Performance Based Contracting

CH2M HILL Case Studies

Federal Remediation Technologies Roundtable
May 25, 2005
Three PBC Models

• Fixed Price with Insurance
  – USN Charleston Naval Complex

• BRAC Early Transfer – Fixed Price with Insurance
  – Mare Island Naval Shipyard

• PBC without Insurance
  – DOE Rocky Flats

• Overall Lessons Learned
Charleston Naval Complex
First DOD Insured Environmental Cleanup

• > 2000 acres of under-utilized infrastructure
  – offices, warehouses and industrial facilities
  – railroads, piers, highway access & utilities
  – family housing & dormitories

• > 15,000 jobs lost due to base closure
CNC Stakeholders’ Priorities

• For City:
  – Accelerate redevelopment
  – Increase job base
  – Increase tax revenue

• For Navy:
  – Reduce and cap costs
  – Divest property as quickly as possible
CNC Fixed Price Insured Environmental Contract

• $28.8 MM vs. a $35 MM Government Estimate (18% Savings)

• CH2M HILL responsibility
  – Investigations, remedial planning, and remedial action to close RCRA & UST sites
  – Regulatory approvals & release of RCRA permit
  – Property transfer documentation (FOST/FOSL)
  – O&M of remedial systems for 20 years
  – Liability for newly discovered sites
  – No differing site conditions clause
CNC Results

- Navy’s environmental liabilities are being executed within budget
  - 88 of 155 BRAC sites are over budget by an average of 45%
- Navy costs are capped and their liabilities covered through with a 20 Year “Environmental Liability and Stop Loss Insurance Policy”
- Property is cleaned and is being transferred
  - Early transfer agreement (FOSET) signed by SC Governor
  - Almost all remedies have been implemented
  - A few remedies have been submitted to the regulators and are waiting on approval
  - Only one site remains where remedy has yet to be submitted
CNC Contract and Policy Exclusions

- Unexploded ordnance
- Wastes associated with the nuclear propulsion program
- Biological and chemical warfare agents
- Sediments below mean low tide
- Changes to the reuse plan
CNC Lessons Learned

• Requires **totally integrated** design/build remediation and insurance team

• Learning curve for first time buyers
  – Requires understanding of insurance issues
  – Performance standard is achievement of regulatory endpoints
  – Owner enforces performance standards, *not* the process

• Early integration of regulators into the process

• Bidder discussions with regulators are very important
CNC Lessons Learned (continued)

- Best value source selection was key to success
  - Details of insurance/indemnification
  - History of success with regulatory relations
  - Proposed remedies and price
- Partnering relationship between client, contractor & regulators is a key to execution
- Based on CNC experience, we use a “Tiger Team” approach to:
  - Identify PBC projects
  - Identify critical uncertainties and close gaps
Mare Island Naval Shipyards was closed in 1996

- Lennar selected as Master Developer for Residential, Commercial/Industrial Use
- Navy site closure process was delaying development

Goals:
- Lennar & City of Vallejo:
  - Expedite Development
  - “No” Environmental Risks
  - Enhance Land Value
- Navy:
  - *Divest Property and Cap Liabilities within Budget*
Mare Island “Early Transfer”

- Land and environmental responsibility transferred to Lennar through City of Vallejo
- CH2M HILL accepted responsibility for closure of >550 Sites
- Navy, City, Lennar and CH2M HILL negotiated agreements to document the revised responsibilities
  - Environmental Services Cooperative Agreement (ESCA)
  - DTSC Consent Agreement
  - Regional Water Quality Control Board Order
  - EPA Consent Agreement on PCBs
  - Integrate Remediation, Infrastructure and Development
Mare Island Results

• Results
  – Navy transferred environmental liabilities within $80M budget
  – Land transfer and development accelerated by 5 years
  – Navy costs capped with stop loss insurance equal to 100% of the clean up cost
  – Liability and unknown contamination backed with environmental liability insurance
  – Homes are being sold within 3 years of transfer
Mare Island Lessons Learned

• Early Transfer Requires:
  – Site suitable for economic development or natural resource conservation
  – Champions within Navy, LRA, and regulators are needed for Early Transfer Approach
  – Available Funding for ESCA grant

• Insurance needed for financial security to obtain Governor’s approval

• Unknowns: on 150 year old industrial base, unknowns exceeded expectations

• Regulatory involvement: order of magnitude increase in volume (velocity) of documents
  – AB 1700 shielded DTSC from hiring freeze
Rocky Flats Environmental Technology Site

- Site Contains
  - Over 14 tons of plutonium
  - 50,000 containers of radioactive wastes
  - 170 areas with soil contamination
  - Groundwater and surface water contamination

- DOE Goals
  - Exemplary Safety Program
  - Accelerate Closure
  - Reduce Costs

“No contractor, government agency or military unit has ever completed the total and safe deconstruction of a nuclear facility this size”
Rocky Flats Overview

• Similarities to BRAC Sites:
  – Focus on expediting land transfer and minimizing costs
  – Uncertainties and scope beyond GFPC

• Scope Includes:
  – Operation of the site (Caretaker)
  – Environmental remediation and site closure
  – Nuclear material handling and waste disposal
  – Property transfer
  – Community and regulatory affairs

• Results
  – Reduced costs by over 10%
  – Cleanup is one year ahead of a seven year schedule
  – Reduced OSHA case rate by 26%
  – DOE using this model at three additional sites
Cost Incentive
CH2M HILL and DOE Share Savings or Overruns on a 30/70 Split

The LESS DOE spends, the more incentive fee CH2M HILL earns
The earlier the project is completed, the more incentive fee CH2M HILL earns.
Rocky Flats Lessons Learned

- TCIF is a major departure from traditional “cost plus”
- Aligns client and contractor goals to expedite cleanup and land transfer
- Partnered solutions - more client control than on a GFPC
- Allows PBC for large complex sites where higher degree of uncertainty would defer GFPC approach
- Avoids cost of insurance
- DOE is using this contract approach at three additional sites
Overall PBC Lessons Learned

• PBC Revised Roles: Environmental consultant is now in role of contractor with financial stake in outcomes
  – Concern: Contractor cost cutting focus will compromise quality
  – Solution: Make contractor’s success working with regulators a key factor in source selection criteria

• Regulatory staffing to respond to accelerated pace of decision documents
  – EPA support of SC DEHC
  – California AB 1700

• PBC’s are more than GFPC
  – Firm Fixed Price (FFP) w or w/o insurance
  – Privatization or Early Transfer
  – Incentive Fee (TCIF)
QUESTIONS??