



Environmental Management & Planning

Client

United States Department of Energy (DOE)

Location

Golden, Colorado, USA

The major projects at Rocky Flats included the decontamination and demolition (D&D) of five large former plutonium production complexes; the D&D of 165 radioactive or chemically contaminated buildings, and 555 non-nuclear facilities; characterization and environmental restoration of soils and substructures contaminated with LLW, hazardous, and low-level mixed waste; and waste management.

Rocky Flats Closure

Project Description

On October 13, 2005, Kaiser-Hill Company LLC, a joint venture of CH2M HILL and Kaiser Engineers, announced completion of the Rocky Flats Closure Project, a 10-year project to clean up one of the most contaminated sites in the U. S. Department of Energy's nuclear weapons complex. The 6,200-acre site was the location of plutonium and uranium "trigger" production for the U.S. nuclear weapons arsenal from 1952 until 1989. More than 40 years of production left a legacy of contaminated buildings, soil and groundwater. A 1994 DOE study of plutonium vulnerabilities ranked two Rocky Flats buildings as the number one and number two most dangerous in the DOE complex.

Closure saves decades and billions of dollars

When Kaiser-Hill assumed management of Rocky Flats in 1995, DOE estimated it would take 65 years and \$30 billion to clean up and close Rocky Flats. Kaiser-Hill accelerated DOE's original cleanup/closure baseline, agreeing to complete the project by 2010 for approximately \$9B. The original scope of work included:

- Nuclear operations (processing radioactive materials to place them in a safe configuration)
- Environmental restoration
- Facility deactivation, decontamination and demolition
- Solid and liquid radioactive, hazardous and sanitary waste management
- Property and records management and disposition

K-H dispositioned more than 21 tons of special nuclear materials, cleaned up and demolished more than 800 facilities, and disposed of more than 550,000 cubic meters of radioactive waste. The project involved complex operations performed in a high-hazard environment within strict safety and environmental compliance parameters.

New contracting models

Kaiser-Hill operated under two innovative DOE contracting models at Rocky Flats. The first, awarded in 1995, was the first performance-based contract in DOE. It paid the contractor only for specific units of verifiable work. The model was in sharp contrast to the Maintenance & Operations (M&O) contracts of the day where contractor's fee was based on subjective performance criteria.

The second and most innovative was the closure contract that DOE and Kaiser-Hill signed in 2000. It authorized the entire scope of work to clean up and close the site October 2005 at a target cost of \$3.94 billion. Obtaining this closure contract was a direct result of Kaiser-Hill's prior performance, safety record, and development of an aggressive yet credible plan to close the site decades earlier and for billions of dollars less.