

Appendix C

Construction Inspector Post Qualification Requirements, Continuing and Refresher Training

Introduction

Consult with your supervisor prior to beginning the activities or completing the post-qualification requirements. In most cases, you may complete the courses in this journal at any point during your qualification.

Training Activities

ISA-PostQual-1: NRC Response to an Emergency at a Nuclear Facility

- Shall be completed no later than 6 months after completing your full qualification
- This requirement does not apply to inspectors previously qualified under IMC 1245 or IMC 1246

ISA-PostQual-2: Incident Inspection Team (IIT) Activities, Augmented Inspection Team (AIT), and Special Inspection Team (SIT)

- Shall be completed no later than 6 months after completing your full qualification
- This requirement does not apply to inspectors previously qualified under IMC 1245 or IMC 1246

OJT- PostQual-1: Emergency Drill

- Shall be completed no later than 24 months after completing your full qualification
- This requirement does not apply to inspectors previously qualified under IMC 1245 or IMC 1246

Training Courses

G-205: Root Cause/ Incident Investigation Workshop

- Shall be completed no later than 24 months after completing your full qualification
- This requirement does not apply to inspectors previously qualified under IMC 1245 or IMC 1246

P-105: PRA for Regulatory Applications

- Shall be completed no later than 24 months after completing your full qualification
- This requirement does not apply to inspectors previously qualified under IMC 1245 or IMC 1246

Courses for all functional areas: Once available, the code's course shall be completed no later than 12 months after completing your full qualification. Only one discipline is required.

- **Civil/Structural Functional Area:** Civil/ Structural Codes and Inspection Course (with Focus on ITAAC)
- **Mechanical Functional Area:** Mechanical Codes and Inspection Course (with Focus on ITAAC)
- **Electrical Functional Area:** Electrical Codes and Inspection Course (with Focus on ITAAC, Including Digital I&C and fiber optics)
- **Preoperational/Start-up Testing Functional Area:** Preoperational and Startup Testing Inspection Course (with Focus on ITAAC)

Other Training Courses

- Reactor Technology Courses (other designs) (TBD)
- Welding/Non-Destructive Examination (NDE) Inspection (TBD)
- Geotechnical Inspection
- Concrete Inspection (TBD)
- Structural Steel Inspection (TBD)

Note: Some of the courses listed are under development. Until those courses are available, other equivalent courses may be substituted for certification. However, their equivalency and use for certification must first be reviewed and approved by the NRC Region II Deputy Regional Administrator for Construction. Any course submitted for equivalency review should contain elements covering technical fundamentals, regulatory and code requirements, and techniques for inspection applicable to the subject matter being taught.

Required Refresher Training

- 16 hours of special topic presentations over a three year period, such as (but not limited to) those presented during counterpart meetings
- and
- Additional discipline-specific courses as determined by the supervisor

Continuing Training

Staff is expected to build on what was learned in initial training as well as to keep up-to-date on changes to the inspection program.

- a. Changes to Inspection Procedures (IPs), Inspection Manual Chapters (IMCs), or other aspects of the inspection program may necessitate training. The need for continuing training will be evaluated by the Construction Inspection and Allegations Branch whenever the inspection program is modified. Any training requirements must be completed by all qualified inspectors who are expected to implement the changed inspection procedure.
- b. The Construction Inspection and Allegations Branch will evaluate lessons learned from industry events and agency activities to determine the need for staff training.

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Post Qualification Individual Study Activities

Post Qualification Individual Study Activity

TOPIC: (ISA-PostQual-1) NRC's 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. This individual study activity will help you understand how the NRC meets its emergency response mandate and will begin to build the knowledge you will need later to successfully perform your assigned emergency response responsibilities.

Note: This requirement does not apply to inspectors previously qualified under IMC 1245 or IMC 1246

COMPETENCY AREA: EMERGENCY RESPONSE

LEVEL OF EFFORT: 12 hours

Note: This activity shall be completed no later than six months after completing your full qualification

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

MD 8.2, "NRC Incident Response Program"

Regional Policy Guide for Emergency Response

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.)

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:
 - 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

TASKS:

1. Explore all aspects of the NSIR Organization 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 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:

Post Qualification Signature Card Item ISA-PostQual-1

Post Qualification Individual Study Activity

TOPIC: (ISA-PostQual-2) Incident Inspection Team (IIT) Activities, Augmented Inspection Team (AIT), and Special Inspection Team (SIT)

PURPOSE: The purpose of this activity is to familiarize you with the actions taken by the NRC in response to incidents that do not require activation of the NRC Incident Response Plan. As a fully qualified inspector, you may be assigned to an IIT, AIT or SIT inspection activity. This ISA will help you to understand how the NRC implements this program, what your responsibilities will be if you are assigned to a team, what the differences are between an IIT, AIT and an SIT, and how this program differs from the NRC Incident Response Program.

Note: This requirement does not apply to inspectors previously qualified under IMC 1245 or IMC 1246

COMPETENCY

AREA: INSPECTION

LEVEL OF

EFFORT: 6 hours

Note: This activity shall be completed no later than six months after completing your full qualification

REFERENCES: Regional Guidance or Office Guidance (if applicable)

MD 8.3, "NRC Incident Investigation Program"

Inspection Procedure (IP) 93800, "Augmented Team Inspection"

IP 93812, "Special Inspection"

EVALUATION

CRITERIA: Upon completion of this activity, you will be asked to demonstrate your understanding of the NRC's IIT, AIT and SIT inspection activities by successfully addressing the following:

1. State the purpose of the NRC's Incident Investigation Program.

2. Describe what an IIT is and its purpose.
3. Describe what an AIT is and its purpose.
4. Describe what a SIT is and its purpose.
5. Describe how the Incident Investigation Program is different than the Incident Response Program.

TASKS:

1. Review MD 8.3. MDs can be found on the NRC Internal Website.
2. Explore all aspects of the Incident Investigation Program presented on the NRC's Internal Website.
3. Review your Region's or Office's guidance on IIT, AIT and AIT activities.
4. Meet with your supervisor, or the person designated to be your resource for this activity, and discuss the answers to the questions listed under the Evaluation Criteria.

DOCUMENTATION:

Post Qualification Signature Card Item ISA-Post-Qual-2

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Post Qualification On-the-Job Activity

Post Qualification On-the-Job Activity

TOPIC: (OJT-PostQual-1) Emergency Drill/Exercise Observation

PURPOSE: The conduct of an emergency drill/exercise allows the licensee to assess emergency response performance and the effective correction of previously identified weaknesses. It permits the evaluation of the level of quality of emergency response training, emergency plan implementing procedures, facility and equipment readiness, personnel performance, organizational and management changes, and communications equipment readiness. This activity will permit you, the observer, to realize the scope of involvement of your particular discipline during a declared emergency at a nuclear power facility.

Note: This requirement does not apply to inspectors previously qualified under IMC 1245 or IMC 1246

COMPETENCY

AREAS: REGULATORY FRAMEWORK
INSPECTION

LEVEL OF

EFFORT: 24 hours

Note: This activity shall be completed no later than six months after completing your full qualification

REFERENCES: IP 71114.01, "Exercise Evaluation"

IP 71114.06, "Drill Evaluation"

Section IV.F of Appendix E, "Emergency Planning and Preparedness for Production and Utilization Facilities," to 10 CFR Part 50

10 CFR 50.47(b)

EVALUATION

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

1. Discuss the Federal guidance for drill/exercise observations as described in IP 71114.01 and IP 71114.06.
2. Identify activities that will occur with regard to your discipline during the performance of an emergency drill/exercise.
3. Discuss the NRC and licensee processes for documenting and handling weaknesses and deficiencies identified during a drill/exercise.
4. Discuss the NRC's method of evaluating licensee performance during an emergency drill/exercise to determine whether it has met the planning standards of 10 CFR 50.47(b).
5. Discuss the NRC's method for evaluating licensee performance during a drill/exercise to determine whether it has demonstrated the capability of providing reasonable assurance that adequate protective measures can be taken in the event of a declared emergency.

Note: Whenever possible, observe a drill or exercise at a site and focus on activities related to your technical discipline.

TASKS:

1. Review IP 71114.01 and IP 71114.06 to identify the inspection attributes provided for drill/exercise performance evaluations. Discuss any questions with a senior emergency preparedness inspector.
2. Review the regulatory requirements with regard to emergency preparedness contained in 10 CFR 50.47(b) and Section IV.F of Appendix E to 10 CFR Part 50.
3. Obtain an emergency drill/exercise schedule for the applicable region. Coordinate your observation of an upcoming emergency drill/exercise with your supervisor, applicable regional senior emergency preparedness inspector, and site senior resident inspector. If possible, observe the drill at the site.
4. Become familiar with the applicable licensee emergency plan and implementing procedures. In particular, review those instructions for your discipline's activities and involvement during a declared emergency and develop an understanding of their successful implementation.
5. Obtain and review a copy of the applicable licensee's

emergency drill/exercise scenario. Identify activities that will occur with regard to your discipline during the performance of the emergency drill/exercise and note the licensee expectations for success versus failure.

6. Perform an independent observation of an emergency drill/exercise. Observe activities at several of the licensee emergency response facility locations, if possible (e.g., control room, operations support center, technical support center, emergency operations facility, joint information center, field activities). Take care not to interfere with licensee performance or evaluation of the drill/exercise. Do not prompt licensee participants or evaluators or provide your observations or conclusions regarding weaknesses or deficiencies during drill/exercise performance. Findings must be held confidential until after the formal licensee critique.
7. During performance of the drill/exercise, note any possible weaknesses and/or deficiencies you observe. To aid in future discussions, obtain documentation of licensee activities during questionable performance.
8. Based on your observations, form an opinion as to whether the licensee has still met the planning standards of 10 CFR 50.47(b) in spite of any deficiency or weakness.
9. Based on your observations, form an opinion as to whether the licensee has demonstrated the capability of providing reasonable assurance that adequate protective measures can be taken in the event of a declared emergency.
10. Discuss your emergency drill/exercise observations and opinions with the lead NRC inspector and provide your recommendation on whether licensee demonstrated the capability of providing reasonable assurance that adequate protective measures can be taken in the event of a declared emergency and if it has met the planning standards of 10 CFR 50.47(b).
11. Meet with your supervisor and/or a qualified senior emergency preparedness inspector to discuss any questions that you may have as a result of this activity and demonstrate that you can meet the evaluation criteria listed above.

DOCUMENTATION: Post Qualification Signature Card Item OJT-Post-Qual-1

General Proficiency Level Signature Card and Certification

<i>Inspector Name</i> : _____	Employee Initials/Date	Supervisor Initials/Date
Required Training Courses		
G-205: Root Cause/Incident Investigation Workshop*		
P-105: PRA for Regulatory Applications*		
Completing a Codes and Inspection Course in only one discipline is required:		
Civil/Structural Functional Area Codes and Inspection Course (Civil/Structural)		
Mechanical Functional Area Codes and Inspection Course (Mechanical)		
Electrical Functional Area Codes and Inspection Course (Electrical)		
Construction/Start-up Testing Functional Area Preoperational and Startup Testing Inspection		
Training Activities		
ISA-PostQual-1: NRC Response to an Emergency at a Nuclear Facility*		
ISA-PostQual-2: Incident Inspection Team (IIT) Activities, Augmented Inspection Team (AIT), and Special Inspection Team (SIT)*		
OJT-PostQual-1: Emergency Drill		

*Not required for inspectors previously qualified under IMC 1245 or IMC 1246

Other Training Courses

- Reactor Technology Courses (other designs)
- Welding/Non-Destructive Examination (NDE) Inspection
- Geotechnical Inspection
- Concrete Inspection
- Structural Steel Inspection

Areas for Certification

- Civil/Structural
- Mechanical
- Electrical
- Preoperational/Startup Testing

Branch Chief's Signature indicates successful completion of all required courses and activities listed in this journal.

Branch Chief's Signature _____ Date: _____

Form 1: Post-Qualification Requirements Equivalency Justification

Inspector Name: _____	<i>Identify equivalent training and experience for which the inspector is to be given credit</i>
Training Courses	
B. Individual Study Activities	
On-the-Job Training Activity	

Branch Chief's Recommendation Signature / Date _____

Division Director's Approval Signature / Date _____

This form must accompany the Signature Card and Certification, if applicable.

Copies to: Inspector
 HR Office
 Branch Chief

ATTACHMENT 1

Revision History for IMC 1252 Appendix C

Commitment Tracking Number	Issue Date	Description of Change	Training needed	Training Completion Date	Comment Resolution Accession Number
	02/06/07 CN 07-005	Initial issuance of document	NO		
N/A	11/25/08 CN 08-033	Revision to update references, to address current policies on training, and to make minor editorial corrections.	NO	N/A	ML081260489
N/A	12/07/09 CN 09-031	Revision to remove the training activities required during qualification and to incorporate post-qualification requirements, refresher training and continuing training. Revisions are sufficiently extensive in this Appendix to constitute a rewrite. Hence, no change lines will be displayed.	NO	N/A	ML093000545