

# NRC INSPECTION MANUAL

FCSS

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INSPECTION PROCEDURE 88010

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| TRAINING

## 88010-01 INSPECTION OBJECTIVES

To determine whether the licensee<sup>1</sup> is complying with regulations and license<sup>2</sup> requirements related to the implementation of a training program for licensee employees and other personnel.

## 88010-02 INSPECTION REQUIREMENTS AND GUIDANCE

### 02.01 Training Program.

- a. **Inspection Requirements.** Verify that any changes the licensee has made to the training program are in compliance with license requirements and regulatory requirements.
- b. **Inspection Guidance.** Discuss the program with the training program manager or equivalent. Determine if any changes were recently made and verify that substantive changes were reviewed and approved by licensee management and are in compliance with requirements.

Review changes to the licensee's training program to determine whether the licensee has a means of updating the facility's training program regarding identified changes in the plant. The recommendations may pertain to changes to items relied on for safety (IROFS) and/or changes to radiological safety, criticality safety, emergency preparedness, and operational safety programs. Determine if the licensee has included lessons learned from past events or mishaps into the program or individual training modules.

Determine if the following were addressed in updating the licensee's training program:

1. A tracking system to ensure that each change was addressed on a timely basis. The inspector should cross-check with the features of the tracking system identified in the hazard identification and assessment element as applicable.
2. Management-approved recommendations from hazard identification and assessment, incident investigations, and/or audit programs, which identified deficiencies in the training program, were addressed in a timely manner to ensure that hazards at the facility were sufficiently addressed. The inspector should cross-check the training program elements with the incident investigation and/or audit results.
3. Training actions initiated by the Change Management process should be addressed before the change is implemented. Verify that all personnel affected by the change received updated training. Determine if this is captured by a pre-startup safety checklist or other tool.

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<sup>1</sup> The term *licensee* as used in this Inspection Procedure (IP) also applies to certificate holders.

<sup>2</sup> The term *license* as used in this IP also applies to certificates.

02.02 Procedures.

- a. Inspection Requirements. Verify that the licensee's training program maintains established, written procedures as required by the license application.
- b. Inspection Guidance. Review the licensee's training program to determine whether the licensee has established written procedures for the identification of training requirements and training material, selection and qualification of instructors, maintenance of employee training records, ensuring adequate frequency of refresher or requalification training, and contractor/visitor training.

Determine if the licensee maintains a training outline that defines requirements, material, and testing.

- 1. Verify that in-house training programs for selected positions cover initial orientation, specific process training (both classroom and on-the-job), and refresher training. Procedures should be available for trainee evaluation and final qualification/certification.
- 2. Verify that training material addresses the following topics:
  - (a) IROFS, process safety information elements (such as safety and health hazards, relevant material safety data sheets [MSDSs], personal protective equipment, etc.);
  - (b) Safe work practices (such as lockout/tag out procedures, opening process equipment, hot work, control of entry into hazardous/radiological areas, etc.);
  - (c) Process technology, as required;
  - (d) Operating procedures for all phases of operation;

02.03 Program Implementation.

- a. Inspection Requirements.
  - 1. Determine that the licensee is in compliance with license requirements relating to the implementation of the training program.
  - 2. Verify that training for administrative controls IROFS are implemented per **Title 10 of the Code of Federal Regulations (10 CFR) 70.62 (d)** to ensure that IROFS are available and reliable.
- b. Inspection Guidance. Specific regulatory requirements related to the licensee's training program will be contained in license conditions.

1. Determine that the training program was implemented per the license conditions by discussing the program with staff and through reviewing relevant documentation. Verify that the training program includes radiological, fire, chemical and nuclear criticality safety content for operators.
  - (a) Verify documentation of training, evaluations, and qualification/certification activities for employees. Training records should be accessible and easily referenced. Information may include: name of employee, date of training, name of trainer, and the method used to determine that training material was understood.
  - (b) Verify that refresher training was provided at least every 2 years, or as specified in the license. Content of required material will be specified in the license application, if applicable, and may include the following: safety and health hazards, relevant MSDSs, job-specific chemical hazards, safe work practices, emergency procedures, and standard operating procedures.

The inspector should interview trainers and/or trainees to determine that refresher training is conducted according to the schedule.
  - (c) Determine if general employee training is required by the license application. The training program for employees, contractors, and visitors should be appropriate given the hazards in the area in which they will be working or visiting. Every person who enters the facility should go through a site-specific general orientation covering safety and health hazards, emergency procedures, and alarms. In addition, maintenance employees and contractors, if relevant, should undergo training in safe work practices, process hazards, etc., as relevant to the work they will be performing.
  - (d) Review internal audits or self-assessments pertaining to the training program. Discuss the licensee's evaluation of the overall effectiveness of the training program. Assess the sufficiency of the training program in addressing the radiological, fire, criticality safety, and chemical safety aspects of hazards that can affect operations with special nuclear material at the facility. The principal objective of the training program is to ensure that employees have been adequately prepared to perform their job tasks in a safe and effective manner.

Note: Content of the nuclear criticality course and professional training for criticality safety staff is reviewed in IP 88015, 'Nuclear Criticality Safety Program.' Do not duplicate.

2. Review a list of training which represents or includes management measures for IROFS (i.e., administrative controls). Select a sample to review in detail.
  - (a) Discuss the training program with one or more supervisors and selected operators or technicians to determine their participation in the training

program as indicated by training records. Verify the completion of initial training, periodic retraining, on-the-job training, and examinations of trainees. Determine if the operators or technicians independently worked in an area in which their training and qualification had expired or was not complete.

- (b) Examine five or more records of initial training for new employees for a variety of positions. Include tests or exams in the review if tests are required by the program.
- (c) Examine five or more records of retraining for experienced employees for a variety of positions. Include tests or exams in the review if tests are required by the program.
- (d) Determine by discussion, document review, and observation that the training program ensures that each individual receives performance based IROFS training. Verify the individual receives safety control training (knowledge and skills) to understand his or her personal and organizational authority and responsibility for safety. Interview trainees to verify that they understand shutdown authority when IROFS and/or safety controls are in doubt. Verify that both shutdown authority and restart authority were addressed in the procedures.

#### 02.04 Training Observations.

- a. Inspection Requirements. Verify that training classes and/or teaching aids are conducted in accordance with license requirements and procedural requirements.
- b. Inspection Guidance. Observe training with staff in a variety of positions, such as managers, supervisors, operators, maintenance mechanics, instrument and control technicians, etc. The training observations may include classroom training, on-the-job training, or one-on-one instruction. Discuss procedural expectations with these selected staff to determine whether the staff can effectively implement procedures. Discuss with the staff to determine whether they thought the training was adequate.

Note: On-the-job training should, as a minimum, include: equipment familiarization, completing log sheets, equipment startup/shutdown activities, limiting operating conditions, control of process variables, and applying operating procedures in the field.

#### 02.05 Changes in Examinations.

- a. Inspection Requirements. Verify that changes to training examinations, if applicable, are in accordance with license requirements.
- b. Inspection Guidance. Examine the changes to selected tests given under the training program to determine that tests required by the program were administered. Verify that the scores or results achieved satisfied program criteria.

#### 88010-03 RESOURCE ESTIMATE

The resource estimate to perform this inspection procedure is estimated to be 16 hours.

#### 88010-04 REFERENCES

10 CFR 70.61, 'Performance Requirements.'

10 CFR 70.62, 'Safety Program and Integrated Safety Analysis.'

29 CFR 1910.119, Occupational Safety and Health Association, 'Process Safety Management of Highly Hazardous Chemicals,' (g) 'Training.'

Center for Chemical Process Safety, 'Guidelines for the Technical Management of Chemical Process Safety,' Chapter 10, pp. 105-110, American Institute of Chemical Engineers, New York, dated 1989.

Chemical Manufacturers Association, 'Process Safety Code of Management Practices,' Practices 17, 18, 19, 20, Washington, dated 1990.

#### 88010-05 PROCEDURE COMPLETION

Implementation of each applicable inspection requirement will constitute completion of this procedure. Individual inspection samples and breadth of review will be determined by the inspector based on requirement compliance, risk-significance of activity, and extent of the activity or records available.

END

Attachment:

Revision History for IP 88010

Attachment 1 - Revision History for IP 88010

Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution Accession Number
N/A	09/05/06 CN 06-020	This document has been revised to: (1) emphasize the risk-informed, performance-based approach to inspection, (2) impose changes to the core inspection program based on operating experience, and (3) remove completed or obsolete IMCs and incorporate other fuel cycle IMCs into a central location.	N/A	ML061940176
N/A	ML13233A178 02/07/14 CN 14-005	This document has been revised to: (1) remove inspection requirements pertaining to 10 CFR 19.12 that are duplicated in IP 88030, (2) reorganize and reword for clarity, and (3) reformat per IMC 40 guidance.	N/A	ML13347A908