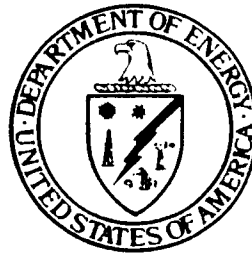


# **MRS Program Status**

**Victor Trebules, Director,  
Storage Division  
Office of Civilian Radioactive Waste Management**



**Presented to**

**Nuclear Waste Technical Review Board  
March 10, 1992**

# **INTRODUCTION**

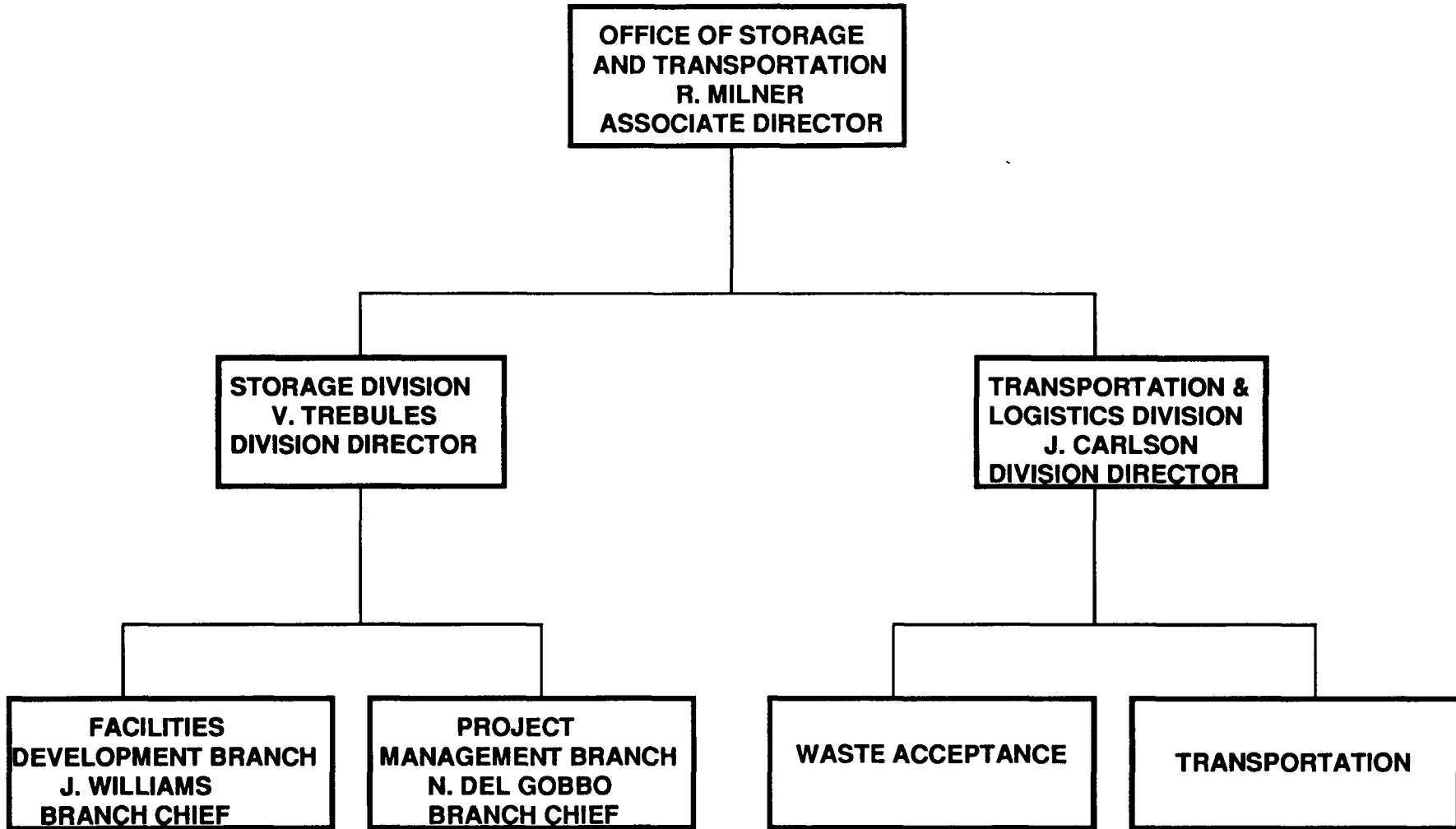
- **NEED FOR MRS**
- **ORGANIZATION**
- **WORK BREAKDOWN STRUCTURE**
- **VOLUNTARY SITING PROCESS**
- **MRS DESIGN**
- **SAFETY CONSIDERATIONS**
- **QUESTIONS**

**NEED FOR MRS**

## **NEED FOR MRS**

- **EARLY WASTE-ACCEPTANCE**
- **CENTRAL STORAGE**
- **SYSTEM BENEFITS**
- **PROGRESS TOWARD ENVIRONMENTAL GOAL**

# **ORGANIZATION**



SYSTEMS ENGINEERING  
 SITE INVESTIGATIONS  
 MRS FACILITY  
 ENGINEERING DEVELOPMENT  
 FINANCIAL ASSISTANT  
 INSTITUTIONAL  
 QUALITY ASSURANCE

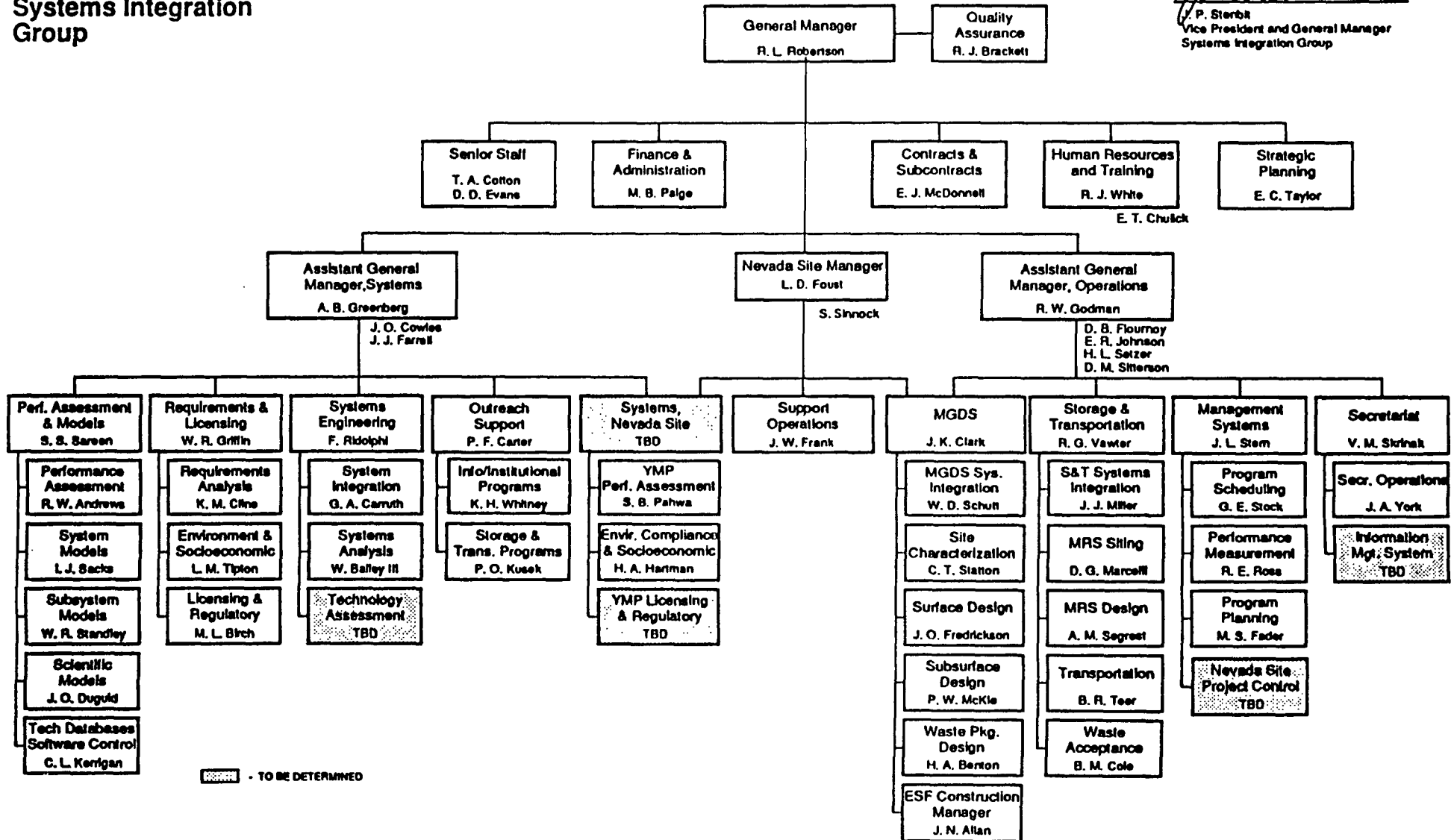
REGULATORY  
 PROJECT MANAGEMENT  
 ENVIRONMENTAL, SAFETY, HEALTH  
 QUALITY ASSURANCE



Systems Integration  
Group

NUCLEAR WASTE MANAGEMENT SYSTEM  
MANAGEMENT AND OPERATING CONTRACTOR  
ORGANIZATION

*R. L. Robertson*  
R. L. Robertson  
*P. Sterbit*  
P. Sterbit  
Vice President and General Manager  
Systems Integration Group



# **ROLE OF THE M&O IN MRS**



## **M&O RESPONSIBILITIES**

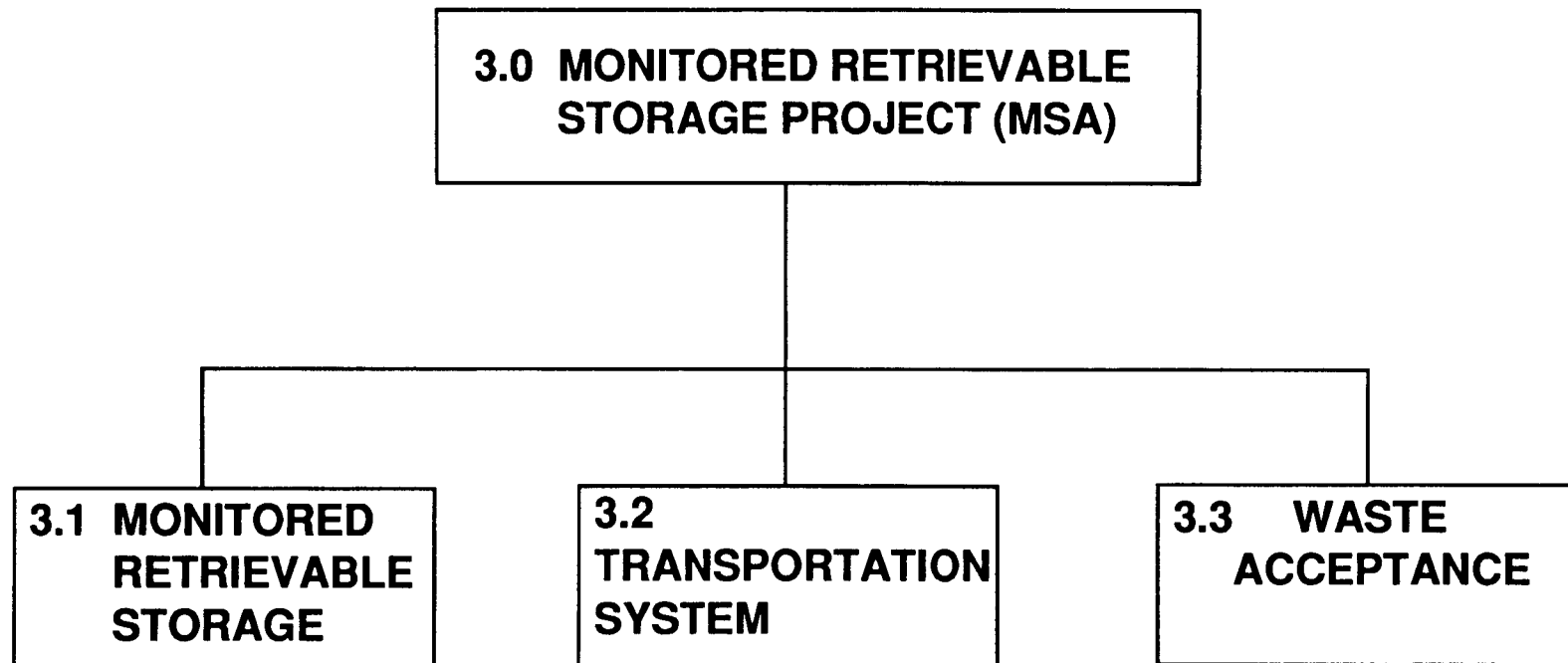
- **SUPPORT OCRWM IN THE NEGOTIATED SITING PROCESS**
- **INTEGRATE THE WORK OF THE CRWMS PROGRAM PARTICIPANTS**
- **CONDUCT MRS DESIGN**
- **COORDINATE RECOMMENDED CHANGES TO THE CRWMS BASELINE AND INTERFACE WITH ALL POTENTIALLY AFFECTED PARTICIPANTS**
- **SUPPORT OCRWM WITH NRC LICENSING AND ENVIRONMENTAL COMPLIANCE**

# **M&O KEY ASSIGNMENTS FOR MRS**

- **STORAGE TECHNOLOGY EVALUATIONS**
- **OUTREACH SUPPORT**
- **SITING SUPPORT**
  - **ENVIRONMENTAL ASSESSMENT**
- **SYSTEM STUDIES**
- **STRATEGIC AND CONTINGENCY PLANNING**
- **CONCEPTIONAL AND SAR DESIGNS**
- **LICENSING SUPPORT**
  - **ANNOTATED OUTLINE**
  - **ISSUE RESOLUTION**

# **WORK BREAKDOWN STRUCTURE**

## WORK BREAKDOWN STRUCTURE (WBS)

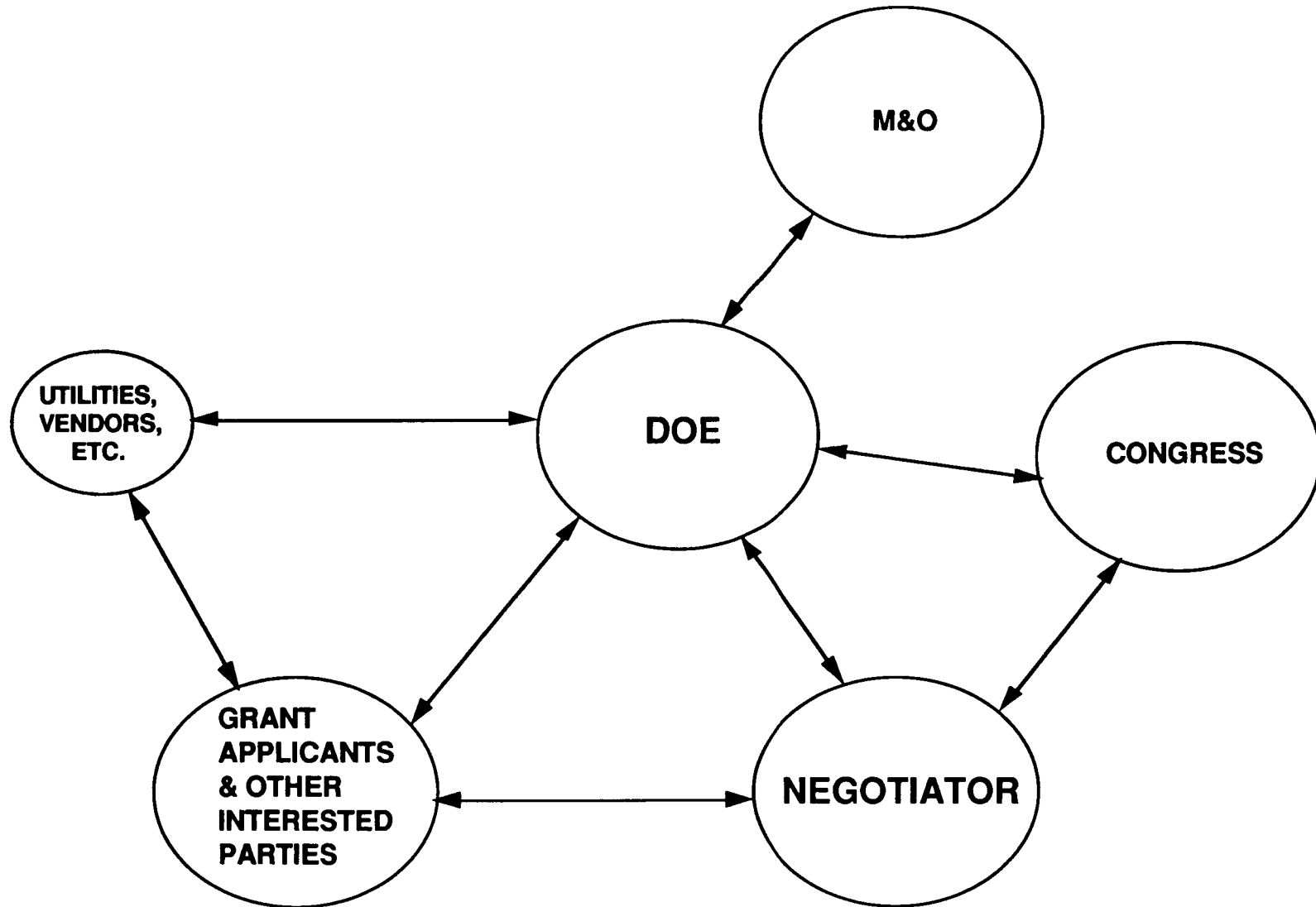


## **3.1 MONITORED RETRIEVABLE STORAGE**

- 3.1.1 SYSTEMS ENGINEERING**
- 3.1.2 (RESERVED)**
- 3.1.3 SITE INVESTIGATION**
- 3.1.4 MRS FACILITY**
- 3.1.5 REGULATORY**
- 3.1.6 (RESERVED)**
- 3.1.7 ENGINEERING DEVELOPMENT**
- 3.1.8 (RESERVED)**
- 3.1.9 PROJECT MANAGEMENT**
- 3.1.10 FINANCIAL ASSISTANCE**
- 3.1.11 QUALITY ASSURANCE**
- 3.1.12 INFORMATION MANAGEMENT**
- 3.1.13 ENVIRONMENT, SAFETY, AND HEALTH**
- 3.1.14 INSTITUTIONAL**
- 3.1.15 SUPPORT SERVICES**

# **VOLUNTARY SITING PROCESS**

# SITING INTERACTION



# **ROLE OF THE NEGOTIATOR**



## **NEGOTIATOR**

- **DAVID LEROY, PRESIDENTIAL APPOINTEE**
- **OFFICES IN BOISE, IDAHO AND WASHINGTON, D.C.**
- **APPOINTED 8/90 TERM EXPIRES 1/94**

# **NEGOTIATOR RESPONSIBILITIES**

**FIND A STATE OR INDIAN TRIBE WILLING TO HOST AN MRS AT A TECHNICALLY SUITABLE SITE UNDER REASONABLE TERMS**

- SERVE AS PRIMARY CONTACT FOR GRANT APPLICANTS AND OTHER INTERESTED PARTIES**
- BALANCE INTERACTIONS BETWEEN THE NEGOTIATOR, DOE, GRANT APPLICANTS AND INTERESTED PARTIES**
- BALANCE HOST DESIRES WITH PROGRAM, REGULATORY AND LEGISLATIVE REQUIREMENTS**
- NEGOTIATE TERMS AND CONDITIONS OF THE NEGOTIATED AGREEMENT BETWEEN HOST AND U.S. GOVERNMENT**
- SUBMIT NEGOTIATED AGREEMENT AND AN ENVIRONMENTAL ASSESSMENT TO CONGRESS**

## **ACTIVITIES TO DATE**

- **SENT INTRODUCTORY LETTERS AND FEASIBILITY GRANT AVAILABILITY LETTERS TO STATES AND INDIAN TRIBES**
- **DEVELOPED A "MEMORANDUM OF UNDERSTANDING" WITH DOE AND NRC**
- **CONDUCTED NUMEROUS FACT FINDING TRIPS IN U.S. AND EUROPE**
- **PROVIDED INFORMATION TO AND MET WITH INTERESTED PARTIES**

**ROLE OF THE OFFICE OF CIVILIAN  
RADIOACTIVE WASTE MANAGEMENT  
(OCRWM)**

# **OCRWM RESPONSIBILITIES**

- **DEVELOP AND OPERATE THE CIVILIAN RADIOACTIVE WASTE MANAGEMENT SYSTEM (CRWMS) WITH THE FOLLOWING GOALS:**
  - **WASTE ACCEPTANCE AT AN MRS BY 1998**
  - **DISPOSAL IN REPOSITORY BY 2010**
- **PROVIDE SUPPORT TO THE NUCLEAR WASTE NEGOTIATOR**
- **REPORT TO CONGRESS ON THE CRWMS ACTIVITIES AND EXPENDITURES**
- **ADMINISTER THE FEASIBILITY GRANTS PROGRAM**
- **PREPARE AN ENVIRONMENTAL ASSESSMENT OF A PROPOSED MRS SITE AND HOLD PUBLIC HEARINGS**
- **IMPLEMENT THE TERMS OF THE NEGOTIATED AGREEMENT WITH THE HOST**

## **RECENT ACTIVITIES**

- **DEVELOPED THE "PRELIMINARY SITE REQUIREMENTS AND CONSIDERATIONS FOR A MONITORED RETRIEVABLE STORAGE FACILITY"**
- **DEVELOPED TECHNICAL BACKGROUND INFORMATION DOCUMENT**
- **DEVELOPED "SPENT FUEL STORAGE AT THE MONITORED RETRIEVABLE STORAGE FACILITY", PAMPHLET**
- **ADMINISTERED GRANTS PROGRAM**
- **INITIATED MRS CONCEPTUAL DESIGN**
- **INITIATED DEVELOPMENT OF THE MRS LICENSE APPLICATION**
- **INITIATED DEVELOPMENT OF MRS ENVIRONMENTAL ASSESSMENT**

## **ACTIVITIES TO DATE (CON'T)**

- **DEVELOPED OUTREACH FACT SHEETS**
- **ARRANGED FOR NUCLEAR STATION ISFSI TOURS**
- **INITIATED DEVELOPMENT OF CONTINGENCY SITING PLAN**
- **MET WITH GRANT APPLICANTS. (MESCALERO APACHE TRIBE, GRANT COUNTY, NORTH DAKOTA)**

## **POTENTIAL BENEFITS TO THE HOST**



## **POTENTIAL BENEFITS TO THE HOST**

- **"REVIEW PANEL" INPUT AND OVERSIGHT OF THE MRS**
- **ECONOMIC DEVELOPMENT**
  - **JOB'S CREATED FOR CONSTRUCTION AND OPERATION**
  - **LOCAL EXPENDITURES FOR MATERIALS, EQUIPMENT AND SERVICES, HOUSING, ETC.**
  - **INFLOW OF MONEY INTO LOCAL BUSINESSES**

## **POTENTIAL BENEFITS TO THE HOST (CON'T)**

- **NEGOTIATED SITING AGREEMENT**
  - **DIRECT FINANCIAL ASSISTANCE**
  - **IMPROVEMENTS TO THE INFRASTRUCTURE (HIGHWAYS, RAILROADS, MUNICIPAL SERVICES, ETC.)**
  - **ENVIRONMENTAL IMPROVEMENTS (I.E., CLEANUP OF EXISTING AIR, WATER OR WASTE PROBLEMS)**
  - **EDUCATIONAL ASSISTANCE**
  - **HEALTH CARE PROGRAMS AND FACILITIES**
  - **RECREATIONAL PROGRAMS AND FACILITIES**
  - **PAYMENTS EQUAL TO TAX**

# **CURRENT GRANT APPLICANTS**

## **PRELIMINARY (PHASE I) GRANTS**

- **APPLICATION DEADLINE MARCH 31, 1992**
- **UP TO \$100,000 FOR 6 MONTHS**
- **ACTIVITIES MAY INCLUDE:**
  - **UNDERSTANDING THE WASTE MANAGEMENT SYSTEM AND AN MRS FACILITY**
  - **DETERMINING WHETHER APPLICANT WANTS TO PROCEED WITH GRANT PROCESS**

# STATUS OF PHASE I GRANTS

<u>APPLICANT</u>	<u>AWARDED</u>	
MESCALERO APACHE TRIBE (NM)	X	
GRANT COUNTY ( ND)	X	
FREMONT COUNTY (WY)	X	
YAKIMA INDIAN NATION (WA)	X	
PRAIRIE ISLAND INDIAN NATION ( MN)		PENDING, DOE REQUESTED ADDITIONAL INFORMATION
SAC AND FOX (OK)	X	
CHICKASAW INDIAN NATION (OK)	X	

## **ADVANCED (PHASE 2) GRANTS**

- **NO APPLICATIONS SUBMITTED TO DATE**
- **APPLICATION DEADLINE JUNE 30, 1992**
- **PHASE 2 AWARD, OF UP TO \$3,000,000 FOR 12 MONTHS, WILL BE AWARDED IN 2 STAGES**
  - **INITIAL \$200,000 FOR PUBLIC INFO ACTIVITIES**
  - **FULL AWARD UPON SUBMISSION OF LETTER FROM GOVERNOR/TRIBAL LEADER TO NEGOTIATOR, STATING REQUEST TO ENTER "CREDIBLE FORMAL DISCUSSIONS" WHICH COULD LEAD TO A SITING AGREEMENT**

# **SITING SCHEDULE**

## **MRS SITING MILESTONES**

<b>INITIATE SITE SPECIFIC EA DEVELOPMENT</b>	<b>8/92</b>
<b>SITE IDENTIFICATION</b>	<b>12/92</b>
<b>COMPLETE EA</b>	<b>6/93</b>
<b>CONGRESSIONAL APPROVAL</b>	<b>9/93</b>
<b>SUBMIT SAR</b>	<b>9/94</b>
<b>SUBMIT LA (EIS, ETC)</b>	<b>9/95</b>
<b>RECEIVE NRC LICENSE</b>	<b>9/96</b>
<b>MRS OPERATIONAL</b>	<b>1/98</b>



**EA ACTIVITIES**

# **MRS EA DEVELOPMENT**

- **ACTIVITIES TO DATE:**

- **COMPLETED DRAFT EA MANAGEMENT PLAN AND ANNOTATED OUTLINE**

- **DEVELOPING DRAFT MRS EA TECHNICAL GUIDE**

- **PRECURSOR TO A SITE-SPECIFIC EA**

- **SITE-INDEPENDENT PORTIONS ESSENTIALLY COMPLETE**

- **GUIDE DESCRIBES WHAT WILL BE INCLUDED IN SITE-SPECIFIC PORTIONS**

- **FUTURE ACTIVITIES:**

- **DEVELOP SITE SPECIFIC SECTIONS OF EA ONCE POTENTIAL SITE IS IDENTIFIED**

**MRS DESIGN**

## **MRS DESIGN**

- **CONCEPTUAL DESIGN IN PROGRESS**
- **CONCEPTUAL DESIGN REPORT (CDR) TO BE COMPLETED BY M&O MAY 1, 1992**
- **CDR REFERENCE DESIGN WILL SERVE AS COST AND SCHEDULE BASELINE**
- **MRS REQUIREMENTS DOCUMENTS WILL SERVE AS TECHNICAL BASELINE**
- **AFTER SITE/TECHNOLOGIES SELECTED M&O CAN COMPLETE DETAILED DESIGNS**
- **DESIGNS CAN BE OPTIMIZED THROUGHOUT THE DESIGN PROCESS**

# **MRS SAFETY CONSIDERATIONS**

# **MRS SAFETY CONSIDERATIONS**

- **RADIOLOGICAL SAFETY**

- **EXPERIENCE AT ISFSI'S APPLICABLE TO MRS**
- **SHORT-LIVED RADIONUCLIDES NOT PRESENT IN SIGNIFICANT QUANTITIES IN 5+YEARS OLD SNF**
- **RELATIVELY LOW HAZARD-POTENTIAL ACTIVITY COMPARED TO NUCLEAR POWER PLANTS**
- **NO MECHANISM PRESENT TO CAUSE A LARGE RELEASE OF RADIOACTIVE MATERIAL**

- **INDUSTRIAL SAFETY**

- **EXPERIENCE AT NUCLEAR POWER AND CONVENTIONAL POWER PLANTS BEING APPLIED**
- **RELATIVELY MODERATE RISK WORKING ENVIRONMENT**