

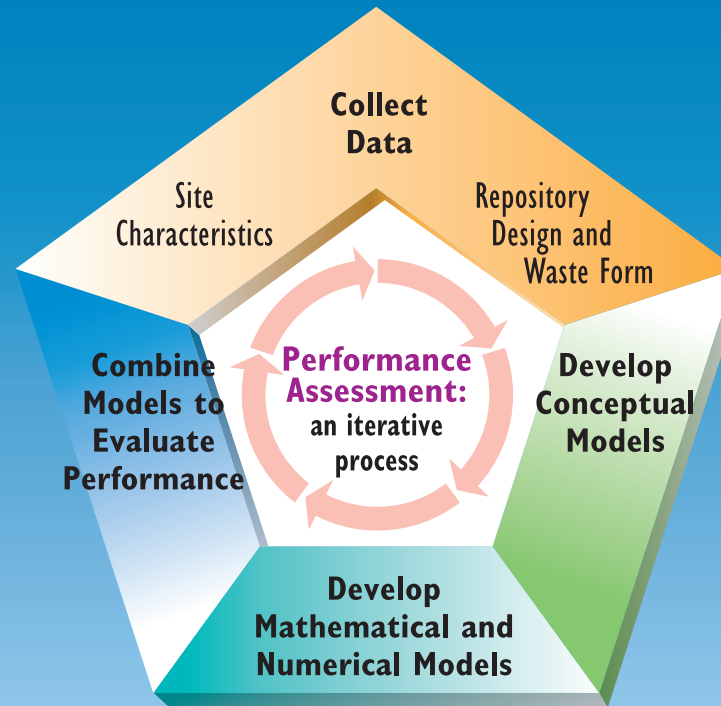
# Performance Assessment: Part of Evaluating the Safety of a Proposed Repository at Yucca Mountain, Nevada

## What is Performance Assessment?

- Systematic analysis of what could happen at a repository
- One of many NRC safety requirements

## Why use it?

- Complex system
- Systematic way to evaluate data
- Internationally accepted approach



## What is assessed?

- What can happen?
- How likely is it?
- What can result?

## How is it conducted?

- Collect data
- Develop scientific models
- Develop computer code
- Analyze results

## NRC would require DOE's Performance Assessment to

- Provide site and design data
- Describe barriers that isolate waste
- Evaluate features, events, and processes that affect safety
- Provide technical basis for models and parameters
- Account for variability and uncertainty
- Evaluate results from alternative models