

# **OPERATIONAL CONCEPT FOR THE CRWMS TRANSPORTATION SYSTEM**

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## Office of Civilian Radioactive Waste Management

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# Purpose

**To describe how the CRWMS  
Transportation System will function  
when full operations commence**



## **Assumptions**

- **SNF will be loaded into MPCs to the maximum extent possible and transported in MPC transportation casks**
- **Rail will be the primary mode of transport**
- **Truck shipments will be used when alternatives are not available**
- **Annual allocations of SNF deliveries from utilities are predetermined based on oldest fuel first**



# Transportation Interfaces within CRWMS

WASTE ACCEPTANCE	TRANSPORTATION	FEDERAL SITE
<ul style="list-style-type: none"><li>• <b>Maintains records of CRWMS waste capacity and locations</b></li><li>• <b>Verify the waste has been properly described</b></li><li>• <b>Manage the contract/ agreement process</b></li><li>• <b>Verify the waste is in the proper form at the sites for transport</b></li><li>• <b>Accept title</b></li></ul>		<ul style="list-style-type: none"><li>• <b>Unload the SNF Transportation casks</b></li><li>• <b>Provide for temporary or long term storage of the SNF</b></li></ul>



# **Primary Operational Components of the CRWMS Transportation System**

- **Operational Planning**
- **Site/Facility Operations**
- **Transport Operations**
- **Support Operations**



## Operational Planning

### Key Terms

- **Annual Capacity Report - Lists the annual delivery allocations for each utility based on the acceptance rate for each year**
- **Delivery Commitment Schedule - A statement from a utility of its intent to deliver SNF based on their annual allocation**
- **Final Delivery Schedule - Once approved, a formal requirement to transport a specified amount of SNF from a designated utility storage site during a specific year**



## **Operational Planning (Cont'd)**

### **Key Planning Documents**

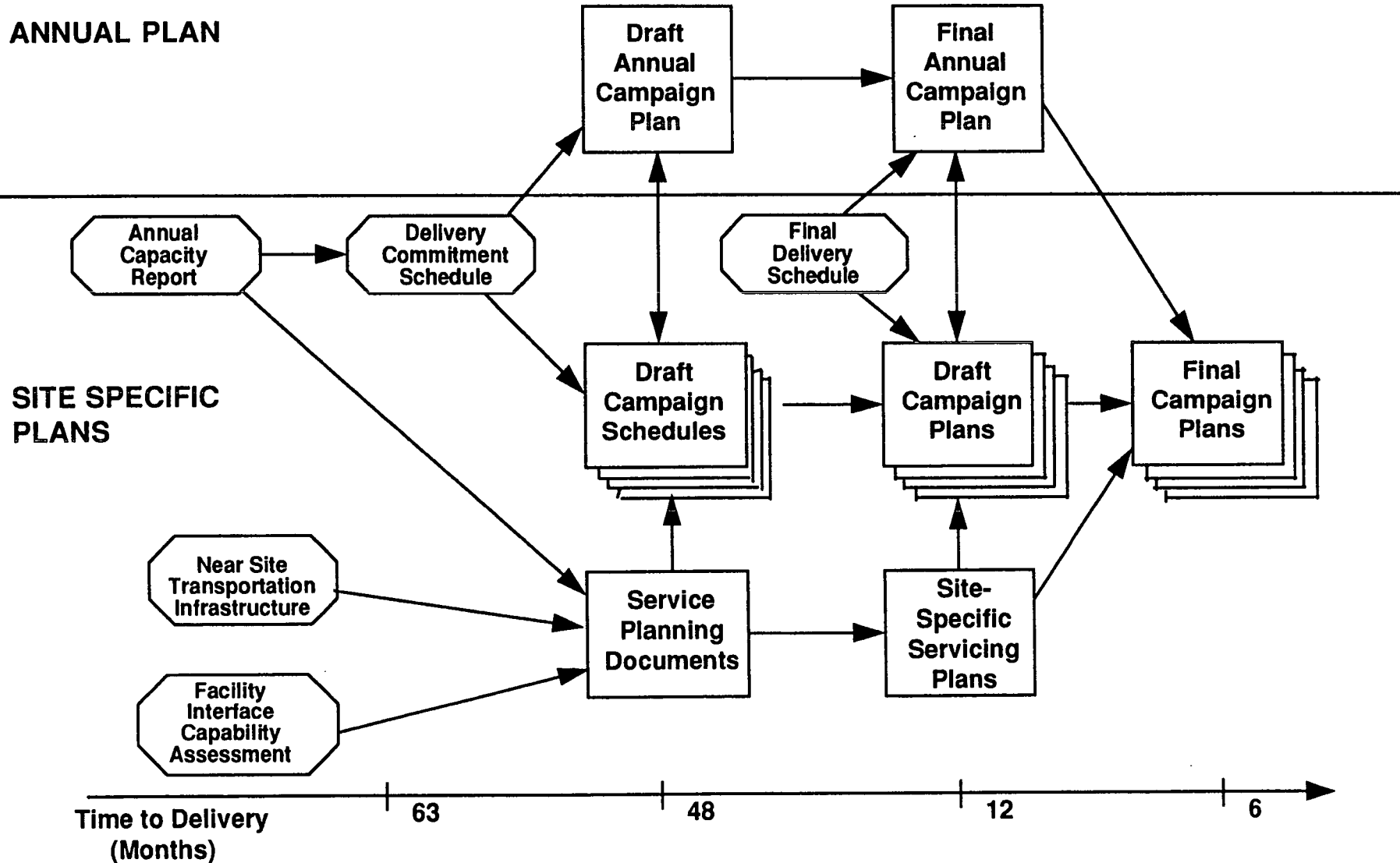
- **Campaign Plan - A detailed plan that covers all aspects of SNF shipments from a specific utility storage site during a one year period**
- **Annual Campaign Plan - A detailed schedule that integrates the schedules of individual site campaign plans for a one year period**
- **Site-Specific Servicing Plan - A detailed set of data that describes the physical characteristics and other important planning information for a specific utility storage site**



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## Operational Planning (Cont'd)

ANNUAL PLAN







## **Site/Facility Operations**

- **MPCs, casks, and supporting equipment will be provided by CRWMS to utilities**
- **Utilities are responsible for loading MPCs and MPC transportation casks or truck casks**
- **CRWMS will provide equipment training and technical support to utilities**



## **Transport Operations**

- **Transport of the SNF casks from utility sites provided by CRWMS in coordination with utilities**
- **Routes from utility sites to CRWMS storage facility established in accordance with approved routing policy**
- **Specific rail services predetermined in service contracts**
- **Legal-weight truck transport used for specific utilities with crane or other limitations restricting the use of rail casks**



## **Transport Operations (Cont'd)**

- **Intermodal Transfer - Barge and heavy haul operations utilized to facilitate use of rail when required**
- **Transportation Operations Center - Focal point for control of transportation operations**
  - **Continuous shipment tracking**
  - **Coordination with other emergency operations centers**
  - **Communication with transport providers**
  - **Communication with other components of CRWMS**
  - **Focal point for emergency coordination**



## **Support Operations**

- **Inventory Management**
- **Maintenance Management**
- **Campaign Analysis**
- **Contingency Planning**