

A1165

LMK Wm-1 (2)  
Wm-11 (2)  
Wm-16 (2)

Trying To Determine With Performance Assessment

- Ground-water travel time to the accessible environment
- Waste-package lifetime
- Release rate from the facility
- Release to the accessible environment
- Dosimetry and health effects
- Compliance with EPA Standard

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WM DOCKET CONTROL CENTER

Tools To Be Used

- Data collection
- Scenario development
- Modeling
- Sensitivity and uncertainty analysis
- [Performance allocation?]

Wm-RES  
WM Record File  
A1165  
SNL

WM Project 10, 11, 16  
Docket No. \_\_\_\_\_  
PDR ✓  
LPDR ✓ (B, N, S)

8709280177 870807  
PDR WMRES EXISANL  
A-1065 PDR

(1)

Distribution:

Galson Coplan

(Return to WM, 623-SS)

Original not rec'd.

87478793 Wm Project  
(H)

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## Scenario Development

### I. Scenario-selection methodology or plan

A. How are scenarios going to be developed?

1. established methodology
2. methodology to be developed
3. expert opinion

### B. Screening of events and processes (and scenarios)

#### 1. Data collection

a. do plans provide for collecting sufficient data on regional and local scales to decide what events and processes need to be considered?

a1. geologic data (thickness of units; location of faults, folds, salt dissolution; geomorphic stability; etc)

a2. rates of processes (deposition, erosion, precipitation, uplift, subsidence, earthquakes, volcanism, climate, etc)

a3. hydrologic data (flow gradients, aquifers, discharge locations, etc)

b. are the specific plans reasonable and adequate?

#### 2. Modeling of events and processes and/or scenarios

a. as part of screening

a. are flow codes developed or being developed?

a1. regional, a2. local, a3. near field

b. are transport codes developed or being developed?

c. are thermomechanical codes developed or being developed?

d. are data being collected to support the modeling?

d1. geologic data (distribution of units, thermomechanical properties of rock types, in-situ conditions, fracture density and distribution, mineralogy, etc.)

d2. hydrologic data (boundary conditions, infiltration, hydraulic conductivities, porosities, distribution of hydraulic heads, etc.)

d3. Thermomechanical properties of rock types

d4. geochemical data ( $K_d$  and/or  $R_d$  for various rock types and environments, mineralogy of units, rock types, water chemistry, etc.)

C. Determination of probability of occurrence for events, processes, and scenarios

1. are methods for determining probabilities being developed?

F A C S I M I L E T R A N S M I S S I O N

DATE 8/07/87

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Telecopy Number

427-4403

Verification Number

844-8368

This Message Consists of 3 Pages (excluding cover sheet).

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