APPENDIX B2

TRAINING REQUIREMENTS AND QUALIFICATION JOURNAL FOR

SPENT FUEL STORAGE AND TRANSPORTATION INSPECTOR

1. **TRAINING REQUIREMENTS**
2. Applicability

The training described below is required for full-time inspectors and inspection team

leaders assigned to perform inspections of activities and facilities of Spent Fuel Storage and Transportation.

B. Training

 1. Required Initial Training.

 a) Self-Study and On-The-Job Training:

 (1) NRC Orientation.

 (2) Code of Federal Regulations.

 (3) NRC Management Directives.

 (4) NMSS/SFST Orientation Reading.

 (5) Regulatory Guidance.

 (6) Industry Codes and Standards.

 (7) NRC Inspection Manual Chapters.

 (8) Formal Training.

 (9) Inspection Accompaniments.

 b) Core Training. These courses establish minimum formal classroom training requirements. Refer to Section 1246-09 for exceptions to these requirements.

 (1) “Fundamentals of Inspection Course” (G-101)

 (2) “NMSS Radiation Worker Training” (H-102), or “Site Access Training” (H-100)

 (3) “Transportation of Radioactive Materials Course” (H-308)

 2. Specialized Training. Additional training beyond that identified as Core Training. The supervisor will determine this training, which will depend on the individual’s previous work experience and planned inspection activities in specific areas.

1. **QUALIFICATION JOURNAL**

A. Applicability

This Nuclear Material Safety and Safeguards (NMSS) Division of Spent Fuel Storage and Transportation (SFST) Qualification Journal implements the United States Nuclear Regulatory Commission (U.S. NRC) Inspection Manual Chapter (IMC) 1246 , by establishing the minimum training requirements for a new inspector in SFST. These requirements provide the base knowledge to inspect the following:

 1. Licensing of radioactive material package and spent fuel storage designs;

 2. Storage of spent fuel; and

 3. Entities engaged in the design, fabrication, and use of packages and installations for the transportation of radioactive materials and the storage of spent nuclear reactor fuel.

The SFST Qualification Journal serves as a guideline for the development of a Program Office Qualification Journal, and establishes the minimum training requirements consistent with IMC 1246. The Program Office Qualification Journal must provide traceable documentation to show that minimum requirements are met for each SFST inspector. The employees supervisor has the discretion to modify the requirements, as needed, based on the employees previous experience, education, and course availability. The employees supervisor may add, delete, or substitute with other material, for course(s) that will not be available during the qualification period. For exceptions to the SFST qualification process (e.g., grandfathering and individuals qualified under other NRC divisions), refer to section 8 of the introduction of IMC 1246 and SFST Office Instruction number six (SFST-06). For post qualification training, refer to section 6 of the introduction of IMC 1246 and Appendix A, of this IMC.

The SFST Qualification Journal consists of a series of qualification cards and signature cards. Each signature card is used to document task completion, as indicated by the appropriate signature block(s). The corresponding qualification guide establishes the minimum knowledge levels or areas of study that must be completed for each signature card. Employees to be qualified as project managers or technical reviewers should follow the guidance in Appendices A and B1, of NRCs IMC 1246, while employees to be qualified as inspectors should follow Appendices A and B2, of IMC 1246.

B. Discussion

This SFST Qualification Journal contains a qualification summary sheet, and signature cards. The supervisor should discuss the scope of this SFST Qualification Journal and expected knowledge level, as described later in this SFST Qualification Journal, with the staff member before the staff member starts the qualification process. The qualifying staff member is expected to complete only the signature card(s) applicable to his /her assigned work group. It may not be necessary to complete every requirement. At the supervisors discretion, requirements may be deleted, or added, depending on the staff members previous experience. To support the inspection work regarding all facility inspections, the staff members supervisor should consider assigning inspection accompaniments to a variety of fuel storage and transportation facilities under SFSTs regulatory responsibility.

The SFST staff member is expected to use the most current version or revision of each document cited in this SFST Qualification Journal. Most of the documentation is readily available either on the: (1) IMC 1246, (NRCs internal web site); (2) NRCs Agency-wide Documents Access and Management System (ADAMS); or (3) SFST library. Unless otherwise indicated, the staff member is to initial and date each appropriate requirement sign-off and insert the appropriate revision number after the reference.

It is recognized that 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 SFST Qualification Journal. In addition, it should be noted that the Supervisor and secretaries will provide new employees with an NRC indoctrination checklist, apart from this SFST Qualification Journal. The purpose of the list is to familiarize the new employees with NRC processes; however, it is not part of the formal qualification program.

The time necessary to complete this SFST Qualification Journal will vary, depending the new staff members previous experience and education, but within 18 months is SFST managements expectation. However, the availability of required training courses and the new staff members assigned workload may also prolong the time period.

NMSS SFST QUALIFICATION JOURNAL SUMMARY SHEET

SPENT FUEL STORAGE AND TRANSPORTATION INSPECTOR

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Position Title: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Branch: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date Training Started: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Complete the following signature cards for a Spent Fuel Storage and Transportation Inspector. All sign-offs shall include the signature of the responsible reviewer and the date. Maintain these cards in a notebook (hard copies of background or written material, required by the program, may also be kept for reference purposes). This notebook will comprise your NRC Inspector Qualification Journal.

SIGNATURE CARDS

 Supervisor Date

CARD 1. NRC ORIENTATION \_ \_\_ \_\_

CARD 2. CODE OF FEDERAL REGULATIONS \_\_

CARD 3. NRC MANAGEMENT DIRECTIVES \_\_

CARD 4. NMSS/SFST ORIENTATION \_\_

 READING

CARD 5. REGULATORY GUIDANCE \_\_

CARD 6. INDUSTRY CODES AND \_\_

 STANDARDS

CARD 7. NRC INSPECTION MANUAL \_\_

 CHAPTERS AND INSPECTION

 PROCEDURES

CARD 8. FORMAL TRAINING \_\_

CARD 9. INSPECTION ACCOMPANIMENTS \_\_

QUALIFICATION BOARD CERTIFICATION

IMC 1246, Section 08, Oral Qualification Board, provides guidance, on conduct of the Oral Qualification Board, that Board members should use. Additional guidance is provided below, on documenting possible Board outcomes.

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 Boards assessment is favorable, the recommendation will be to grant Full Qualification. Any areas where additional review was required (look-up items) must be completed by the individual and verified by an assigned member of the Board, before forwarding the Boards 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 re-examination, when the remediation activities are complete. The Board and the individuals supervisor will agree on a schedule for re-examination.

 c. If the Board has identified performance deficiencies that could not be (in the Boards opinion) or cannot likely be successfully addressed with a thorough re-mediation effort, the Board will document the full scope of the deficiencies and recommend that the individual not be remediated nor re-examined.

 d. A copy of each Qualification Boards results, identifying any weaknesses and deficiencies, will be placed in the individuals personnel file. The employee will receive a copy of the Boards findings and recommendation.

Re-examination Board: A Re-examination Board must include at least one individual from the original Board. The Board questioning during re-examination will focus on the areas of identified weakness.

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

Boards decision.

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 Memo Issued:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor Date

Qualification Completion Certificate Issued/Ordered:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_

Supervisor Date

The documentation review requirements, specified in the following Cards, reflect the minimum information that should be reviewed, understood, and successfully applied to perform inspection activities in SFST. It is recognized that some subjects require different levels of understanding, to adequately perform assignments in SFST. Accordingly, the training and documentation are marked with the following guidelines, to indicate the level of knowledge and understanding that is expected in the qualification process. As discussed below, the employee should use a graded approach in reviewing and applying the document. Similarly, qualification questions should be consistent with the prescribed knowledge level.

(F) Familiarity: The individual is knowledgeable of the document’s purpose and general content. The individual is expected to have paged through the document, but not to have read it word-for-word. Knowledge of specific contents is not expected.

(B) Basic: The individual is knowledgeable of the document’s purpose and scope, the major topical areas, and relationship to the roles, responsibilities, and assignments of position for which he/she is qualifying. The individual is expected to have read the document and understand how it is used and/or the role it plays in the regulatory process.

(I) In-Depth: The individual is expected to have read and studied the document. Although rote memorization is not required, the individual should be able to describe basic requirements of the regulations and/or industry standards, guidance contents (within the individual’s area of qualification), analytical techniques and processes consistent with the individual’s grade level, and any associated limitations, and how the document is used in the review process. Because rote memorization is not required, reference to the document is expected for complex questions concerning its content and use.

CARD 1

NRC ORIENTATION

The following documentation should be read to develop a general understanding of the

U.S.NRC as an organization, where its regulatory authority is derived from, and the

duties and responsibilities of its various offices. This information should be discussed

with the qualifying individuals supervisor (or as directed).

 Employee Supervisor Date

B NUREG/BR-0164, NRC Regulator of Nuclear

 Safety (24 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

F NUREG/BR-0292, Safety of Spent Fuel

 Transportation (16 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

F NUREG-1350, USNRC Information Digest

 [Familiarize with Abstract, NRCs role, regional

 offices, pages 2-8, 18, 24, 28-30, 37, 56 (types

 of licensees), and 66-74] (~22 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

F NUREG/BR-0215, Public Involvement in the

 Nuclear Regulatory Process (16 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_

F NUREG-1614, USNRC Strategic Plan - Vol 4

 (Purpose and Strategic Goals) - Current Version \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_\_\_

CARD 1

NRC ORIENTATION (CONT.)

The following training courses should be taken to develop a general understanding of the U.S. NRC as an organization, and to familiarize the individual with general tasks performed by the staff.

Orientation Classes Offered By Professional Development Center

 Employee Supervisor Date

“NRC: What It Is and What It Does” (2 days) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_ \_\_\_\_

“Regulatory Process” (2 days) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

Training Offered On NRC Website

 Employee Supervisor Date

“Allegations” (~3 hrs.) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

“Computer Security Awareness” (~3 hrs.) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

“Government Travel Card” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

“Information Security Awareness Course” (~3 hrs.) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

New Employee Ethics Training scheduled by \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

the Office of the General Counsel or

On-Line Ethics Training

Other Orientation Material

 Employee Supervisor Date

“Open, Collaborative, Work Environment” (~3 hrs.) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

(Orientation Seminar or presentation slides at

NRC’s internal website: <http://www.internal.nrc.gov/OE/dva/index.html>)

CARD 2

CODE OF FEDERAL REGULATIONS

The qualifying individual should become familiar with the following sections of the Code of Federal Regulations (CFRs), listed on this card. After the qualifying individuals completes the self study of the listed CFR Parts, he/she will discuss them with the supervisor. To the extent possible, the discussion should emphasize recent application of various sections, new regulatory initiatives, and current industry issues.

 Employee Supervisor Date

 10 CFR Part 71, “Packaging and Transportation

 of Radioactive Material” (~54 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 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” (~58 pages)\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 10 CFR Part 21, “Reporting of Defects and

 Noncompliance” (7 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F 10 CFR Part 19, “Notices, Instructions and

 Reports to Workers: Inspections and

 Investigations” (7 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F 10 CFR Part 20, “Standards for Protection

 Against Radiation” - Overview of Subparts A

 Through K (27 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F 10 CFR Part 9, “Public Records” – Overview of

 Subparts A, B, and C (~30 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F 10 CFR Part 2, “Rules of Practice for Domestic

 Licensing Proceedings and Issuance of Orders,”

 or On-line Training - Overview of Types of

 Hearings and 2.390 \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

CARD 3

NRC MANAGEMENT DIRECTIVES

The supervisor should select some currently applicable NRC Management Directive (MD) references and discuss the application of the selected NRC MDs with the qualifying individual. (The first line supervisor should also discuss where MDs are located including how to access these documents in NRC’s internal website.) These references should include those listed below and be documented. The qualifying individual should be expected to have a general knowledge of the topics addressed in the references. He/she may learn the information by studying, study-quizzes, briefings, or discussions. The selection should include:

 Employee Supervisor Date

NRC MD 14.1, “Official Temporary Duty Travel”

 (189 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B NRC MD 8.8, “Management of Allegations” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B NRC MD 9.29, “Organization and Function of

 Regional Offices” (6 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B NRC MD 10.131, “Protection of NRC Employees

 Against Ionizing Radiation” (76 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F NRC MD 3.1, “Freedom of Information Act” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (97 pages)

F NRC MD 3.5, “Attendance at NRC Staff -

 Sponsored Meetings” (50 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

(Management directives can be found in the following link in NRCs internal website: <http://www.internal.nrc.gov/ADM/DAS/cag/Management_Directives/index.html>.)

CARD 4

NMSS/SFST ORIENTATION READING

The qualifying individuals supervisor should discuss these policies and practices with the employee to ensure that he/she has a general understanding of the material.

General Overview

 Employee Supervisor Date

B Enforcement Policy (Main document and \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 applicable Appendixes)

 (<http://www.nrc.gov/about-nrc/regulatory/enforcement/enforc-pol.pdf>)

SFST Reading

 Employee Supervisor Date

F SFST Office instructions

(ADAMS Document Manager Folder:

NMSS/NMSS-SFPO/Office Instructions) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F U.S. DOT/NRC Memorandum of Understanding,

 dated 7/02/79 (FRN 44FR38690) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F U.S. OSHA/NRC Memorandum of Understanding \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

(see IMC 1007, “Interfacing Activities Between Regional

Offices of NRC and OSHA,” and

<http://r12k3web.nrc.gov/dnms/Training/MOU06_2003.htm>)

NRC Inspection Manual Chapter

 Employee Supervisor Date

I IMC 1201, “Conduct of Employees” (35 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

CARD 4

NMSS/SFST ORIENTATION READING

(CONT.)

The qualifying individuals supervisor should discuss these policies and practices with the employee to ensure that he/she has a general understanding of the material.

Policy and Procedures Letters

The following NMSS’ Policy and Procedure Letters (P&PLs) should be discussed with the qualifying individual to develop a general understanding of NMSS’ as an organization and to familiarize the individual with general tasks that the staff performs. (The first line supervisor should also discuss where P&Ps are located in ADAMS.)

 Employee Supervisor Date

F P&PL1-13 “Signature Level on NMSS

 Correspondence”

 (Revised Nov99, 1 page)

 (ML032180768) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F P&PL1-84 “10 CFR Part 72 Backfit Guidance

 for NMSS” (11/6/04; 45 pages)

 (ML040330332; ML050350399) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F P&PL1-85 “Handling Requests to Withhold

 Proprietary Information from Public

 Disclosure” (3/3/05; 15 pages)

 (ML050340352) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

CARD 5

REGULATORY GUIDANCE

The supervisor should select currently applicable regulatory guidance, on spent fuel storage and transportation, from the list below, and these should be documented. The qualifying individual should be expected to have an appropriate general knowledge of the topics in the selected references. The individual can review the topics by self-study, study-quizzes, briefings, or discussions. Note that many Regulatory Guides reference or endorse industry codes and standards listed in Qualification Guide 6. Therefore, the study of these corresponding and sub-tier codes and standards are recommended.

The qualifying individuals supervisor should review the selected regulatory guidance with the qualifying individual to ensure an understanding of the information and its application to the SFST inspection program.

Regulatory Guides (Use Latest Revision)

 Employee Supervisor Date

 7.10, “Establishing Quality Assurance Programs

 for Packing Used in the Transport of Radioactive

 Material” (28 pages) (ML050540330) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B 1.28, “Quality Assurance Program Requirements

 (Design and Construction)” (15 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (ML003739981)

B 1.33, “Quality Assurance Program Requirements

 (Operation)” (8 pages) (ML003739995) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B 7.7, “Administrative Guide for Verifying

 Compliance with Packing Requirements for

 Shipments of Radioactive Materials” (2 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (ML050540321)

F 7.1, “Administrative Guide for Packing and

 Transporting Radioactive Material” (1 page) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (ML003739261)

F 7.9, “Standard Format and Content of Part 71

 Applications for Approval of Packaging of Type

 B, Large Quantity, and Fissile Radioactive

 Material” (32 pages) (ML033630447) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F 8.29, “Instruction Concerning Risks from

 Occupational Radiation Exposure” (19 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (ML003739438)

CARD 5

REGULATORY GUIDANCE

(CONT.)

Information Notices (INs) and Bulletins (BLs)

 Employee Supervisor Date

B IN 83-10, “Clarification of Several Aspects

 Relating to Use of NRC-Certified Transport

 Packages” (3 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B IN 84-050, “Clarification of Scope of Quality

 Assurance Programs for Transport Packages

 Pursuant to 10 CFR 50, Appendix B” (2 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B IN 87-033, “Applicability of 10 CFR Part 21 to

 Non-licensees” (3 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B IN 95-029, “Oversight of Design and Fabrication

 Activities for Metal Components Used in Spent

 Fuel Dry Storage Systems” (3 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B IN 91-039, “Compliance with 10 CFR Part 21,

 Reporting of Defects and Noncompliance” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (4 pages)

B IN 95-029, “Oversight of Design and Fabrication

 Activities for Metal Components Used in Spent

 Fuel Dry Storage Systems” (3 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B IN 96-040, “Deficiencies in Material Dedication

 and Procurement Practices and in Audit of

 Vendors” (3 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B IN 97-051, “Problems Experienced Loading and

 Unloading Spent Nuclear Fuel Storage and

 Transportation Casks” (5 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B IN 99-029, “Authorized Contents of Spent Fuel

 Casks” (1-2 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B IN 2002-35, “Changes to 10 CFR Parts 71 and

 72 Quality Assurance Programs” (2 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

CARD 5

REGULATORY GUIDANCE

(CONT.)

Information Notices (INs) and Bulletins (BLs) (Cont.)

 Employee Supervisor Date

B IN 2004-13, “Registration, Use, and Quality

 Assurance Requirements for NRC-Certified

 Transportation Packages” (9 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B IN 2005-10, “Changes to 10 CFR Part 71 \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 Packages” (3 pages)

B BL 96-004, “Chemical, Galvanic, or Other \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 Reactions in Spent Fuel Storage or

 Transportation Casks” (9 pages)

NUREGs (latest revision, where applicable)

 Employee Supervisor Date

I NUREG/CR-6314, “Quality Assurance

 Inspections for Shipping and Storage Containers”

 (69 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

I NUREG/CR-6407, “Classification of

 Transportation Packages and Dry Spent Fuel

 Storage System Components According to

 Importance to Safety” (55 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B NUREG/CR-5502, Engineering Drawings for

 10 CFR 71 Package Approvals \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 <http://www.rampac.com/NRCinfo/NUREG_5502.pdf>

CARD 5

REGULATORY GUIDANCE

(CONT.)

Generic Letters (GLs)

 Employee Supervisor Date

B GL 91-05, “Licensee Commercial-Grade

 Procurement and Dedication Programs” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

 (8 pages)

Other Regulatory Guidance

 Employee Supervisor Date

F Interim Staff Guidance (ISG) memoranda \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (Selected Reading) (http://www.nrc.gov/reading

 -rm/ doc-collections/isg/spent-fuel.html)

CARD 6

INDUSTRY CODES AND STANDARDS

The supervisor should select currently applicable codes and standards on spent fuel storage and transportation, from the list below, and these should be documented in a journal. The qualifying individual should be expected to have appropriate general knowledge of the codes and standards in the selected references. The individual can review these by self-study, study-quizzes, briefings, or discussions.

The qualifying individuals supervisor should review the selected codes and standards with the qualifying individual to ensure an understanding of the information and its application to the SFST inspection program.

 Employee Supervisor Date

B ASME/NQA-1 Quality Assurance Program

 Requirements for Nuclear

 Facilities \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B ASTM Boiler and (Applicable Parts of Sections III,

 Pressure Vessel V, and IX) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 Code

B EPRI-5652 “Guideline for Utilization of

 Commercial Grade Items

 In Nuclear Safety Related

 Applications (NCIG-07)” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F ACI 318-XX “Building Code Requirements for

 Structural Concrete

 (Chapters 1-7 and 12 and

 Appendix B)) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

F IAEA Safety Regulations for the Safe

 Standard, Transport of Radioactive

 No. TS-R-1 Material” [Types B(U) and B(M)

 2005 only] - IAEA Safety Standards

 Section I; Section VI – pages 81-83;

 86; 89-92; Section VII –

 pages 99-105; 108 (top);

 Section VIII – pages 111-126

 (~48 pages) \_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

CARD 6

INDUSTRY CODES AND STANDARDS

(CONT.)

 Employee Supervisor Date

F ACI-349 “Code Requirement for Nuclear

Safety Related Concrete Structures,”

(Chapters 1-7 and 12, and

Apendix D) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F ASTM-C31 “Standard Practice for Making and

 Curing Concrete Test Specimens

 in the Field \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F ASTM-C94 “Specification for Ready-

 Mixed Concrete” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

F ASTM-C172 “Standard Practice for Sampling

 Freshly Mixed Concrete” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_\_

CARD 7

NRC INSPECTION MANUAL CHAPTERS (IMCs)

AND INSPECTION PROCEDURES (IPs)

The supervisor should select currently applicable IMC and IP references with direct application to the SFST inspection program and document them. Several of the IMCs listed below were written to provide guidance for NRC inspectors at reactor facilities and material licensees. These IMCs can also be applicable to the SFST inspection program. The qualifying individual should become familiar with the selected IMCs and IPs and discuss their applicability to the SFST program with the supervisor.

The qualifying individuals supervisor should review the selected IMCs and IPs with the qualifying individual, to ensure the individual understands of the information and its application to the SFST inspection program.

NRC Inspection Manual Chapters

 Employee Supervisor Date

 IMC 2690, “Inspection Programs for Dry Cask

 Storage of Spent Nuclear Fuel at ISFSIs” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (21 pages)

B IMC 0102, “Oversight and Objectivity of Inspectors

 and Examiners at Reactor Facilities” (8 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B IMC 0610, “Nuclear Material Safety and

 Safeguards Inspection Reports” (37 pages) \_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B IMC 0620, “Inspection Documents and Records” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (17 pages)

F IMC 0300, “Announced and Unannounced

 Inspections” (5 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

CARD 7

NRC INSPECTION MANUAL CHAPTERS (IMCs) AND

INSPECTION PROCEDURES (IPs)

(CONT.)

NRC Inspection Procedures

 Employee Supervisor Date

 IP 60851, “Design Control of ISFSI Components” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (6 pages)

 IP 60852, “ISFSI Component Fabrication by

 Outside Fabricators” (7 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 IP 60853, “On-Site Fabrication of Components

 and Construction of an ISFSI” (10 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 IP 60854, “Preoperational Testing of an ISFSI” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (11 pages)

 IP 60855, “Operation of an ISFSI” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (8 pages)

 IP 60856, “Review of 10 CFR 72.212(b)

 Evaluations” (11 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 IP 60857, “Review of 10 CFR 72.48 Evaluations” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (8 pages)

 IP 60858, “Away-From-Reactor ISFSI Inspection

 Guidance” (10 pages) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 IP 86001, “Design, Fabrication, Testing, and

 Maintenance of Transportation Packaging” \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

 (6 pages)

CARD 8

FORMAL TRAINING

A. CORE TRAINING

The qualifying individual should complete the following training courses:

Course Title (Course No.) Employee Supervisor Date

“Fundamentals of Inspection Course”

(G-101) (4 days) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

“NMSS Radiation Worker Training” (H-102),

“Site Access Training” (H-100), or Challenge

“Site Access Exam” (1-2 days) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

“Transportation of Radioactive Materials Course”

(H-308) (5 days) \_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ \_\_\_\_

B. SPECIALIZED TRAINING

Other specialized training and/or courses required for inspectors performing inspection activities in specific areas as determined by the supervisor.

CARD 9

INSPECTIONS ACCOMPANIMENTS

The qualifying individual should accompany certified inspectors on at least three (3) inspections. If possible, one of these inspections should be of 10 CFR Part 71 activities and two of 10 CFR Part 72 activities. The following is a guide for material that the inspector should study and discuss with the lead inspector during these inspection accompaniments. The qualifying individuals supervisor may also discuss these items, as appropriate, after any of the inspection accompaniments.

1. The Inspection Program

2. Scheduling and Preparation for Inspections

3. Scope of Inspection

4. Entrance/Exit Interviews

5. Conduct of Inspection and Accumulation of Data

6. Post-Inspection Activities of Inspectors

7. IMC 0610 and 2690 Inspection Reports (including the use of Form 591S)

Record of Accompaniments

1. Location/Facility: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Inspection Dates: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Inspection Type (71/72): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Successful Completion: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Lead Inspector/Supervisor

2. Location/Facility: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Inspection Dates: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Inspection Type (71/72): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Successful Completion: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Lead Inspector/Supervisor

CARD 9

INSPECTIONS ACCOMPANIMENTS

(CONT.)

3. Location/Facility: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Inspection Dates: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Inspection Type (71/72): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Successful Completion: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Lead Inspector/Supervisor

4. Location/Facility: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Inspection Dates: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Inspection Type (71/72): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Successful Completion: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Lead Inspector/Supervisor

Attachment 1

Revision History For IMC 1246 B2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Commitment Tracking Number | Document Accession Number and Issue Date | Description of Change | Training Needed | Training Completion Date | Comment Resolution Accession Number |
| N/A | ML05346001705/25/06 | Added additional guidance for qualification board conduct and documentation | N/A | N/A | N/A |
| N/A | ML08218087709/24/08CN 08-027 | Complete rewrite of IMC 1246 A06 and change title name. IMC 1246 A06 was also divided into two qualification journals (i.e., SFST project managers and technical reviewers, and SFST inspectors). A total of four documents were created during this revision; attachments were created within IMC 1246 A06 and new titles were assigned to these attachments. The section and title of this document should be the following: IMC 1246 B06, Attachment 2, “Office of Nuclear Material Safety and Safeguards Qualification Journal for Spent Fuel Storage and Transportation Inspector.” | N/A | N/A | ML082180876  |
| N/A | ML11230B31410/26/11CN 11-022 | Combined Appendix A06, Attachment 2 with Appendix B06, Attachment 2 and renamed as Appendix B2. Added “training requirements” section from Appendix A06, Attachment 2. | N/A | N/A | ML112350554 |