

**U.S. DEPARTMENT OF ENERGY  
OFFICE OF CIVILIAN RADIOACTIVE WASTE MANAGEMENT**

**NUCLEAR WASTE TECHNICAL REVIEW BOARD  
PANEL ON STRUCTURAL GEOLOGY & GEOENGINEERING**

**SUBJECT: INTRODUCTORY REMARKS**

**PRESENTER: DR. JEANNE COOPER**

**PRESENTER'S TITLE  
AND ORGANIZATION: PHYSICAL SCIENTIST  
YUCCA MOUNTAIN SITE CHARACTERIZATION PROJECT  
LAS VEGAS, NEVADA**

**PRESENTER'S  
TELEPHONE NUMBER: (702) 794-7930**

**ALEXIS PARK HOTEL  
SEPTEMBER 14 - 16, 1992**

# Introductory Remarks

- **Primary focus of volcanism studies is evaluation of the potentially adverse condition of igneous activity**
- **As mandated by law, DOE must look for evidence that would disqualify the site early in the siting process**
- **DOE believes that the only future igneous event potentially capable BY ITSELF of disqualifying the site is an extrusive event through the repository**

# Introductory Remarks

(Continued)

- **Investigations focus on a probabilistic approach to assessment:**
  - Initial emphasis on disqualification from an ERUPTIVE release
  - Currently expanding studies to the effects of igneous activity on the waste isolation system
- **Volcanism studies are progressing satisfactory:**
  - Progress slowed by limited budget in FY 92
  - Investigations follow the three study plans and the strategy described in the Program Baseline
- **This meeting is a progress report of accomplishments since March 1991**
  - See a "snapshot" of activities currently in progress

**Nuclear Waste Technical Review Board  
Panel on Structural Geology and Geoengineering  
Meeting on Volcanism**

**Agenda**

**September 14 - 16, 1992  
Las Vegas, Nevada**

**Monday, September 14, 1992**

**Update on Geologic and Geophysical Studies**

- |             |   |                         |
|-------------|---|-------------------------|
| <b>1:30</b> | <b>Overview of Task Status</b>          | <b>B. Crowe, LANL</b>   |
| <b>2:00</b> | <b>Review of Age-Dating Activity</b>    | <b>D. DePaolo, UCB</b>  |
| <b>2:45</b> | <b>Paleomagnetism Studies</b>           | <b>J. Geissman, UNM</b> |
| <b>3:05</b> | <b>Cosmogenic Helium Dating Studies</b> | <b>J. Poths, LANL</b>   |
| <b>3:20</b> | <b>Break</b>                            |                         |

# Agenda

## Update on Geologic and Geophysical Studies

- |             |  |                         |
|-------------|--|-------------------------|
| <b>3:35</b> | <b>Soils and Geomorphic Studies: Part I</b>  | <b>L. McFadden, UNM</b> |
| <b>4:05</b> | <b>Soils and Geomorphic Studies: Part II</b> | <b>S. Wells, UCR</b>    |
| <b>4:35</b> | <b>Petrology Studies - Basalt Cycles</b>     | <b>F. Perry, UNM</b>    |
| <b>5:20</b> | <b>Adjourn</b>                               |                         |

# Agenda

**Tuesday, September 15, 1992**

## **Update on Geologic and Geophysical Studies**

**8:40 Physical Processes of Magmatism  
and Effects on Repository**

**G. Valentine, LANL**

**9:30 Progress in Field Studies of Recent  
Volcanism**

**E. Smith, UNLV**

## **Update on Probabilistic Hazard Studies**

**1:30 Status of Probability Studies**

**B. Crowe, LANL**

## **Perspectives and Round-Table Discussion**

**2:45 Volcanic Studies - Progress and  
Future Direction**

**B. Crowe, LANL**

# Agenda

**Wednesday, September 16, 1992**

**7:00 Field Trip**