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## INSPECTION PROCEDURE 88201 APPENDIX C

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### TRAINING AND QUALIFICATIONS

Effective Date: June 20, 2025

PROGRAM APPLICABILITY: IMC 2600, 2694

#### 88201.C-01 INSPECTION OBJECTIVES

- 01.01 To determine if the applicant's or licensee's training and qualifications program adequately establishes and is implementing measures to ensure that all personnel who perform activities associated with items relied-on for safety (IROFS) are trained and tested so as to provide reasonable assurance that they understand, recognize the importance of, and are qualified to perform these activities in a manner that adequately protects public health and safety and the environment.
- 01.02 To determine if the applicant's or licensee's training and qualifications program is adequately coordinated and integrated with other management measures.

#### 88201.C-02 INSPECTION REQUIREMENTS

This inspection procedure (IP) is intended to provide inspection requirements and guidance applicable to a wide variety of potential construction projects at both existing and new fuel cycle facilities. These projects may vary greatly in scope, complexity, and risk to public health and safety. As a result, not all sections, or subsections, of this appendix may be applicable or implemented at a specific facility. Recommended inspection scope and hours for a specific new fuel cycle facility will be documented in the principal inspection plan (PIP) for that facility developed in accordance with Inspection Manual Chapter (IMC) 2694, "Fuel Cycle Facility Construction and Pre-Operational Readiness Review Inspection Program." Additionally, this appendix can be used to provide additional management measures inspection guidance for plant modification inspections at existing facilities but is not required to be implemented for these projects. Use of this appendix or sections of this appendix for modifications at existing fuel cycle facilities, would be done on a case-by-case basis, in accordance with IMC 2600, Appendix B, "NRC Core Inspection Requirements."

##### 02.01 Training and Qualifications Program

- a. Review relevant sections of the applicant's or licensee's integrated safety analysis. Determine if appropriate measures have been established for the training and qualifications of personnel who perform activities associated with IROFS.
- b. Determine if any changes the applicant or licensee has made to the training program are in compliance with any requirements and/or licensee commitments.

- c. Determine if the applicant's or licensee's training program maintains established, written procedures as required by the license application.

#### 02.02 Program Implementation

- a. Determine that the applicant or licensee is in compliance with license requirements relating to the implementation of the training program.
- b. Verify that training for administrative controls IROFS is implemented per Title 10 of the *Code of Federal Regulations* (10 CFR) 70.62 (d) to ensure that IROFS are available and reliable.

#### 02.03 Training Observations

Determine if training classes and/or teaching aids are conducted in accordance with application or license requirements and procedural requirements.

#### 02.04 Changes in Examinations

Determine if changes to training examinations, if applicable, are in accordance with the license application.

### 88201.C-03 INSPECTION GUIDANCE

#### Specific Guidance

#### 03.01 Training and Qualifications Program (Inspection Requirement 02.01)

- a. 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 applicant or licensee management and are in compliance with requirements.
- b. Review changes to the applicant's or licensee's training program to determine whether the applicant or licensee has a means of updating the facility's training program regarding identified changes in the plant. The recommendations may pertain to changes to IROFS and/or changes to radiological safety, criticality safety, emergency preparedness, and operational safety programs. Determine if the applicant or licensee has included lessons learned from past events or mishaps into the program or individual training modules.
- c. Determine if the following were addressed in updating the applicant's or 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 configuration 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.
  - a. Review the applicant's or licensee's training program to determine whether the applicant or 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.
  - b. Determine if the applicant or 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 (e.g., safety and health hazards, relevant material safety data sheets (MSDSs), personal protective equipment, etc.);
      - (b) safe work practices (e.g., 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.

#### 03.02 Program Implementation (Inspection Requirement 02.02)

- a. Specific regulatory commitments and/or requirements related to a licensee's training program should be contained in the license application or license conditions.
- b. Determine that the training program was implemented per the license application commitments or 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.
  1. Verify documentation of training, evaluations, and qualification/certification activities for employees. Training records should be accessible and easily referenced. Information may include the following: name of employee, date of training, name of trainer, and the method used to determine that training material was understood.
  2. Verify that refresher training was provided at least every 2 years, or as specified in the license application commitments or conditions. Content of required material will

be specified in the license application, if applicable, and may include the following: safety and health hazards, MSDSs, job-specific chemical hazards, safe work practices, emergency procedures, and standard operating procedures.

3. The inspector should interview trainers and/or trainees to determine that refresher training is conducted according to the schedule.
4. Determine if general employee training is required by the license application or conditions. 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.
5. Review internal audits or self-assessments pertaining to the training program. Discuss the applicant's or 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.

- c. Review a list of training which represents or includes management measures for IROFS (i.e., administrative controls). Select a sample to review in detail.
  1. 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.
  2. 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.
  3. 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.
  4. 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.

### 03.03 Training Observations (Inspection Requirement 02.03)

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 the following: equipment familiarization, completing log sheets, equipment startup/shutdown activities, limiting operating conditions, control of process variables, and applying operating procedures in the field.

### 03.04 Changes in Examinations (Inspection Requirement 02.04)

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.

## 88201.C-04 RESOURCE ESTIMATE

The resource estimate for completing this appendix is dependent on the specific facility and will be as determined in the PIP for the facility. Details on the resource estimates are identified in IP 88201, Section 04, "Resource Estimate."

## 88201.C-05 PROCEDURE COMPLETION

Procedure completion is dependent on the specific facility and will be as determined in the PIP for the facility.

## 88201.C-06 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

END

List of Attachments:

Attachment 1: Revision History for IP 88201 Appendix C

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Commitment Tracking Number	Accession Number Issue Date Change Notice	Description of Change	Description of Training Required and Completion Date	Comment Resolution and Closed Feedback Form Accession Number (Pre-Decisional Non-Public Information)
	ML25010A400 06/20/25 CN 25-018	Initial issuance. Initial Issue to provide guidance for the Management Measures inspections of Fuel Facilities licensed under Part 70.	N/A	N/A