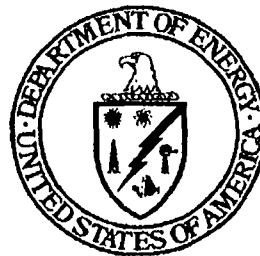


Transportation Plan

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U.S. Department of Energy**



**Nuclear Waste Technical Review Board
Denver, Colorado
July 13, 1994**



Office of Civilian Radioactive Waste Management

Overview

- **Background**
- **Preliminary Draft Transportation Plan**
- **Contingency planning**
- **Approach to system development**
- **Equipment acquisition**
- **Operating system development**
- **Institutional activities**



Background

- **Mission**

- transportation of:

- spent fuel from reactors or storage sites to CRWMS facilities
 - spent fuel from MRS (if available) to repository
 - high-level waste from producer sites to repository
 - wastes from repository, if needed

- planning principles for the transportation program

- protect public health and safety
 - provide for public participation
 - use private industry to the fullest extent possible
 - exercise cost effectiveness



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Background (con't)

- **Spent fuel shipping experience**
- **Nuclear Waste Policy Act**
- **Transportation Business Plan**
- **Transportation Institutional Plan**



Transportation Plan

- **Provides an overview of the transportation system**
- **Will replace the *Transportation Business Plan* and the *Transportation Institutional Plan***
- **New program guidance and realignment incorporated**
- **Preliminary draft completed June 1994**
 - distributed at Transportation Coordination Group meeting
 - comments due October 1994
- **Planned as a “living document”**



Transportation Contingency Planning

- **Cask programs on schedule to provide transportation capability in the year 2000**
- **Approaches to meet earlier date if necessary**
 - existing NRC approved casks
 - current technology casks
 - development and NRC certification of new cask designs using current technologies
- **Operational structure - could use existing DOE traffic management**



Systems Engineering Approach

- **Top-level document is the Civilian Radioactive Waste Management System Requirements Document**
- **Transportation system technical baseline documents**
 - Transportation System Requirements Document
 - Transportation Design Requirements Documents
 - Transportation-Related Interface Control Documents
 - Transportation Design Packages
- **Transportation System Operations Plan**
 - provides detailed concept of operations



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Transportation System Architecture

- **Transportation cask subsystems**
- **Planning and control**
- **Service and maintenance support**
- **Field operations**



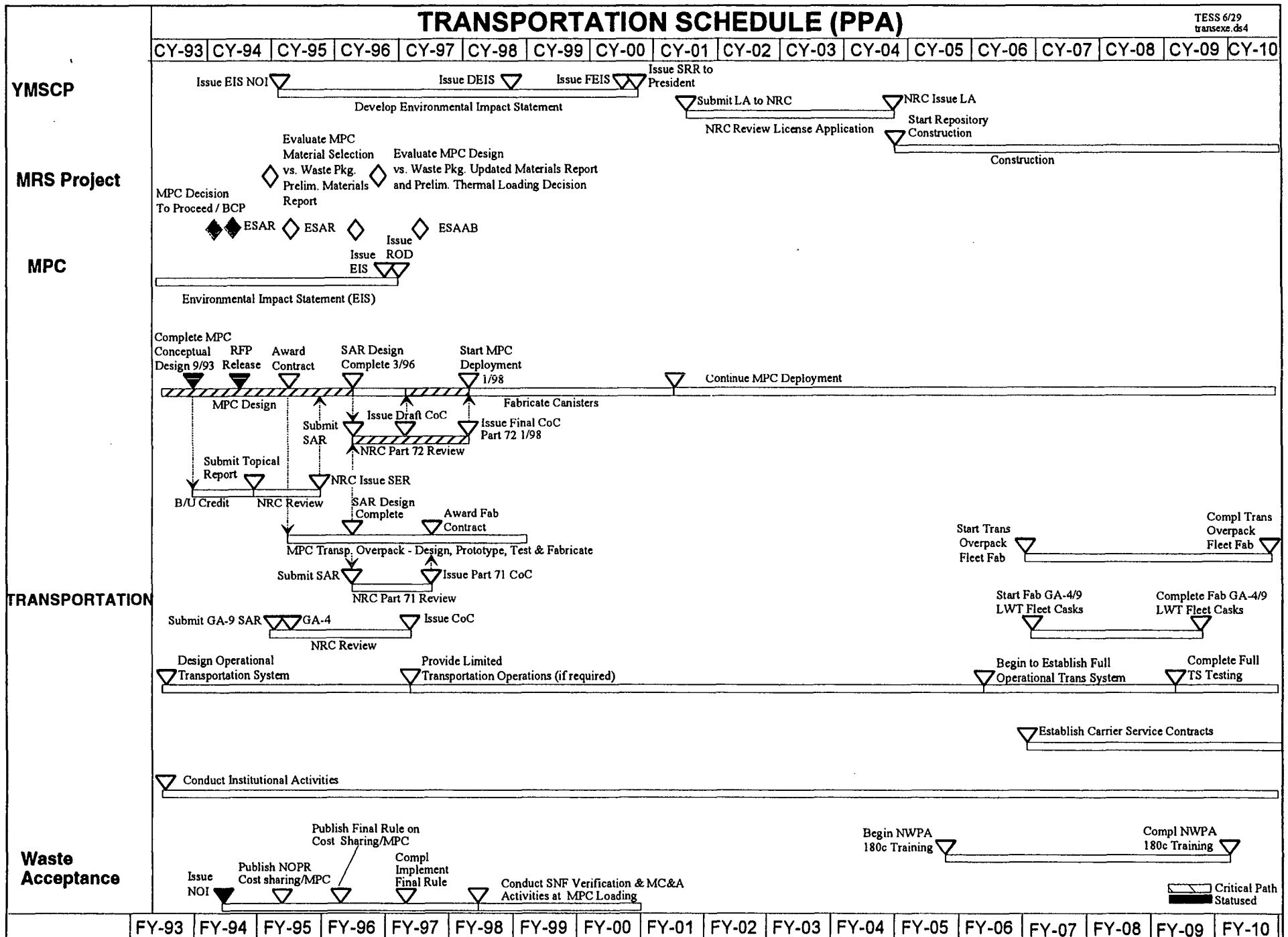
Transportation System Assumptions

- **Consists of equipment, facilities, organizations, and activities required to ship spent fuel and high-level waste**
- **All surface modes will be considered**
- **Majority of spent fuel shipped in multi-purpose canisters by rail**
- **Some spent fuel will be shipped by truck due to handling constraints**
- **High-level waste shipped by rail**

Predecisional Draft

TRANSPORTATION SCHEDULE (PPA)

TESS 6/29
transex.d4





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System Development Activities

- **Hardware development and acquisition**
- **Operating system**
- **Institutional program**



Cask Subsystem Development

- **Casks**

- ☐ from-reactor
- ☐ specialty
- ☐ high-level waste
- ☐ multi-purpose canister
- ☐ transportable storage cask

- **Transporters**



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Operational System Development

- **Functions to be performed**
- **Operational structure**
- **Operational concepts**
- **Schedule and approach**



Institutional Interactions

- **Essential to promote understanding of OCRWM's transportation program**
- **Work together with stakeholders to ensure public safety and promote confidence**
- **Programmatic issues**
 - resolution results in management and administrative actions necessary to implement the program



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Programmatic Issues and Activities

- **Routing**
- **Section 180(c)**
- **Risk management**
- **Full-scale cask testing**
- **Advance notification to Indian tribes**
- **Inspection/enforcement**