
INSPECTION PROCEDURE 88141

FIRE PREVENTION AND PROTECTION

PROGRAM APPLICABILITY: 2630

88141-01 INSPECTION OBJECTIVES

01.01 Ascertain whether approved controls exist relative to fire prevention, protection, and suppression at fuel cycle facilities under construction.

88141-02 INSPECTION REQUIREMENTS

02.01 Ascertain whether adequate and approved fire prevention procedures exist to control the following, during construction activities:

- a. Storage, handling, and use of flammable materials.
- b. Storage, control, and use of combustible materials relative to locations of flammable materials and ignition sources.
- c. Use and control of open flames and other ignition sources that may be used in areas containing flammable materials.

02.02 Ascertain whether adequate and approved procedures exist, relative to fire suppression, during construction activities that use ignition sources and/or flammable materials, including:

- a. Use, testing, maintenance, and identification of fire-suppression equipment.
- b. Use, testing, maintenance, and identification of related auxiliary equipment.

02.03 Ascertain whether approved procedures exist relative to fire fighting activities in the areas of:

- a. Supervision/control.
- b. Action plan.
- c. Communications.

02.04 Ascertain whether approved procedures exist relative to training in the areas of fire

prevention, protection, and suppression. Ascertain whether training was conducted as specified.

02.05 Ascertain whether adequate and approved administrative procedures exist for the control of the procedures identified in items Sections 02.01 through 02.04, in the areas of:

- a. Revision.
- b. Approval.
- c. Distribution.
- d. Periodic inspections/audits, to assure that construction activities adhere to approved requirements and procedures.

02.06 Examine 10 fire-suppression devices at the construction site and determine whether they have been inspected/tested within the specified time intervals and whether there is any evidence of deterioration.

02.07 Observe three activities, using ignition sources, and ascertain whether the provisions of the procedures identified in Section 02.01 are being followed.

02.08 Review a sample of available records of quality assurance/quality control (QA/QC) inspections/audits of fire prevention/protection activities.

88141-03 INSPECTION GUIDANCE

03.01 General Guidance. Applicable portions of the applicant's Construction Authorization Request (CAR) should be reviewed, during inspection preparation, to determine licensee commitments in this area.

Where the phrase "adequate and approved procedures" is used in Section 02 of this procedure, it means procedures that meet U.S. Nuclear Regulatory Commission (NRC) requirements and CAR commitments, and that these procedures have been reviewed and approved by responsible personnel.

03.02 Specific Guidance.

Note: The numbering of the guidance below refers to specific subsections of 02, above.

- 02.01c Open-flame or ignition, source permits should be required for torch-cutting, welding, brazing, soldering, some leak-testing, some construction activities using open heat sources, and space heating equipment.
- 02.02b Auxiliary equipment includes communications (radios, phones, public address systems); masks, breathing equipment (self-contained breathing apparatus (SCBA), breathing air, etc.); emergency exhaust fans, normal and emergency lights, etc.

- 02.06 This is to be a visual equipment examination (e.g., carbon dioxide canisters of correct weight-tested at prescribed intervals; condition of hose; and fire mains pressurized).
- 02.07 Select activities for observation from any work scheduled in the facility during the inspection period.
- 02.08 Construction QA/QC, or a comparable organization, should be performing periodic inspections/audits to determine that construction personnel are following established fire prevention/protection requirements. Review a sample of the available records of these inspections/audits to determine if established fire-prevention/protection requirements are usually being followed. It is desirable to review all such available records since the last NRC inspection in this area. If there are repetitive failures to follow procedures, this may indicate a program breakdown, requiring additional licensee corrective actions. Such conclusions should be promptly brought to the licensee management's attention.

88141-04 RESOURCE ESTIMATES

This inspection procedure is expected to take, on the average, 10 hours, per site visit, for review of licensee/contractor activities. The procedure should be conducted once per quarter during the construction period.

88141-05 REFERENCES

Duke, Cogema, Stone and Webster, "Mixed-Oxide Fuel Fabrication Facility Construction Authorization Request (CAR)," latest revision, accepted by the U.S. Nuclear Regulatory Commission, Chapter 7, including pertinent codes and standards referenced in the CAR.

U.S. Nuclear Regulatory Commission, Regulatory Guide 3.16, "General Fire Protection Guide for Plutonium Processing and Fuel Fabrication Plants," January 1974.

National Fire Protection Association, (NFPA), NFPA 13-1996, 14-1996, 22-1998, and 25-1995, and other applicable referenced NFPA, American Water Works Association, American National Standards Institute and American Society for Testing and Materials codes.

END

ATTACHMENT 1

Revision History for IP 88141

| Commitment Tracking Number | Issue Date | Description of Change | Training Needed | Training Completion Date | Comment Resolution Accession Number |
|----------------------------|-----------------------|--|-----------------|--------------------------|-------------------------------------|
| N/A | 08/08/07 CN 07-024 | IP 88141 is a newly issued procedure. Issued for MOX inspection program to improve effectiveness and efficiency by incorporating and consolidating fire prevention and protection inspection requirements. | None | N/A | ML072010343 |
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