

<b>ISFSI FUEL MANAGEMENT PROGRAM</b>		Identifier: PRD-319
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INTEC	Program Requirements Document	For Additional Info: <a href="http://EDMS">http://EDMS</a>
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## 1. PURPOSE

This document provides administrative requirements and guidelines for the Fort St. Vrain (FSV) and Three Mile Island, Unit 2 (TMI-2) Independent Spent Fuel Storage Installation (ISFSI) Fuel Management Programs.

## 2. APPLICABILITY

This document applies to the Material Control and Accountability (MC&A) (inventory, accounting, and reporting) of spent fuel stored at the FSV ISFSI and TMI-2 ISFSI.

## 3. REQUIREMENTS

### 3.1 Organization and Responsibilities

- 3.1.1 ISFSI Facility Managers (FM): Be responsible for all fuel management activities at the respective ISFSIs with implementation performed by M&O contractor personnel or subcontractors working under the direction of the M&O contractor in accordance with approved procedures. This responsibility may be delegated to the respective Facility Safety Officer (FSO).
- 3.1.2 ISFSI personnel: Initiate stop work authority as needed when actual or potential unsafe radiological conditions are observed.
- 3.1.3 Nuclear Material Custodian (NMC): Carryout responsibilities as delineated in referenced implementing procedures.

### 3.2 Licensing Basis

- 3.2.1 ISFSI personnel: Implement and comply with requirements at the ISFSIs that are defined in the respective Safety Analysis Reports (SAR), Technical Specifications (TS), and the ISFSI Environmental Reports.
- 3.2.2 The spent nuclear fuel to be stored in fuel storage containers (FSC) at the FSV ISFSI must meet the following requirement. The fuel elements stored at the ISFSI must be only those within the facility as of February 9, 1996, as specified in the Contract No. DE-AC07-961D13425 between the United States Department of Energy (DOE) and the Public Service Company of Colorado (PSCo). No other spent fuel will be received and stored in the MVDS. <FSV ISFSI TS 2.1.1>

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- 3.2.3 The spent nuclear fuel to be stored in DSCs at the Three Mile Island Unit 2 (TMI-2) ISFSI shall meet the following requirement. The spent fuel is the TMI-2 core debris resulting from the partial melting of the TMI-2 reactor core (1979). The TMI-2 core debris shall be contained in the stainless steel TMI-2 canisters. The core debris includes severely damaged spent fuel assemblies, partially intact spent fuel assemblies, and various core components and in-core instruments recovered from the damaged TMI-2 reactor. The core debris was loaded into the TMI-2 canisters during the 1986 TMI-2 reactor defueling and transported to the INL for underwater storage. <TMI-2 ISFSI TS 2.1.1>

**3.3 Procedures**

- 3.3.1 MC&A personnel: Ensure the Fuel Management Program is implemented through procedures for reporting, accountability, element information management, and physical inventory maintenance.

**3.4 Fuel Management Program**

- 3.4.1 Records are maintained in accordance with MCP-11504 showing the receipt, inventory and location, disposal, acquisition, and transfer of all spent fuel in storage. <10 CFR 72.72(a)>
- 3.4.2 A physical inventory of all the spent fuel in storage is conducted every 12 months in accordance with MCP-11504. <10 CFR 72.72(b)>
- 3.4.3 A copy of each inventory is retained as a record in accordance with MCP-11504 until license termination. <10 CFR 72.72(a)>
- 3.4.4 Written material control and accounting procedures that are sufficient to enable accounting for material in storage are established, maintained and followed in accordance with LRD-11500 until license termination. <10 CFR 72.72(c)>
- 3.4.5 Records of spent fuel in storage are maintained in duplicate and in separate locations in accordance with MCP-11504. <10 CFR 72.72(d)>
- 3.4.5.1 The BEA Safeguards department shall be required to maintain the master copy.
- 3.4.5.2 The TMI-2/FSV Material Balance Area Custodian (MBAC) shall be required to maintain the duplicate copy. This copy shall be maintained in the NRC records storage center in accordance with UFC-7652.
- 3.4.6 Accidental criticality events and any loss of special nuclear material are reported in accordance with MCP-11504. <10 CFR 72.74>

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- 3.4.7 A material status report in computer-readable format is completed in accordance with MCP-11504. <NUREG/BR-0007 and NMMSS Report D-24>
- 3.4.8 The material status report is submitted to the NRC within 60 days of the physical inventory of all the spent fuel in storage in accordance with MCP-11504 unless otherwise directed by the NRC. <10 CFR 72.76(a)>
- 3.4.9 Computer-readable Nuclear Material Transaction Reports are completed in accordance with MCP-11504 whenever spent fuel is either transferred or received. <10 CFR 72.78(a), NUREG/BR-0006, and NMMSS Report D-24>

**4. RECORDS**

**NOTE 1:** [MCP-557, "Records Management,"](#) the [INL Records Schedule Matrix](#), and associated NRC [record types list](#) provide current information on the storage, turnover, and retention requirements for these records.

**NOTE 2:** *For NRC licensee facilities, Safeguards retains records showing the receipt, inventory (including location), disposal, acquisition, and transfer of all spent fuel and high-level radioactive waste in storage. These records must be retained for as long as the material is stored and for a period of five years after the material is disposed of or transferred out of the Independent Spent Fuel Storage Installation (ISFSI) [10 CFR 72.72(a)]. Safeguards will retain the master copy of the current inventory as a record until the Commission terminates the license [10 CFR 72.72(b)]. The TMI-2/FSV MBAC will be required to maintain the duplicate copy.*

**5. DEFINITIONS**

None

**6. REFERENCES**

10 CFR 72, "Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Radioactive Waste"

LRD-11500, "Nuclear Material Management, Control and Accountability Plan"

MCP-169, "Safeguards, Records, and Reports"

MCP-11504, "Safeguards Nuclear Regulatory Commission Independent Spent Fuel Storage Installation Actions/Criteria"

NUREG/BR-0006, "Instructions for Completing Nuclear Material Transfer Reports"

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NUREG/BR-0007, "Instructions for Completing Material Balance Report, Physical Inventory Listing, and Concise Note Forms"

USNRC Nuclear Material Management and Safeguards System, Report D-24, "Personal Computer Data Input for NRC Licensees"

**7. APPENDIXES**

None