

LOGISTICAL PLANNING ACTIVITIES

**MICHAEL CONROY
TRANSPORTATION BRANCH
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

**NUCLEAR WASTE TECHNICAL REVIEW BOARD
TRANSPORTATION & SYSTEMS PANEL MEETING
SEPTEMBER 25, 1991
ARLINGTON, VA**



TRANSPORTATION LOGISTICAL PLANNING

- **DESIGNED TO PROVIDE FOR THE MOVEMENT OF SNF OR HLW FROM SPECIFIC GENERATOR SITES TO A SPECIFIC FEDERAL WASTE MANAGEMENT FACILITY**
- **CONDUCTED IN TWO PHASES:**
 - **LONG-RANGE PLANNING BEGINNING 5 YEARS PRIOR TO SHIPMENT**
 - **CAMPAIGN PLANNING BEGINNING 1 YEAR PRIOR TO SHIPMENT**
- **DIFFERS FROM OPERATIONAL PLANNING WHICH DEVELOPS THE TRANSPORTATION SYSTEMS CAPABILITIES IN THAT IT IS SITE-SPECIFIC**



OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

LONG-RANGE LOGISTICAL PLANNING

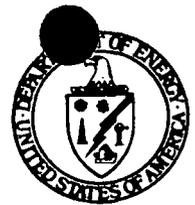
- **STARTS WITH PURCHASERS DELIVERY COMMITMENT SCHEDULE (DCS) SUBMITTED AT LEAST 63 MONTHS PRIOR TO EXPECTED DELIVERY DATE**

- **APPROVED DCS PROVIDES KEY INFORMATION TO BEGIN LOGISTICAL PLANNING**
 - **SPECIFIC REACTOR(S)/FACILITY(IES) FROM WHERE SNF WILL BE SHIPPED**

 - **PROPOSED DELIVERY DATE AND SHIPPING MODE (RAIL,TRUCK OR BARGE)**

 - **MAXIMUM NUMBER AND TYPE OF ASSEMBLIES TO BE SHIPPED AND RANGE OF SNF DISCHARGE DATES**

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT



LONG-RANGE LOGISTICAL PLANNING ACTIVITIES

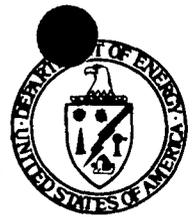
- **DEVELOP DETAILED SITE-SPECIFIC PLANNING DOCUMENTS**
- **COORDINATE WITH FEDERAL WASTE MANAGEMENT FACILITY TO DEVELOP PLANNING ACCEPTANCE SCHEDULES**
- **DEVELOP, AS REQUIRED, SITE-SPECIFIC AUXILIARY HANDLING EQUIPMENT**
- **COORDINATE WITH THE INSTITUTIONAL PROGRAM IN THE IDENTIFICATION OF TRANSPORTATION CORRIDORS**
- **PROVIDE ASSISTANCE, AS REQUESTED, TO WASTE OWNERS IN THE DEVELOPMENT OF THEIR SITE-SPECIFIC PROCEDURES**

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT



LONG-RANGE LOGISTICAL PLANNING ACTIVITIES (CONT)

- **DEVELOP PLANNING SHIPMENT SCHEDULES BY YEAR BASED ON APPROVED DCS AND SITE-SPECIFIC INFORMATION**
- **DEVELOP ACTUAL MODAL AND CASK REQUIREMENTS**



LOGISTICAL CAMPAIGN PLANNING

- **STARTS WITH PURCHASERS FINAL DELIVERY SCHEDULE (FDS) SUBMITTED 12 MONTHS PRIOR TO DELIVERY**

- **APPROVED FDS PROVIDES KEY INFORMATION TO BEGIN CAMPAIGN PLANNING**
 - **SHIPPING MODE**

 - **DELIVERY DATES**

 - **OTHER CHANGES AND/OR UPDATES IN THE INFORMATION PROVIDED IN THE DCS**

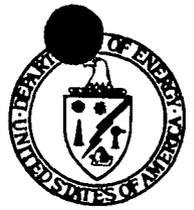
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT



LOGISTICAL CAMPAIGN PLANNING ACTIVITIES

- **PLAN CASK-SPECIFIC OPERATIONAL TRAINING OF WASTE OWNER PERSONNEL**
- **PREPARE SAFEGUARDS PLAN**
- **DEVELOP ANNUAL SHIPMENT AND RECEIPT SCHEDULES**
- **DEVELOP ANNUAL CASK AND CARRIAGE REQUIREMENTS**

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT



LOGISTICAL CAMPAIGN PLANNING ACTIVITIES (CONT)

- **DEVELOP CAMPAIGN EQUIPMENT LISTS AND FIELD SERVICE PERSONNEL REQUIREMENTS**

- **CONDUCT PRE-SHIPMENT MANAGEMENT PLANNING**

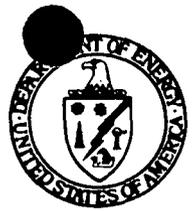
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT



TYPICAL CAMPAIGN OPERATIONAL ACTIVITIES

- **PRE-CAMPAIGN SUPPORT ACTIVITIES**
 - **COMPLETE HANDS ON TRAINING OF WASTE OWNER PERSONNEL IN SPECIFIC CASK OPERATION AND ANY DOE SUPPLIED EQUIPMENT**
 - **FINALIZATION OF THE SITE-SPECIFIC PLANNING DOCUMENT**
 - **SITE ACCESS TRAINING FOR DOE FIELD SERVICE PERSONNEL**
 - **DELIVERY AND SETUP OF SITE-SPECIFIC AUXILIARY EQUIPMENT SUPPLIED BY THE DOE OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT



TYPICAL CAMPAIGN OPERATIONAL ACTIVITIES (CONT)

- **PRE-CAMPAIGN SUPPORT ACTIVITIES (CONT)**
 - **FINAL ROUTE SELECTION**
 - **PROVIDE ADVANCED WRITTEN NOTIFICATION TO THE NRC 10 DAYS PRIOR TO SHIPMENT DATE**
 - **PROVIDE ADVANCED NOTIFICATION TO STATE GOVERNORS OR DESIGNEES 7 DAYS IN ADVANCE OF THE SHIPMENT DATE**
 - **ARRANGE FOR ADDITIONAL PHYSICAL SECURITY, AS NECESSARY**

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT

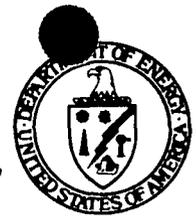


TYPICAL CAMPAIGN OPERATIONAL ACTIVITIES (CONT)

• **PRE-SHIPMENT ACTIVITIES**

- **DELIVERY OF EMPTY SHIPPING CASK(S)**
- **OBSERVATION OF WASTE OWNER CASK LOADING OPERATIONS**
- **REVIEW AND VERIFICATION OF WASTE OWNER SUPPLIED DOCUMENTATION**
- **ARRANGE FOR OUTGOING CARRIAGE**
- **ACCEPT CASK F. O. B. CARRIER FROM WASTE OWNER**

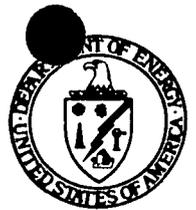
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT



TYPICAL CAMPAIGN OPERATIONAL ACTIVITIES (CONT)

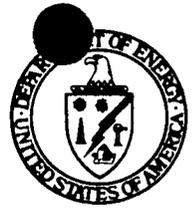
- **SHIPMENT PREPARATION ACTIVITIES**
 - **PREPARE SHIPMENT DOCUMENTATION**
 - **INSPECT CONVEYANCE & TRANSPORT VEHICLE**
 - **BRIEF TRANSPORT CREW**
 - **RELEASE SHIPMENT**

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT



TYPICAL CAMPAIGN OPERATIONAL ACTIVITIES (CONT)

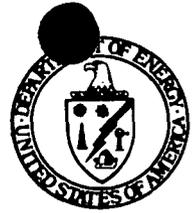
- **SHIPMENT MOVEMENT ACTIVITIES**
 - **TRANSPORT SHIPMENT**
 - **PROVIDE PHYSICAL SECURITY**
 - **PERFORM INTERMODAL OPERATIONS AS REQUIRED**
 - **RESPOND TO EMERGENCY SITUATIONS, IF NECESSARY**



TYPICAL CAMPAIGN OPERATIONAL ACTIVITIES (CONT)

- **PROVIDE TRAFFIC MANAGEMENT ACTIVITIES**
 - **MONITOR TRAFFIC FLOW STATUS**
 - **SUPPORT EMERGENCY RESPONSE COMMUNICATIONS**
 - **COORDINATE TRAFFIC COMMUNICATIONS**
 - **ISSUE TRAFFIC NOTICES/DISPATCH ORDERS**
 - **PROVIDE UPDATE TO STATE GOVERNORS AND NRC**
 - **COLLECT AND FILE TRANSPORTATION RECORDS**

OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT



TYPICAL CAMPAIGN OPERATIONAL ACTIVITIES (CONT)

- **DELIVERY OPERATIONS**
 - **POSITION CASK AND TRANSPORTER FOR SURVEYS**
 - **TRANSFER SHIPPING DOCUMENTATION**
 - **DEBRIEF OF TRANSPORT CREW**