

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

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

**SUBJECT: DOE PERSPECTIVE ON
SURFACE-BASED TEST
PRIORITIZATION TASK**

PRESENTER: DR. J. RUSSELL DYER

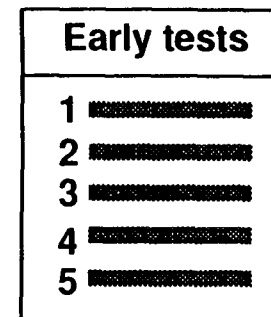
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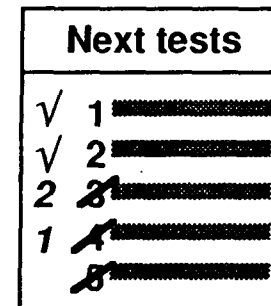
The task force is developing a unified framework for meeting three program goals

1. Develop an explicit decision analysis method to prioritize surface-based testing in the initial phase of site investigation



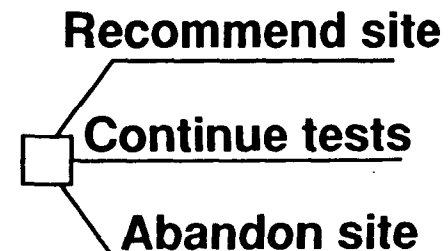
2. Recommend methods to re-prioritize testing at any point during site characterization

This includes a method for deciding when to stop testing



3. Recommend a draft method to assess site suitability at any point during site characterization

The method is consistent with Goals 1&2 and incorporates the prioritization methodology



Summary

- **The test-prioritization approach quantifies the current level of uncertainty and how well it can be resolved through testing**
- **The site-suitability approach can address broad criteria and quantitative performance measures such as**
 - **Cumulative curies released**
 - **Ground-water travel time**
 - **Preclosure radiological safety**
 - **Others**
- **These approaches can produce significant insights**
 - **The justification for tests**
 - **The sensitivity of decisions to technical and value judgments**
- **Together, the two approaches provide *defensible* methods for**
 - **Determining the value of tests**
 - **Deciding whether or not to continue testing**
 - **Deciding whether or not to recommend the site**