

River Corridor Closure Project

Lessons Learned



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Project Snapshot

Environmental Management Operations Lessons Learned

- **Project Scope:** Responsible for cleaning up ~210 mi² of the Hanford Site located along the Columbia River Corridor including remediation of 761 contaminated waste sites, demolition of 379 facilities
- **Life-Cycle Cost:** \$ 4.233 B (IPABS since beginning of FY1997)
- **Key Dates:**
 - Start of project:October 1997 (IPABS PBS RL-0041)
 - Major milestones:
 - CD-0 Approval 03/06/2002
 - CD-1 Approval 05/08/2003
 - River Corridor Closure Contract (RCCC) award 03/23/2005
 - RCCC Transition Completed08/26/2005
 - RCCC Integrated Project Baseline (IPB) Provisional Approval04/19/2006
 - Planned End of Project:September 30, 2015
- **Performance (Project-to-Date* as of September 30, 2006):**
 - Schedule: Ahead, SPI = 1.10 (per IPABS PEM/PARS), RCCC SPI=1.217
 - Cost: Under, CPI = 1.16 (per IPABS PEM/PARS), RCCC CPI=1.234
 - Safety: DART = 0; TRC = 0 ; no fatalities or crippling injuries
- **Status:** Preparing for CD-2/3; anticipate by June 2007

* Project-to-Date in IPABS is from October 1, 2003 or beginning of Fiscal Year 2004



Environmental Management Operations Lessons Learned

- **Background**
 - Chemically and radioactively contaminated facilities. Many facilities / systems shutdown or abandoned for several years
 - 60+ year old site
 - Some data/drawings not updated (pipelines, electrical lines, etc...)
- **Industrial safety lessons learned**
 - Anticipate the hazards; understand the potential changing risks
 - Emphasize quick, practical solutions w/ worker buy-in (e.g. burial ground sorting)
- **Radiological/nuclear safety lessons learned**
 - When practical, facilities need to have source term removed to allow operation as a less than Cat. 3 facility as quickly as possible
- **The smartest things we did in terms of safety were...**
 - Facilities should not be decontaminated prior to demolition; asbestos and other hazardous materials need to be removed, and the remainder of the facility fixed with compounds such as SoilSement™ for demolition
 - Focus on safety as total project requirement
 - Engage workforce at all levels
- **Things we would do better or are changing in terms of safety are ...**
 - Recognized difficulty w/ consolidation of work control process with transitioning from multiple to one contractor



Acquisition Strategy

Environmental Management Operations Lessons Learned

- **Background**
 - Willing to pay for performance, leverage incentives
- **Pre-solicitation lessons learned**
 - Align contract approach with mission
 - Provide adequate and skilled staff for SEB and have some with prior SEB experience
 - Conduct Vendor meetings to gain industry insight prior to issuance of RFP
- **Solicitation lessons learned**
 - Determine scope of the solicitation and get approval from HQ (once determined, do not change)
 - Provide detailed site tours and as much documentation on the scope as possible
 - Plan for a protest and allow adequate resources and time in schedule
- **Transition lessons learned**
 - All facilities should be transferred at the same time; lagging facilities cause turnover end state arguments between the 2 contractors and DOE
 - Allow for a 90 day transition, 60 day was not adequate
 - Update all contract tables (RCCC Table B-1, J-1, and C-1) during transition
 - Control the number of Material Differences (minimize the time between RFP expectation of contractor responsibility transfer to the actual time)



Acquisition Strategy

Environmental Management Operations Lessons Learned

- **The smartest things we did during the initial contracting phase were ...**
 - Developed Table J-1 which identified all contract scope by activity
 - Document all aspects of the proposal review including assumptions, decisions, etc...
 - Provide flexibility within the contract to shift more risk and responsibility to the contractor with the appropriate governmental oversight
- **Things that we would do differently during the acquisition phase are ...**
 - Allow adequate time to do a bottoms-up Independent Government Estimate
 - Allow for a 90 day proposal review period
 - Prevent contractual conflicts (e.g. funding allocation vs. incentive Expectations)



Contract Management

Environmental Management Operations Lessons Learned

- **Background**
 - Shift from multiple to single CPIF contract
 - Rigorous baseline development and validation
 - CPIF closure contract with 80/20 share ratio (FAR-based)
- **Monitoring/ensuring contract compliance lessons learned**
 - “Managing the contract, not the Contractor” is difficult, but essential
 - Use standard, objective project management tools linked to baseline (i.e. EVMS)
 - Need good Performance Measures with a preference to objective based
- **Contractor fee lessons learned**
 - Contractors absolutely respond to incentives; need good measures (i.e. objective)
 - Direct fee sharing with workers appears to provide incentive and engagement
- **The smartest thing we have done so far in contract management was ...**
 - Developed/included a contractually required funding profile
- **Things that we could do better in contract management are ...**
 - Fully develop Request for Equitable Adjustment process at the start of the contract



Contract Management

Environmental Management Operations Lessons Learned

- **Things that we could do better in contract management are ... (cont.)**
 - Fully understand issues related to having the most junior craft personnel working on a site that will be completed prior to the rest of the Hanford work (no hope of staying in town) as well as failure to understand the effect of other Hanford Site contractor's bump and roll on the morale and work style of existing, more junior personnel attached to the River Corridor Project
 - Understand regulatory requirements for closure (e.g. RCRA, groundwater, etc.)
 - Have impact awareness at all levels on the 95% funding level vs. 100% funding level

Regulatory Compliance

Environmental Management Operations Lessons Learned

- **Background**
 - Regulations push for paper/process over cleanup
 - State and EPA regulatory competition/duplication
 - Tri-Party Agreement signed
- **State regulations lessons learned**
 - Identification of jurisdictional boundaries
- **Federal regulations lessons learned**
 - Identification of jurisdictional boundaries
- **The smartest things we did to meet regulatory requirements were ...**
 - TBD
- **Things that we could do better in regulatory compliance are ...**
 - Over communicate and involve in the process
 - In the works is development and approval of Final RODs



Funding & Resources

Environmental Management Operations Lessons Learned

- **Background**
 - Uncertain annual funding with “fixed” project (scope and schedule)
 - Fixed/level annual funding to fit project funding curve
- **Funding & resources lessons learned**
 - Budget, regulatory agreement, contract, project baseline must be aligned
 - Understand fixed funding profile impact on a multi-project (i.e. PBS) site
 - Provide funding profile to bidders
- **The smartest things we did in obtaining funding & resources were ...**
 - Include annual funding profile in the contract
- **Things that we could do better in terms of funding & resources are:**
 - IF possible it would have been a plus if the funding for the project was met at 100% with ties to CPI and SPI



Communications

Environmental Management Operations Lessons Learned

- **Background**
 - Communications with all stakeholders on all projects
 - Stakeholders includes regulators, contractors, and others
- **Workplace communication lessons learned**
 - Communications on the work activities and issues identified by stakeholders
- **Media communication lessons learned**
 - Continuous interface with local media
- **External stakeholder communication lessons learned**
 - Anomalies no matter how small should be communicated before a small item turns into an elephant
- **The smartest things we did in communications were ...**
 - Started to involve workers and regulators in open dialogue for resolution on issues
- **Things that we would do better in communications are ...**
 - Should have conducted a training session on the approach to the new contract and the differences from the previous
 - Expectations of the new contract shared with all stakeholders

