

Solving Cleanup Challenges Through Risk Reduction



**Waste Management
2007**



U.S. DEPARTMENT OF ENERGY



**ENVIRONMENTAL
MANAGEMENT
STATUS**



EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

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Solving Cleanup Challenges Through Risk Reduction

EM Program Priorities

- Continue to focus on safe, cost-effective prioritized risk reduction and cleanup
- Implement a robust project management system and acquisition strategies that promote performance and efficiency
- Strive for an organization with industry partners that recognizes professional competence and yields high performance



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Rocky Flats Site



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Fernald Closure Project

Fernald Closure Project

1987



Fernald Closure Project

2006



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Columbus Closure Project



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Ashtabula Closure Project



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Miamisburg Closure Project



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Oak Ridge Reservation -- Melton Valley



Completed September 30, 2006



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Savannah River T-Area



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Paducah Outside Material Storage Areas



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First Remote-Handled Transuranic Waste Shipment to Waste Isolation Pilot Plant



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K East Sludge Containerization



East Bay

After



West Bay Floor



Center Bay



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Idaho Liquid Radioactive Waste Tanks



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FY 2007 - 2008 Cleanup Completions

FY 2007

- Lawrence Berkeley National Laboratory (California)

FY 2008

- Miamisburg Environmental Management Project (Ohio) ^{a/}
- Inhalation Toxicology Laboratory (New Mexico)
- Pantex Plant (Texas)
- Lawrence Livermore National Laboratory – Site 300 (California)

a/ Physical completion in 2007


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Project Management Focus

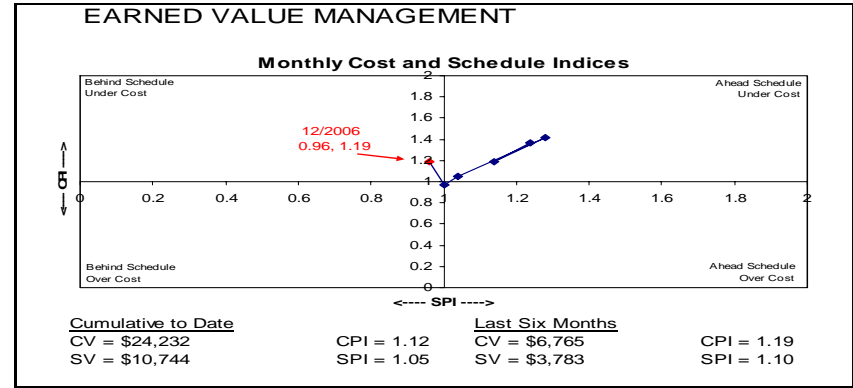
Site: Savannah River Site **Assessment**


PBS #: SR-0011C
Title: NM Stabilization and Disposition-2035

TPC Near-Term
Baseline = **\$253.3M (Deputy Secretary Report through 2006)**
LCC = \$1,759M (2005 Gen-2 Report + BCPs)
EAC = \$2,166M (2006 Project Execution Plan [PEP])

Validated TPC (LCC): Yes _____ No _____
FPD: Patrick McGuire, 803-208-3927
Contractor: Washington Savannah River Company LLC (WSRC)
Status:
CD-0 _____ CD-1 _____ CD-2 _____ CD-3 _____ CD-4 _____

Project Narrative Description:
Safe receipt, surveillance, storage, and disposition of special nuclear materials in K Area and FAMS. Includes construction of the Plutonium Disposition Project.



PROJECT RISK and RISK MITIGATION













Risk:
K-Area Fire Protection upgrades delay life safety improvements (Event ID# 041)

Planned Action:
Remaining KAMS upgrades anticipated to begin in FY 2009 (cable removal accomplished in September 2006)

Risk:
Storage space challenges for interim storage of NNSA materials (Event ID#045)

Planned Action:
New storage location (Fan Room) provides additional lag storage space, coordinate material receipts between H-Canyon and NNSA

SAFETY PERFORMANCE

Occurrence Category	Performance Assessment
TRC Rate	
DARTS Rate	
Recurring Events	
Electrical Safety Events	
Criticality Events	
Industrial Events	
Radiological Events	
Near Miss Events	
Authorization Basis Events	
LOTO Events	
Injury Events	
QA Profile	

Legend:
Green = Good
Yellow = Requires some action
Red = Action Required

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EM Safety Priorities

- Safety is number one in all we do in EM
- Incorporation of safety into planning and design of capital projects
- Incorporation of Quality Assurance (QA) into the planning, design, and construction of capital projects
- Federal Project Directors' responsibility and accountability for the integration of safety and QA into their projects
- Implementation of 10 CFR 851 “ Worker Safety”
- Better tracking of safety performance through data normalization.
 - Overall EM performance is improving



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Safety Focus

TRC & DART Rates by DOE EM Field Office

Quarter - Fiscal Year	Site A						Site B		Site C			
	Contractor A		Contractor B		Contractor C		Contractor D		Contractor E		Contractor F	
	TRC	DART	TRC	DART	TRC	DART	TRC	DART	TRC	DART	TRC	DART
4th Quarter 05	0.6	0.0	1.5	1.5	0.9	0.0	0.5	0.0	0.5	0.3	2.4	0.0
1st Quarter 06	1.4	1.1	0.0	0.0	0.0	0.0	0.5	0.0	0.5	0.1	0.4	0.0
2nd Quarter 06	0.9	0.3	1.0	0.0	0.0	0.0	0.9	0.0	0.8	0.2	1.1	0.0
3rd Quarter 06	0.0	0.0	0.0	0.0	2.0	1.0	0.5	0.0	0.6	0.2	0.0	0.0
4th Quarter 06	1.7	0.3	1.0	0.0	0.0	0.0	0.4	0.4	0.6	0.0	1.8	0.4

Quarter - Fiscal Year	Site D				Site E				Site F			
	Contractor G		Contractor H		Contractor I		Contractor J		Contractor K		Contractor L	
	TRC	DART	TRC	DART	TRC	DART	TRC	DART	TRC	DART	TRC	DART
4th Quarter 05	1.1	0.4	2.5	1.5	3.0	1.7	1.5	0.5	1.6	0.0	2.2	0.7
1st Quarter 06	0.5	0.3	1.5	0.5	1.8	0.3	2.0	1.6	0.0	0.0	0.0	0.0
2nd Quarter 06	0.8	0.1	0.9	0.4	1.6	0.3	1.7	1.1	1.4	1.4	0.8	0.0
3rd Quarter 06	0.8	0.2	0.0	0.0	1.0	0.0	1.1	0.4	1.5	0.0	1.3	1.3
4th Quarter 06	1.0	0.2	0.0	0.0	0.6	0.0	2.4	1.6	0.0	0.0	0.0	0.0

Quarter - Fiscal Year	Site G				Site H	
	Contractor M		Contractor N		Contractor O	
	TRC	DART	TRC	DART	TRC	DART
4th Quarter 05	1.7	0.3	0.4	0.0	1.2	0.5
1st Quarter 06	0.6	0.0	0.9	0.0	1.7	1.1
2nd Quarter 06	0.8	0.0	0.5	0.0	2.8	0.7
3rd Quarter 06	1.4	0.5	0.0	0.0	1.1	0.5
4th Quarter 06	2.2	1.0	1.4	1.0	2.0	0.9

Color Key: PRIOR = previous contractor performance.

**Case replaces case rate due to low work-hours (< 200,000)

Occupational Safety – Total Recordable Case Rate per 200,000 work hours.	TRC Rate	< 1.32 cases, EM mean.	1.33 - 1.62 cases	1.63 - 2.00 cases	> 2.00 cases
OSHA Lost Work Days Cases (Days Away from Work or Restricted Days) per 200,000 work hours.	DART Case Rate	< .60 cases, EM mean.	.61 - .79 cases.	.80 - 1.00 cases	> 1.00 cases



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Management Initiatives

- Maintain and demand highest safety performance
 - Incorporation of safety in planning and design
- Assure effective identification and management of risks
 - Performance
 - Dealing with increased scope and requirements
 - Independent reviews – technical, cost, and schedule
- Validate project costs, schedules, and assumptions
- Improve management of projects
 - Use of “tools”
 - Quarterly project reviews
- Become a higher performing organization
 - Highly qualified
 - Well trained
 - Balanced
 - Diverse
- Implement more effective acquisition process
 - Integration of acquisition strategy, contract type, and fee structure with project objectives
 - More timely procurements
- Enhance communications including site managers' involvement of stakeholders



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Summary

- EM will continue focusing on safe, cost-effective prioritized risk reduction and environmental cleanup.
- EM is committed to and is implementing several management initiatives to improve performance and results in safety, acquisitions, and project management.
- EM's redesigned website is now available at www.em.doe.gov.



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