



### Performance-Based Contracting

for

# **Environmental Cleanup**

23 May 2005





#### Introduction

- Performance-Based Contracting (PBC) is a federal government-wide initiative
- Army began using PBC for environmental cleanup projects in 1999
  - Use of Guaranteed Fixed Price Remediation (GFPR) contracts
  - Pilots at both BRAC and active installations
- PBC is an initiative of both the DoD and Army Business Initiative Councils (BICs)
  - US Army Environmental Center is implementing the Army's PBC initiative





#### **PBC** for Environmental Cleanup

- Goal is for Contractor to achieve one or more of the following performance objectives for each site identified in the PWS:
  - Remedy in Place with successful 5-year review
  - Response Complete
  - Perform required remedial action operations and long-term management
  - Demonstrate that remedy is operating and performing successfully (OPS)
  - Implementation of ramp down and/or exit strategy





#### **Overview of Army Initiative**

- General characteristics of performance-based contracts:
  - Contract for "What," not "How"
  - Clearly define objectives, milestones, and standards
  - Use incentives or environmental insurance to enhance performance
    - Incentives are inherent in PBCs
  - Promote flexibility in exchange for accountability
  - Use fixed price contracts

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#### **USAEC** and Performance-Based Contracting

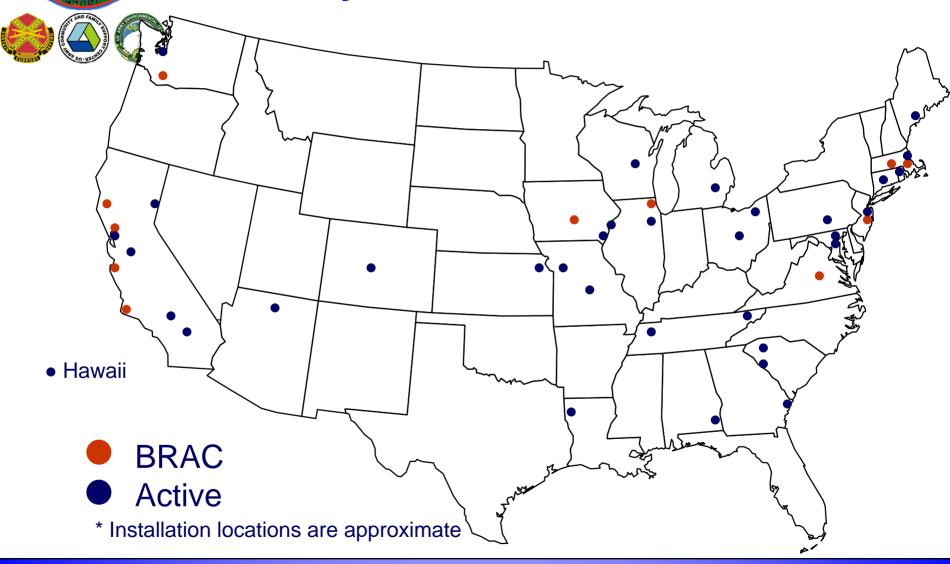
#### **Metrics**

- Installation Restoration Program PBC goals:
  - FY03: 3-5% of total program achieved 9% (\$37M)
  - FY04: 30% of total program achieved 36% (\$141M)
  - FY05: 50% of total program → GOAL ~\$200M
  - FY06: 60% of total program
  - FY07+: 70% of total program
- BRAC (either PBC or Environmental Services Cooperative Agreement):
  - FY06: 60% of remaining sites
  - FY07+: 70% of remaining sites
- FUDS:
  - FY06: 15% of total program
  - FY07: 25% of total program
  - FY10+: 50 % of total program





#### **Army PBC Awards to Date\***





#### **PBC** Accomplishments







	Installations	Sites	CTC (\$M)	IGE (\$M)	Contract Award (\$M)	CTC - Contract (\$M)	IGE - Contract (\$M)
FY01-02	Fort Gordon, Fort Leavenworth	39	42.200	42.200	39.167	3.033	3.033
FY03	Fort Dix, Fort Jackson, Lake City AAP, Ravenna AAP, Sierra Army AD	70	123.680	117.300	98.795	24.885	18.505
FY04	Aberdeen PG - Graces Quarters, Aberdeen PG - Other Aberdeen Areas, Fort Detrick, Fort Irwin, Fort Rucker, Holston AAP, Hunter AAF, Iowa AAP, Louisiana AAP, Milan AAP, Reserves, Riverbank AAP, Rock Island, Fort Leonard Wood	147	269.351	207.616	165.903	103.448	41.713
FY05	Aberdeen PG – Westwood, Camp Navajo, Hawaii – Tripler/Schofield, Joliet AAP, Ravenna AAP	70	35.44	37.39	27.54	7.9	7.5
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Cumulative		326	470.67	404.51	318.22	152.45	83.94
Cost Avoidance on all PBCs (based on CTC)			32.4%				
Cost Avoidance on all PBCs (based on IGE)				20.8%			



#### **Innovative Technologies**

Site	Innovative Technology	Pilot or Full-Scale
Lake City Army Ammunition Plant	<ul> <li>Enhanced Reductive Dechlorination using molasses and cheese whey.</li> <li>Nanoscale zero valent iron for treatment of NAPL in source area.</li> <li>In-situ thermal treatment technology for chlorinated solvent in source area.</li> </ul>	<ul> <li>Pilot study ongoing (1) and planned (1).</li> <li>Bench scale study being conducted.</li> <li>Being considered for two OUs.</li> </ul>
Fort Leavenworth	<ul> <li>Enhanced Reductive Dechlorination using molasses and cheese whey.</li> <li>Vegetative/phytocover for landfills.</li> </ul>	<ul><li>Pilot study (2).</li><li>Under consideration.</li></ul>
Fort Gordon	Enhanced Reductive Dechlorination using molasses.	Full scale implementation.
Aberdeen Proving Ground	In-Situ abiotic reductive dechlorination using titanium citrate and vitamin B12.	Pilot study.
Milan Army Ammunition Plant	<ul> <li>Enhanced In-Situ biodegradation using molasses for explosives in groundwater.</li> <li>Composting for explosives (TNT) in soils.</li> </ul>	Pilot study.     Full-scale implementation.
Fort Jackson	Enhanced Reductive Dechlorination using molasses.     Vegetative/phytocovers for landfills	Full-scale implementation.     Full-scale implementation.
Sierra Army Depot	<ul> <li>Chemical reduction of chlorinated solvents in groundwater by the injection of nanoscale zero valent iron.</li> <li>Enhanced Reductive Dechlorination using molasses to treat CVOCs.</li> <li>Enhanced in-situ biodegradation using molasses to treat explosives (TNT).</li> <li>Building CAMU to treat lead-contaminated soil on-site.</li> </ul>	<ul> <li>Pilot study.</li> <li>Full-scale implementation.</li> <li>Full-scale implementation.</li> <li>Full-scale implementation.</li> </ul>



#### Resources

## Performance-Based Contracting web page

http://aec.army.mil/usaec/cleanup/pbc00.html

