

**PRESENTATION TO THE  
NUCLEAR WASTE TECHNICAL REVIEW BOARD**

**Subject:  
DECISION MAKING**

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# **DECISION MAKING**

## **PURPOSE:**

**Review Process for Uniform Decision Making**

## **OVERVIEW:**

- **Background**
- **Functional Needs**
- **Functional Dependence**
- **Uniform Decision Making Process**
- **ESF & Repository Functions**
- **Summary**

# **BACKGROUND**

## **SITE SUITABILITY:**

- **Program Priority**
- **Driven by Scientific Research Needs  
and Institutional Considerations**
- **Pivotal to Successfully Completing the Mission**

## **SYSTEM ENGINEERING:**

- **System Engineering Program Being Implemented**
- **Management System Improvement Strategy**

# **FUNCTIONAL NEEDS**

## **SYSTEM FUNCTIONAL DEFINITION:**

- **NWMS Functional Analysis**
- **ESF Functional Analysis**
- **Requirements Definition**
- **Functional Needs Defined (Solution Space)**

## **PROGRAMMATIC FUNCTIONAL ANALYSIS:**

- **Examining Program Processes**
- **Requirements Analysis**
- **Needs Analysis**
- **Design Process**
- **Uniform Decision Making Process**

# **FUNCTIONAL DEPENDENCE**

## **SYSTEM FUNCTIONAL INTERFACES:**

- **NWMS Functional Analysis**
- **Functional Flow Block Diagrams**
- **Time Line Analyses**

## **PROGRAMMATIC FUNCTIONAL ANALYSIS:**

- **External Relations Interfaces**
- **Institutional Agencies' Needs**
- **Legal and Socioeconomic Considerations**

# **UNIFORM DECISION MAKING PROCESS**

## **DECISION QUALITY:**

- **Program-Wide Uniformity**
- **Process Suited to Program Characteristics**
- **Will Consider Functional Dependencies**

## **DECISION ARCHIVAL:**

- **PC Prompted Process**
- **Creates Record of Considerations**

# **ESF & REPOSITORY FUNCTIONS**

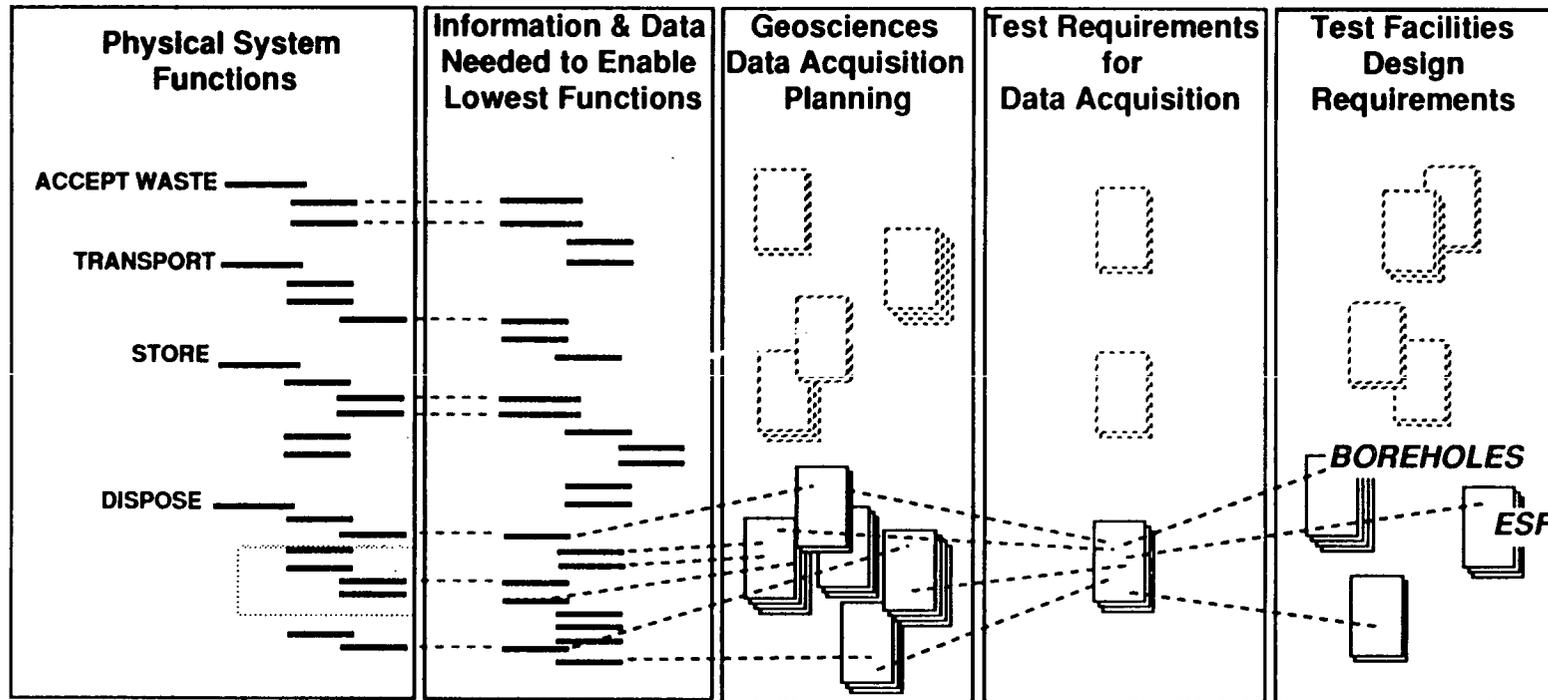
## **FUNCTIONAL NEED:**

- **Objective Is Site Suitability**
- **Data Needs Drive Design**
- **Preserves Option for Repository Use**

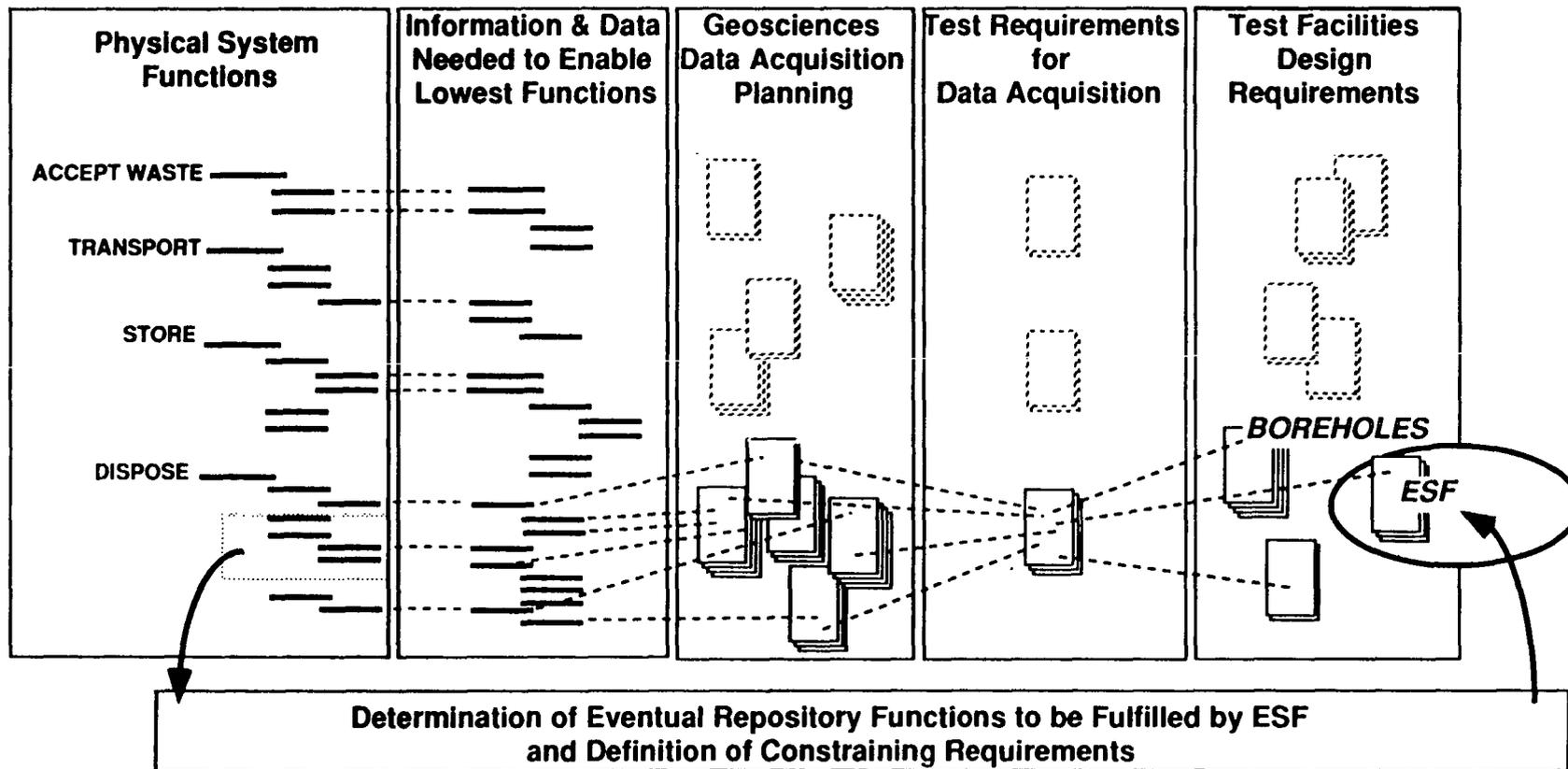
## **REPOSITORY CONCEPTUAL DESIGN:**

- **Update of Conceptual Design**
- **ESF Reconciliation with MGDS**

# HOW THE ESF DESIGN AND TEST REQUIREMENTS EMERGE?



# HOW THE ESF DESIGN AND TEST REQUIREMENTS EMERGE?



## **SUMMARY**

- **Focus Has Been On Site Suitability**
- **System Engineering Program Being Implemented**
- **NWMS Functional Analysis Provides:**
  - √ **Functional Definition and Needs**
  - √ **Functional Dependencies**
- **Programmatic Functional Analysis**
  - √ **Establishing Tailored Processes**
  - √ **Uniform Decision Making Process**
- **ESF Will Be Reconciled With Updated Conceptual Design**