

Yucca Mountain Licensing Project

(BAA Las Vegas Operations Office)



Beckman & Associates, Inc
Belle Vernon, Pennsylvania

Client / Contract Value

- **Sandia National Lab** (2006 – ongoing) \$ 4 million Time & Materials
- **Bechtel / SAIC** (2000 – ongoing) \$ 15 million Time & Materials
- **TRW** (1991 – 2000) \$ 4 million Time & Materials

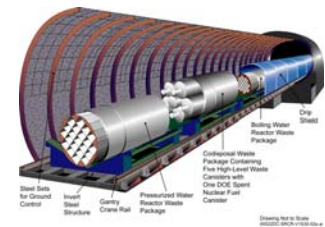


Scope of Work --- Obtain USNRC License for the Yucca Mountain Site

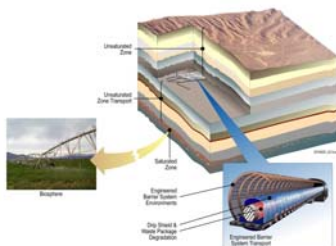
- **Provide engineering, licensing, scientific and IT Services**
- **Bechtel / SAIC --- focus on Pre-Closure Activities**
- **Sandia National Lab --- focus on Post-Closure Activities**

BAA Services

- **Project Management & Strategic Planning**
 - Management Matrix Integration with M&O (5 BAA Senior Managers in positions of leadership)
 - BAA Senior Managers develop/manage \$100 million budgets
 - BAA President leads both contract efforts
- **Software Management & Engineering**
 - Use of applicable engineering and scientific modeling software codes
 - Identification of software life-cycle methodologies including development of requirements, design specifications and validation test cases
 - Software development, qualification, verification, and validation
 - Software and hardware procurement
 - Systems implementation and maintenance
 - End of life-cycle disposition
- **Nuclear Criticality Analysis**
 - Manage criticality analyses
 - Engineering and software development
 - Criticality strategy for SOP and Accident Conditions
 - Moderator exclusion and passive-engineered controls
 - Administrative controls (as-needed)
- **Seismic and Mechanical Analysis of Repository Components**
 - BAA Senior Manager leads effort
 - Finite element and rock mechanics analysis
 - Engineering analyses/studies for failure modes of engineered components
 - Damage abstractions for seismic hazards (vibratory ground motion, fault displacement, rock fall)



Waste Types for Disposal



Engineered Barrier System

- **Scientific Model Development**
 - Principal Investigators and Independent Reviewers
 - Model planning, requirements development, implementation, testing, analysis, and validation
 - Monitor field/lab testing
 - Integration of results into model development