

Rocky Flats Model Contract

Project Overview—Rocky Flats Environmental Technology Site (RFETS)

- ▶ NPL site, 15 miles NW of Denver
- ▶ From 1940's – 1989, produced components for nuclear weapons
- ▶ Largest DOE site slated for closure
 - 700 structures
 - 385-acre industrial area surrounded by nearly 6,000 acres of controlled open space
 - Stored the largest inventory of plutonium not in final weapons form
 - Five of the top ten high risk plutonium facilities in the country were located on site



Project Overview

- ▶ Kaiser–Hill was jointly–owned by CH2M HILL and Kaiser Group Holdings formed specifically for the Rocky Flats Cleanup Project
- ▶ The 1995 Contract was a performance–based integrating management contract—the framework of which was formed by:
 - Vice President Gore’s “reinventing” government
 - Department of Energy’s “contract reform” initiatives
 - Department of Defense contracts for services
- ▶ Early in the original contract Kaiser–Hill developed the Accelerated Site Action Plan (ASAP) designed to significantly reduce time and cost of the cleanup.
 - Applying appropriate Project Management techniques from government and commercial business sectors

Project Overview (con't)

- ▶ In 1994, cleanup and closure was estimated to cost >\$36 billion and take >60 years
- ▶ Kaiser-Hill's cleanup cost estimate was ~\$7 billion with closure by 2006
- ▶ In 2000, Kaiser-Hill and DOE entered into a performance-based cost reimbursable incentive fee contract with target cost and schedule incentive/penalty for the safe closure of Rocky Flats by December 2006
 - This was a single-source negotiation based on Kaiser-Hill's performance record and willingness to share risk with DOE



M&O, M&I, Closure Contract Comparison

M&O	M&I	Closure
• Contractor Indemnified • Integrated Accounting System • Letter of Credit • DEAR-Like Contract • CPAF (Fixed and Award Fee) • Single Contractor • Operations WBS • Single Employer – Union • M&O Standards, Cost Principles, Fee Guidelines, Indemnifications • No Insurance Required • Federal Norm • Standard Insurance Program	• Increased Risk & Accountability • Formal Invoice Under FAR • No Letter of Credit • FAR-like Contract • CPIF (Performance Measures) • Multiple Subcontractors • Projectized WBS • Leased Labor – Union • Commercial Standards Greater • Insurance Required • Contract Reform • “Run it Like A Business”	• Closure Contract (to “Physical Completion) • Cost Reimbursable – Target Incentive for Cost and Schedule (No Performance Measures) • Cost Savings Share (70% DOE, 30% contractor) • Fee Deduction for Specific Events/Trends of ES&H Environmental, and Unsatisfactory Performance • DOE Transaction Level w/Contractor greatly reduced • Contractor Risk Broader but bound by fee minimum • DOE Only Responsible for GFS/I • Fixed funding level for duration of contract • Project Management techniques used on all work • “Project-Focused” Subcontracts w/Contractor Project Managers • “Physical Completion” Defined • Formal DOE Commitments to Streamline • Very Specific Definitions through SOW and Baseline • No Base Fee • Quarterly Conditional Payments of Project Target Fee • No letter of credit • Insurance Required

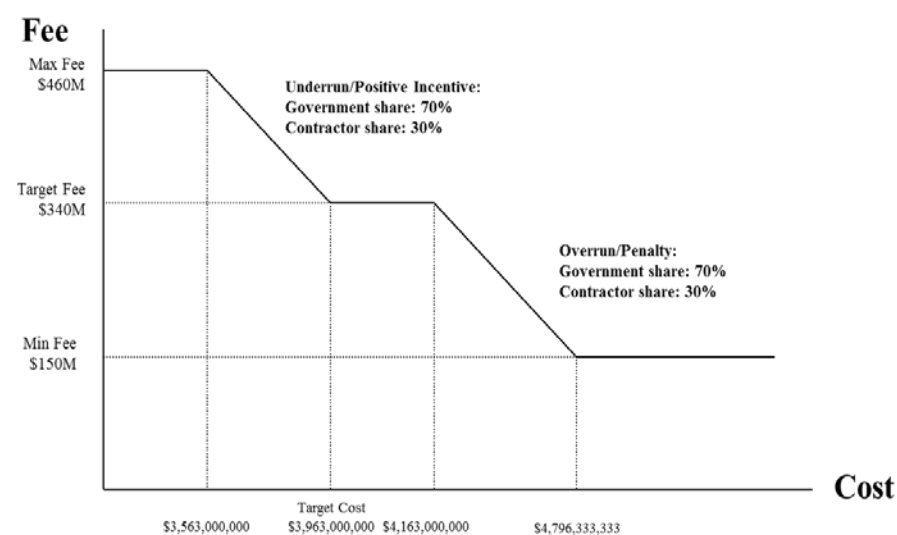
Closure Contract Features

- ▶ Predetermined criteria for fee reduction in the event of environmental, safety, and safeguards/security performance deficiencies
- ▶ “Equity partnership” between DOE and contractor to reduce costs
- ▶ All contractor fee conditional until project “physical completion”
- ▶ Baseline scope-of-work with change control system
- ▶ Cost and Schedule reward and penalty

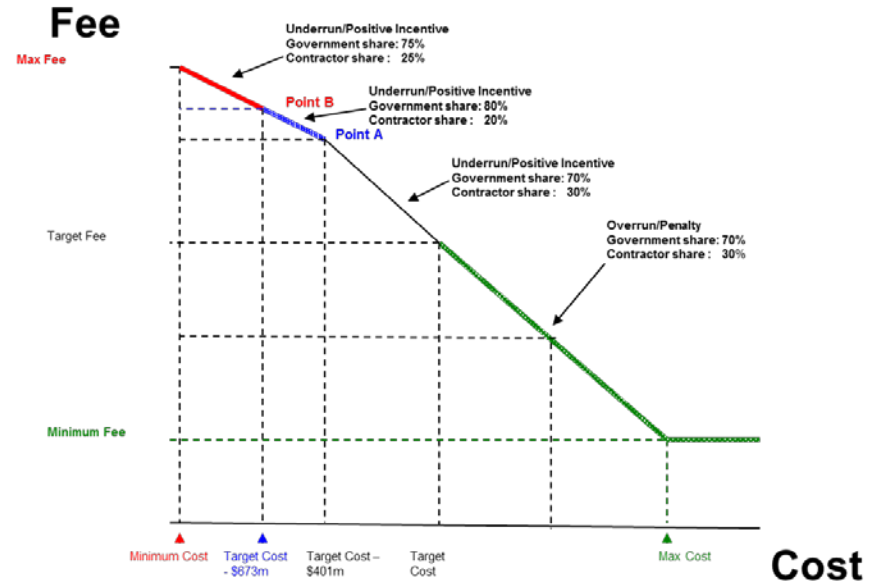
Closure Contract Features

- ▶ Risks for many site latent conditions shifted to contractor (waste volumes, differing site conditions)
- ▶ DOE accountability for Government Furnished Services and Items
- ▶ Contractor controls work sequencing
- ▶ Significant goals for subcontracting work to small and disadvantaged businesses
- ▶ Partnership commitment to reduce non-value added transactions and requirements
- ▶ Contract completion defined

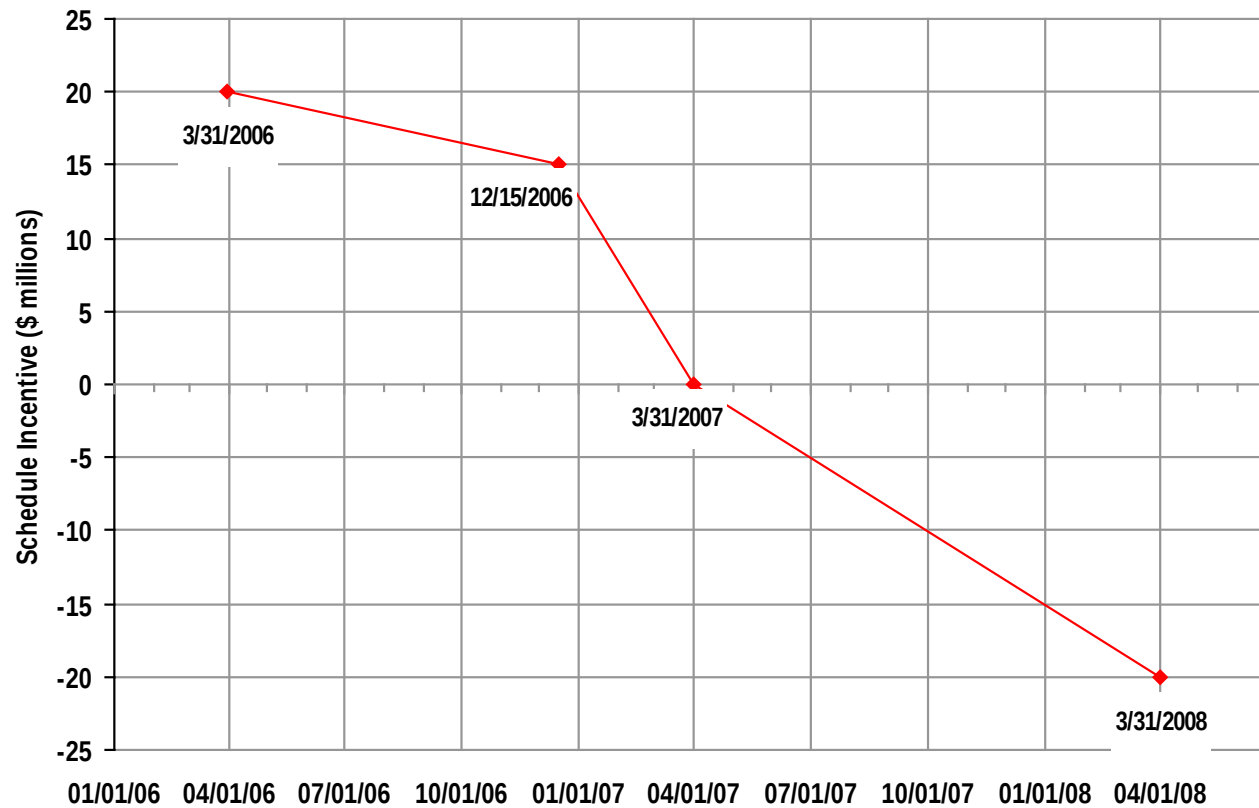
Original and Final Cost Incentive



This graph is not to scale!



Schedule Incentive

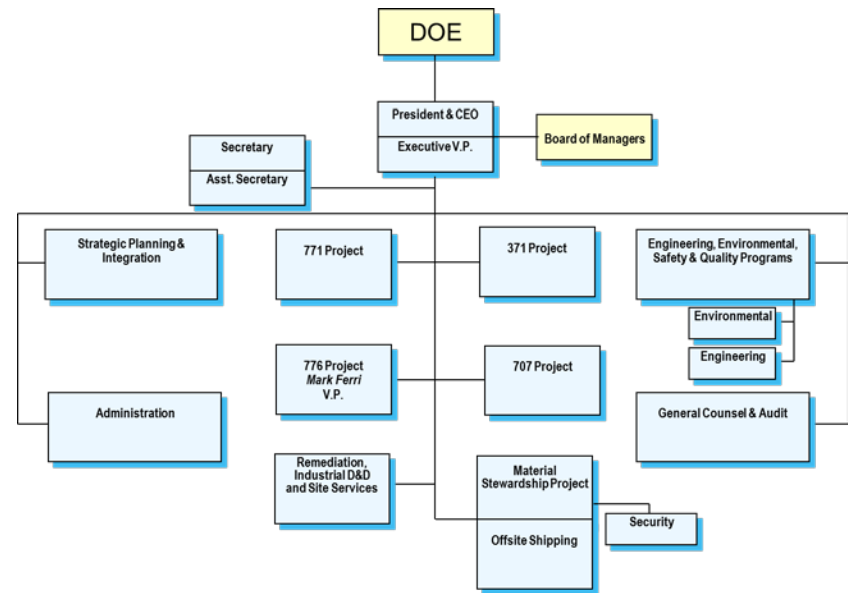


Incentivized Contract Model Helps Motivate Creativity & Innovation

- ▶ In 1995 the workforce was demoralized, not working, didn't have a mission
- ▶ Kaiser-Hill recognized the need to put this great workforce back to work and re-instill their pride – we:
 - Increased communication
 - Included them in our plans for closure
 - Solicited their input on work planning, hazard analysis and safety
 - Recognized their performance
- ▶ All employees were incentivized for safe accelerated closure of the site
- ▶ Employee creativity and innovation resulted in the project's performance – Instacot, Glovebox removal, etc.

Project Management Techniques Implemented

- ▶ Contract structure allowed contractor to sequence work
- ▶ Partnered with DOE
- ▶ Brought commercial practices to DOE projects
- ▶ Projectized **ALL** activities
- ▶ Assigned Project Manager to each major scope of work
- ▶ Focused on safety first, then cost and schedule performance
 - Union safety rep in every project to help workforce be safe
 - Provided workforce with every tool they needed



Project Management Techniques Implemented

- ▶ Conducted monthly internal reviews with 6-week look-a-head on planned work
 - Resource requirements (staff, materials, equipment)
 - Risks
 - Material and equipment needs
 - Work sequencing
- ▶ President controlled management reserve
- ▶ Didn't use unproven technologies
- ▶ Prepared a “work plan” with Dec. 05 completion date and measured performance against it
 - In late fiscal 2002 prepared a “2 to go” plan to further accelerate completion
 - Reported on all “plans” to DOE

Project Management Techniques Implemented

- ▶ Manage the “Money” Critical Path
 - Understanding the safety envelop of each building and reducing safety envelop reduced overall cost and schedule of D&D
- ▶ Innovated throughout the life-cycle
 - Created a safe site (traffic patterns, moved non-essential personnel offsite – including DOE)
 - Shipped waste via rail versus truck

Project Management Techniques Implemented

- ▶ Robust Risk Management Process – Dirty Dozen
- ▶ Schedule contingency – (used Oracle Risk) used to determine appropriate level of schedule contingency to project completion dates
- ▶ Divided the site into closure areas with specific criteria agreed upon with DOE so once the area was complete it was walked down and closed out
- ▶ Implemented comprehensive Workforce Transition Program

Project Management Techniques Implemented

► Project Control

- Implemented DOE Order 413
- Strong configuration control of scope
- Strong change control process
- EVMS Certification
- Developed WBS dictionary to the work package level improved clarity on scope
- Fully integrated cost and schedule down to the work package level enhanced management control and use of resources (staff, waste containers, etc.)
- Burn rate analysis

Keys to Success

- ▶ Clear and common vision with customer
- ▶ Safety culture and performance
- ▶ Transformation of the workforce
- ▶ Creativity and innovation
- ▶ All major subcontractor incentives linked to closure
- ▶ Partnering with the workforce and sharing successes with the workforce
- ▶ Successful transition program for workforce when the work is finished

Benefits of Cost Plus Incentive Fee

- ▶ Shared risk and reward for both government and the contractor
- ▶ Commercial model – lower cost higher reward
- ▶ Contractor motivated to seek safe accelerated solutions
- ▶ Provided measure of predictability for the contractor and DOE

Results

- ▶ Final Cost \$6.7B versus original plan of \$37B
- ▶ Completion Date – October 2005 versus 2060
- ▶ Safety Performance (incl. all subcontractors)
 - TRCR: > 1.0
 - Lost Workday Case Rate: > 0.10
- ▶ Workforce
 - Received substantial incentive payments
 - Workforce Transition Program helped place 50% of the workforce with 27% retiring – balance didn't respond to inquiries
 - Significant number continued performing using lessons-learned at Rocky Flats