at U.S. Nuclear Power Plants from 1968 through 2002"
- 10. Generic Letter (GL)-80-113, "Control of Heavy Loads"
- 11. GL-81-07, "Control of Heavy Loads"

- 12. GL 83-42, "Clarification to Generic Letter 81-07 Regarding Response to NUREG-0612, 'Control of Heavy Loads at Nuclear Power Plants'"
- 13. GL 85-11, "Completion of Phase II of 'Control of Heavy Loads at Nuclear Power Plants' NUREG-0612"
- Regulatory Issue Summary (RIS) 05-25, "Clarification of NRC Guidelines for Control of Heavy Loads"
- 15. IN 03-20, "Derating Whiting Cranes Purchased before 1980"
- 16. IN 09-20, "Degradation of Wire Rope Used in Fuel Handling Applications"
- 17. IN 97-51, "Problems Experienced with Loading and Unloading Spent Nuclear Fuel Storage and Transportation Casks"
- 18. RIS 06-22, "Lessons Learned from Recent 10 CFR Part 72 Dry Cask Storage Campaign"
- 19. Licensee daily, frequent, and periodic ASME B30.2 inspection procedures, if available
- 20. Licensee NUREG-0554 Compliance Matrix, if available

EVALUATION CRITERIA:

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

- Demonstrate a knowledge of industry codes and standards pursuant to the control of heavy loads. Specifically, you should be able to demonstrate knowledge of required heavy load inspection frequencies and scopes, requirements for operation of overhead cranes, and general crane design.
- Understand the single-failure-proof crane design acceptance criteria and load drop analysis requirements. In addition, understand the evolution of the requirements for controlling heavy loads.
- 3. Understand the purpose and enforceability of industry standards, as a regulator.
- 4. Understand the purpose of generic communications, as a regulator.
- 5. Understand the purpose and enforceability of a NUREG, as a regulator.

TASKS:

- 1. Review the Standard Review Plans to understand aspects of ISFSIs subject to review by the Office of Nuclear Materials Safety and Safeguards.
- 2. If possible, at a licensee site, perform a crane walkdown of a licensee overhead crane with a qualified inspector observing the licensee's performance of daily operational checks.
- 3. Review NUREG-0612 and understand its implementation at licensee sites.
- 4. Locate the generic communications provided in the reference section.
- 5. Become familiar with the issues described in the generic communications listed in the reference section.
- 6. Discuss the differences between the types of generic communications.
- 7. Discuss the enforceability of the NRC's documentation (e.g., safety evaluation report, NUREG) and the licensee's (e.g., CoC).
- 8. Explain how and why industry standards may be used during an inspection. Also, explain what version of the industry standard is used during a particular inspection.
- 9. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature on Item ISA-Technical-5.

TOPIC: (ISA-Technical-6) ISFSI Canister Processing

PURPOSE: The purpose of this activity is to provide knowledge about ISFSI

canister processing and technical issues associated with this process.

COMPETENCY

AREA: INSPECTION

LEVEL

OF EFFORT: 16 hours

REFERENCES:

- 1. Bulletin 96-04, "Chemical, Galvanic, or Other Reactions in Spent Fuel Storage and Transportation Casks"
- 2. IN 2011-10, "Thermal Issues Identified During Loading of Spent Fuel Storage Casks"
- 3. RIS 06-22, "Lessons Learned from Recent 10 CFR Part 72 Dry Cask Storage Campaign"
- 4. SFST-Interim Staff Guidance (ISG) 11, "Cladding Considerations for the Transportation and Storage of Spent Fuel"
- 5. SFST-ISG 22, "Potential Rod Splitting Due to Exposure to an Oxidizing Atmosphere During Short-Term Cask Loading Operations in LWR or Other Uranium Oxide Based Fuel"
- 6. Licensee-specific canister processing procedures
- 7. Canister final safety analysis report canister processing operating procedures

EVALUATION CRITERIA:

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

- Understand the steps required for canister processing. Specifically, you should be able to demonstrate knowledge of the order of the canister processing steps and potential safety issues that may arise during these steps.
- 2. Identify the documentation that contains the regulatory requirements for ISFSI canister processing.
- 3. Understand and identify the safety-significant steps during a loading campaign.

TASKS:

- 1. Review the Standard Review Plans to understand aspects of ISFSIs subject to review by the Office of Nuclear Materials Safety and Safeguards.
- 2. If available, review licensee specific training for canister processing operations.
- 3. Locate and become familiar with the ISG provided in the reference section of this ISA.
- 4. Explain the purpose of ISG.
- 5. Explain the purpose of canister processing procedures and why these are inspected.
- 6. If possible, at a licensee site with a qualified inspector, observe licensee staff performing canister processing operations.
- 7. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature on Item ISA-Technical-6.

TOPIC: (ISA-Technical-7) ISFSI Pad Construction and Design

PURPOSE: This activity will provide a general understanding of ISFSI pad

construction and design. This activity will also familiarize you with relevant documents and issues associated with the construction and

design of an ISFSI pad.

COMPETENCY

AREA: INSPECTION

LEVEL

OF EFFORT: 24 hours

REFERENCES: 1. American Concrete Institute (ACI)-349, "Code Requirement for Nuclear Safety Related Concrete Structures"

2. ACI-318, "Building Code Requirements for Structural Concrete"

3. ACI-301, "Specification for Structural Concrete"

4. American Society of Civil Engineers 4-98, "Seismic Analysis of Safety-Related Nuclear Structures and Commentary"

- 5. American Society for Testing and Materials (ASTM) 1196, "Standard Test Method for Nonrepetitive Static Plate Load Tests of Soils and Flexible Pavement Components, for Use in Evaluation and Design of Airport and Highway Pavements"
- 6. ASTM C172, "Standard Practice for Sampling Freshly Mixed Concrete"
- ASTM C94, "Standard Specification for Ready-Mixed Concrete"
- 8. ASTM C31, "Standard Practice for Making and Curing Concrete Test Specimen in Field"
- 9. IN 95-28, "Emplacement of Support Pads for Spent Fuel Dry Storage Installations at Reactor Sites"
- 10. IN 03-16, "Icing Conditions Between Bottom of Dry Storage System and Storage Pad"
- 11. IN 08-17, "Construction Experience with Concrete Placement"

EVALUATION CRITERIA:

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

- 1. Understand the steps of ISFSI pad construction before concrete placement and the codes and standards governing each step.
- 2. Demonstrate knowledge of concrete placement at ISFSI pads. Specifically, describe regulatory requirements for placement sampling and testing of concrete as well as placement technique.
- 3. For a site, identify the documentation that contains the regulatory requirements for the design of the ISFSI pad.

TASKS:

- 1. Review industry codes and standards used to govern ISFSI pad construction and design.
- 2. Discuss the purpose and enforceability of industry standards, as a regulator.
- 3. If possible, at a licensee site with a qualified inspector, observe the ISFSI pad: excavation, backfill, compaction, soil testing, rebar placement, concrete placement, and concrete testing.
- 4. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's designee's signature on Item ISA-Technical-7.

TOPIC: (ISA-Technical-8) Radiation Protection

PURPOSE: The purpose of this activity is to inform you of the regulatory

requirements and NRC guidance related to radiation protection

applicable to the loading and storage of ISFSI casks.

COMPETENCY

AREA: INSPECTION

LEVEL

OF EFFORT: 12 hours

REFERENCES:

1. 10 CFR 72.104, "Criteria for Radioactive Materials in Effluents and Direct Radiation from an ISFSI or MRS"

- 2. 10 CFR 72.106, "Controlled Area of an ISFSI or MRS"
- 3. SFST-ISG-13, "Real Individual"
- 4. SFST-ISG-14, "Supplemental Shielding"
- 5. RG 8.29, "Instruction Concerning Risks from Occupational Radiation Exposure"
- 6. IN 90-33, "Sources of Unexpected Occupational Radiation Exposures at Spent Fuel Storage Pools"
- 7. Licensee as low as is reasonably achievable (ALARA) plan (if available)

EVALUATION CRITERIA:

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

- 1. Understand the ISFSI storage radiation protection regulatory requirements.
- 2. Understand and identify the safety-significant canister loading steps that may pose elevated radiation levels to plant workers.

TASKS:

- 1. Review a licensee's ISFSI loading ALARA plan to evaluate elevated radiation levels during critical ISFSI loading steps.
- 2. Review requirements for ISFSI storage radiation levels.

- 3. Observe at least one ISFSI loading activity including the radiation protection staff's actions to maintain ALARA principles.
- 4. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature on Item ISA-Technical-8

TOPIC: (ISA-Technical-9) ISFSI Canister Sealing

PURPOSE: The purpose of this activity is to provide general knowledge of the

ISFSI canister sealing process.

COMPETENCY

AREA: INSPECTION

LEVEL

OF EFFORT: 16 hours

REFERENCES: 1. SFST-ISG-4, Revision 1, "Cask Closure Weld Inspections"

2. SFST-ISG-18, Revision 1, "The Design and Testing of Lid Welds on Austenitic Stainless Steel Canisters as the Confinement Boundary for Spent Fuel Storage"

- 3. SFST-ISG 25, "Pressure and Helium Leakage Testing of the Confinement Boundary of Spent Fuel Dry Storage Systems"
- 4. ASME Boiler and Pressure Vessel Code (applicable parts of Sections III, V, and IX)
- 5. ASNT Handbook, Volume 1, "Leak Testing"

EVALUATION CRITERIA:

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

- 1. Demonstrate knowledge of ISFSI canister sealing and nondestructive examination codes and standards.
- 2. Understand the regulatory requirements for testing the spent fuel canister's confinement boundary.

TASKS:

- 1. Review a licensee's ISFSI loading ALARA plan to evaluate elevated radiation levels during critical ISFSI loading steps.
- 2. If possible, at a licensee site with a qualified inspector, observe ISFSI canister sealing and nondestructive examination activities.
- 3. Discuss the regulatory requirements for testing the spent fuel canister's confinement boundary and where these requirements may be found.

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

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature on Item ISA-Technical-9.

TOPIC: (ISA-Technical-10) ISFSI Fuel Selection

PURPOSE: The purpose of this activity is to provide basic knowledge on the

authorized contents that can be loaded in cask systems that will be placed in an ISFSI pad. This activity will also introduce possible conditions of the spent fuel, as well as challenges associated with fuel

retrievability.

COMPETENCY

AREA: INSPECTION

LEVEL

OF EFFORT: 12 hours

REFERENCES: 1. SFST-ISG-1, "Damaged Fuel"

2. SFST-ISG-2, "Fuel Retrievability"

3. SFST-ISG-9, "Storage of Components Associated with Fuel Assemblies"

- 4. SFST-ISG-22, "Potential Rod Splitting Due to Exposure to an Oxidizing Atmosphere During Short-Term Cask Loading Operations in LWR or Other Uranium Oxide Based Fuel"
- 5. IN 99-29, "Authorized Contents of Spent Fuel Casks"
- 6. IN 02-09, "Potential for Top Nozzle Separation and Dropping of a Certain Type of Westinghouse Fuel Assembly"
- 7. NUREG/CR-6831, "Examination of Spent PWR Fuel Rods after 15 Years of Storage"
- 8. Licensee CoC, Approved Contents

EVALUATION CRITERIA:

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

- 1. Demonstrate knowledge of ISFSI fuel selection criteria.
- 2. Understand some potential hazards during a fuel loading campaign that result from the condition of the spent fuel.

TASKS:

- 1. Review a licensee's fuel selection package if available and compare to the CoC approved contents.
- 2. Become familiar with the information in the reference section and discuss the following:
 - a. What is "damaged fuel"?
 - b. What are some challenges associated with fuel retrievability?
 - c. What does "approve contents" mean?
- 3. If possible, at a licensee site with a qualified inspector, observe ISFSI fuel loading activities on a refuel bridge.
- 4. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature on Item ISA-Technical-10

TOPIC: (ISA-Technical-11) 10 CFR 72.48

PURPOSE: The purpose of this activity is to provide the information necessary to

review evaluations and procedures under 10 CFR 72.48, "Changes,

Tests, and Experiments."

COMPETENCY

AREA: INSPECTION

LEVEL

OF EFFORT: 16 hours

REFERENCES: 1. 10 CFR 72.48

- 2. RG 3.72, "Guidance for Implementation of 10 CFR 72.48, 'Changes, Tests, and Experiments'"
- 3. Appendix B, Nuclear Energy Institute 96-07, "Guidelines for 10 CFR 72.48 Implementation"
- 4. IN 97-039, "Inadequate 10 CFR 72.48 Safety Evaluation of Independent Spent Fuel Storage Installations"
- 5. SFST-ISG 21, "Use of Computational Modeling Software"
- 6. Licensee 10 CFR 72.48 procedure (if available)

EVALUATION CRITERIA:

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

- 1. Demonstrate knowledge of the 10 CFR 72.48 process.
- 2. Review licensees' or vendors' 10 CFR 72.48 procedures.

TASKS: 1. Review 10 CFR 72.48.

- 2. Review RG 3.72, including Appendices A and B.
- 3. Discuss similarities and differences in the criteria of 10 CFR 72.48 and 10 CFR 50.59, "Changes, Tests and Experiments," with your region's or office's 10 CFR 50.59 expert.
- 4. Review a 10 CFR 72.48 or 10 CFR 50.59 screening and evaluation.

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

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature on Item ISA-Technical-11

Technical-Level On-the-Job Activities

The on-the-job training (OJT) activities require you to conduct inspection-related work, under supervision, at an ISFSI facility. They are designed to allow you to observe and perform key inspector tasks under controlled circumstances. Like the ISAs, each of the OJT activities informs you of the importance of the activity, the time that might be needed to complete the assignment, and the expectations for successful completion.

Before beginning the activities in this section, you must successfully complete the course work for site access. You can do this in one of two ways: by completing the NRC site access course and the site-specific requirements for access, or by completing the site access requirements at a site. Your immediate supervisor will discuss with you the best way to meet the site access requirements.

You should complete three individual types of inspections: (1) pad construction, (2) preoperational testing, and (3) operational.

If you are unable to participate in each type of inspection, you may substitute another ISFSI inspection.

- You should complete all practical parts of each activity.
- Your supervisor will act as a resource for help in completing each activity. You should discuss any questions about how a task must be done or how the guidance is to be applied. Your immediate supervisor may designate a fully qualified inspector to work with you in completing the various activities and to sign off the OJT as you complete it.
- You are responsible for keeping track of the tasks completed. You should complete all aspects of an OJT activity before your immediate supervisor's evaluation.

Issue Date: 11/07/11 B-27 1246

TOPIC: (OJT-1, -2, and -3) Inspection Activities

PURPOSE: The purpose of this activity is to familiarize you with inspection tasks

commonly performed by an inspector. This OJT will prepare you to independently plan and conduct the baseline inspection program, as

defined in the applicable IMC.

COMPETENCY

AREAS: INSPECTION

COMMUNICATION

TEAMWORK

SELF-MANAGEMENT

LEVEL OF EFFORT:

Note: The objective of this activity is to make sure that you have experienced the full range of inspection activities. The time needed to

experienced the full range of inspection activities. The time nee

complete the tasks will depend on your proficiency.

REFERENCES: 1. IP 60853, "On-Site Fabrication of Components and Construction of an ISFSI"

2. IP 60854/60854.1, "Preoperational Testing of an ISFSI"

3. IP 60855/60855.1, "Operation of an ISFSI"

4. IP 60856/60856.1, "Review of 10 CFR 72.212(b) Evaluations"

5. IP 60857, "Review of 10 CFR 72.48 Evaluations"

6. IP 60858, "Away-From-Reactor ISFSI Inspection Guidance"

7. IMC 2690, "Inspection Programs for Dry Cask Storage of Spent

Nuclear Fuel at ISFSIs"

EVALUATION CRITERIA:

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

1. Understand the baseline inspection process.

2. Describe the contents and purpose of the site-specific inspection plan.

3. Describe the purpose of the inspection planning call.

4. Develop a specific inspection plan and provide it to your immediate supervisor.

5. Describe the purpose and contents of a specific inspection plan.

- 6. Discuss the documents to be reviewed, including their content and purpose, before an inspection.
- 7. Describe the activities accomplished by the staff during the inspection(s) and their purpose.
 - a. entrance meeting
 - b. management briefing and exit prebriefing of licensee management
 - c. exit meeting

TASKS:

- 1. Review the annual or applicable site-specific inspection plan to understand how the staff's inspection effort fits into the overall plan.
- 2. Participate in an inspection planning call to the licensee.
- 3. Participate in developing the inspection-specific plan.
- 4. Review the following documents to understand how they provide background information, current issues, and areas for emphasis and support for the inspection effort you plan to accomplish:
 - a. previous inspection reports
 - b. appropriate licensee documents
 - c. applicable inspection procedures
 - d. other applicable documents (e.g., performance indicators, licensee event reports, information notices, and bulletins)
- 5. Observe and participate in an entrance meeting.
- 6. During a planned inspection, perform the following tasks:
 - a. observe implementation of inspection procedures
 - b. observe interviews and discussion with facility personnel
 - c. observe facility work activities
 - d. review documentation and records
 - e. discuss inspection results with the lead inspector
- 7. Observe and participate in a briefing to NRC management.
- 8. Observe and participate in an exit prebriefing of licensee management.
- 9. Observe and participate in an exit meeting.
- 10. Perform the following tasks in an inspection:
 - a. draft a portion of the inspection-specific plan
 - b. conduct activities described in Task 6 above, as appropriate
 - c. conduct a portion of the following:

- i. entrance meeting
- ii. briefing of NRC management
- iii. prebriefing of licensee management
- iv. exit meeting
- 11. Meet with your supervisor or the person designated to be the resource for this activity to discuss the items listed in the evaluation criteria section.

DOCUMENTATION:

You should obtain your immediate supervisor's or designee's signature on Items OJT-1, -2, and -3.

Form B-1: Technical-Proficiency-Level Signature Card and Certification

Inspector's	Name:
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Division: Branch:

Region or Headquarters: Immediate Supervisor:

Description of Qualification Requirement	Employee Initials/Date	Supervisor's Signature/Date				
Part B-1. Training Courses						
Crane Technology (SF-182)						
H-117, Reactor Concepts Introductory Health Physics, or H-201, Health Physics Fundamentals						
Concrete Technology and/or Codes Course						
Welding Technology and/or Codes Course						
ISFSI Inspector Training						
Part B-2. Individual Study Activities						
ISA-1 ISFSI Inspection Procedures						
ISA-2 Quality Assurance Program						
ISA-3 Problem Identification and Resolution						
ISA-4 ISFSI Licensing						
ISA-5 ISFSI Control of Heavy Loads						
ISA-6 Canister Processing						
ISA-7 ISFSI Pad Construction and Design						
ISA-8 Radiation Protection						
ISA-9 ISFSI Canister Sealing						
ISA-10 ISFSI Fuel Selection						
ISA-11 10 CFR 72.48						
Part B-3. On-the-Job Training Activities						
OJT-1 ISFSI Pad Inspection Accompaniment						
OJT-2 ISFSI Preoperational Testing Accompaniment						
OJT-3 ISFSI Operational Accompaniment						

This signature card and certification must be accompanied by the appropriate Form B-2: Technical-Proficiency-Level Equivalency Justification, if applicable.

Issue Date: 11/07/11 B-31 1246

Form B-2: Technical-Proficiency-Level Equivalency Justification

Inspector's Name: Division: Branch: Region or Headquarters: Immediate Supervisor:			
Description of Qualification Re	quirement	Employee Initials/Date	
Crane Technology (SF-182)			
H-117, Reactor Concepts Introdu Physics, or H-201, Health Physic Fundamentals			
Concrete Technology and/or Coo	les Course		
Welding Technology and/or Code	es Course		
ISFSI Inspector Training			
ISA-1 ISFSI Inspection Procedu	res		
ISA-2 Quality Assurance Progra	m		
ISA-3 Problem Identification and	Resolution		
ISA-4 ISFSI Licensing			
ISA-5 ISFSI Control of Heavy Lo	ads		
ISA-6 Canister Processing			
ISA-7 ISFSI Pad Construction a	nd Design		
ISA-8 Radiation Protection			
ISA-9 ISFSI Canister Sealing			
ISA-10 ISFSI Fuel Selection			
ISA-11 10 CFR 72.48			
OJT-1 ISFSI Pad Inspection Acc	ompaniment		
OJT-2 ISFSI Preoperational Tes Accompaniment	ting		
OJT-3 ISFSI Operational Accom	paniment		
Cuponicar's Decommendation		•	
Supervisor's Recommendation	Name Branch		Date
Division Director's Approval			
	Name Division		Date
Office Director's Approval			
• • • • • • • • • • • • • • • • • • • •	Name Office		Date

Issue Date: 11/07/11 B-32 1246

Qualifying Staff HR Office Copies to:

Personnel File

Revision History Sheet for IMC 1246, Appendix B3

Commitment Tracking Number	Issue Date	Description of Change	Training Needed	Training Completion Date	Comment Resolution Accession Number
N/A	11/07/11 CN 11-028 ML112650062	To develop an agencywide training for Independent Spent Fuel Storage Safety Inspectors. This is the first version of this document, which was developed with support of the regions	Yes	N/A	ML112650068