



Report to Congress

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

June 2010

Office of Environmental Management

Submitted pursuant to House Report 111-203 accompanying the
Energy and Water Development Appropriations Bill, 2010



U.S. DEPARTMENT OF
ENERGY

On the cover:

Fernald Site, near Cincinnati, Ohio, 1987 (*top image*)

The Fernald Closure Project (called the Fernald Site) is a former uranium processing facility.

Fernald Preserve, 2006 (*lower image*)

Cleanup was successfully completed in 2006.

MESSAGE FROM THE SECRETARY

June 18, 2010

The Department is responding to House Conference Report 111-203, Energy and Water Development Appropriations Bill, Fiscal Year 2010, which directs the Department to update and submit Appendices A and B of the *Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War (Status Report)*. The original *Status Report*, provided to Congress in January 2009, responded to a requirement in the National Defense Authorization Act, Fiscal Year 2008, Section 3130.

Updated Appendices A and B containing the requested information are enclosed. The Office of Environmental Management (EM) has had great success in meeting the terms of its regulatory commitments, as shown in the update to Appendix A. EM's overall record of meeting regulatory milestones exceeds 90 percent. EM has also had great success in containing life-cycle cost growth, as shown in the update to Appendix B. Despite baseline changes and the acceptance of nearly \$600 million of new scope not contained in the January 2009 *Status Report*, EM has reduced its life-cycle costs from a range between \$274 and \$329 billion in 2008 to \$273 to \$327 billion today. In addition, the American Recovery and Reinvestment Act funds have helped EM avoid another \$3.2 billion in life-cycle costs.

Pursuant to statutory requirements, this report is being provided to the following Members of Congress:

- **The Honorable Byron L. Dorgan**
Chairman, Subcommittee on Energy and Water Development
Committee on Appropriations
- **The Honorable Robert F. Bennett**
Ranking Member, Subcommittee on Energy and Water Development
Committee on Appropriations
- **The Honorable Peter J. Visclosky**
Chairman, Subcommittee on Energy and Water Development
Committee on Appropriations

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

- **The Honorable Rodney P. Frelinghuysen**
Ranking Member, Subcommittee on Energy and Water Development
Committee on Appropriations
- **The Honorable Daniel K. Inouye**
Chairman, Senate Committee on Appropriations
- **The Honorable Thad Cochran**
Ranking Member, Senate Committee on Appropriations
- **The Honorable David R. Obey**
Chairman, House Committee on Appropriations
- **The Honorable Jerry Lewis**
Ranking Member, House Committee on Appropriations
- **The Honorable Carl Levin**
Chairman, Senate Armed Services Committee
- **The Honorable John McCain**
Ranking Member, Senate Armed Services Committee
- **The Honorable Ike Skelton**
Chairman, House Armed Services Committee
- **The Honorable Howard P. McKeon**
Ranking Member, House Armed Services Committee

If you have any questions or need additional information, please contact me or Ms. Kristy Hartman, Office of External Coordination, at (202) 586-4246.

Sincerely,



Steven Chu

EXECUTIVE SUMMARY

Responding to the requirements in the fiscal year (FY) 2010 Energy and Water Development Appropriations Report (H.R. 111-203) the Office of Environmental Management has updated Appendices A and B of the *Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War*.

Appendix A provides updated information on each Enforceable Agreement Milestone that was reported in the *Status of Environmental Management Initiatives* report. The Department has a history of meeting more than 90 percent of its enforceable agreement milestones. In FY 2009 EM met 72 out of 74 planned milestones (97 percent). In FY 2010, EM is required to meet 111 major Enforceable Agreement Milestones planned for FY 2010.

Appendix B provides an update of the life-cycle cost of the EM program. In FY 2008 the projected life-cycle cleanup cost was \$274 to \$329 billion. By comparison, the FY 2010 projected life-cycle cleanup cost is \$273 to \$327 billion. The updated life-cycle cost projection reflects estimated cost savings and avoidances of about \$7 billion that result from the American Recovery and Reinvestment Act funded acceleration of existing work scope. The FY 2010 estimates includes “new scope” associated with excess facilities that EM has been able to accept from other Departmental programs for remediation and demolition as a result of receipt of ARRA. The cost estimate for completing this new work scope is \$532 to \$597 million.

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

This page intentionally left blank.



Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Table of Contents

Congressional Direction	1
Appendix A – List of Enforceable Milestones.....	3
Appendix B – EM Life-cycle Cost by Project Baseline Summary	27

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

This Page Intentionally left blank.

CONGRESSIONAL DIRECTION

This report responds to Congressional direction set forth in year (FY) 2010 Energy and Water Development Appropriations Report (H.R. 111-203) wherein it is stated:

“The Committee directs Environmental Management (EM) to update appendices A and B, pp. A1-B9, from their recently submitted report pursuant to Section 3120 of the FY 2008 National Defense Authorization Act (NDAA) (P.L. 110-81). The updates should include both American Recovery and Reinvestment Act (ARRA) funding and the FY 2010 request or enacted, if available. These appendices contain Enforceable Milestones, Commitment dates, and Life-Cycle Cost by Project Baseline Summary (PBS), among other data. A column should be added to these tables that indicate the change in status and commitments since the submission of the first report.”

In response, the Office of Environmental management has updated Appendices A and B of the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War.

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

This page intentionally left blank.

APPENDIX A – LIST OF ENFORCEABLE MILESTONES

Appendix A provides updated information on each Enforceable Agreement Milestone that was reported in the *Status of Environmental Management Initiatives* report. It lists the Site, Agreement, Enforceable Milestone, and Commitment Date exactly as reported in the *Status of Environmental Management Initiatives* and adds a Status column to inform whether the Enforceable Agreement milestone was met or re-negotiated. It also includes new milestones negotiated or added since the report was published.

The total number of milestones for the life-cycle of the EM program is higher than displayed in the published report. Consistent with the published report, this update focuses only on the higher-level compliance picture at individual EM sites and does not include most routine, recurring and purely administrative enforceable milestones. This update contains 101 new enforceable agreement milestones since the *Status of Environmental Management Initiatives* was published in January 2009.

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Table 1
Comparison of Major Enforceable Agreement Milestones by Site
Between *Status Report* and Update

ENVIRONMENTAL MANAGEMENT SITE	STATUS REPORT, 01/09	FY 10 UPDATE
Brookhaven National Laboratory	1	1
Energy Technology Engineering Center	14	14
Idaho	21	21
Los Alamos National Laboratory	42	61
Nevada Test Site	25	48
Oak Ridge	65	79
Paducah	10	20
Portsmouth	7	7
Richland	82	112
River Protection	34	34
Sandia National Laboratories	2	2
Savannah River Site	29	29
Stanford Linear Accelerator Center	13	17
West Valley Demonstration Project	0	1
Totals Reported	345	446

The Department has a history of meeting more than 90 percent of its enforceable agreement milestones. In FY 2009 EM met 72 out of 74 planned milestones (97 percent). In FY 2010, EM is required to meet 111 major Enforceable Agreement Milestones planned for FY 2010.

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date¹	Status²
Brookhaven National Laboratory³			
Submit Interagency Agreement Annual Update	FFA	Annual Requirement through 11/30/2020	Met through 11/30/2009
Energy Technology Engineering Center (ETEC)⁴			
Site Treatment Plan (STP) Milestone Report (proposes milestones)	STP	Annually 2/15	Met
Annual STP Submittal (discuss new volumes added)	STP	Annually 10/30	Met
Santa Susana Field Laboratory Groundwater Corrective Measures Study Workplan	Consent Order	3/13/2009	Milestones combined and revised deadline was met on 4/21/2009
Santa Susana Field Laboratory Surficial Media Corrective Measures Study Workplan	Consent Order	4/9/2009	
Group 7 Surficial Media RCRA Facility Investigation Report	Consent Order	6/15/2009	Met
Santa Susana Field Laboratory Groundwater Operable Unit RCRA Facility Investigation Report	Consent Order	9/24/2009	Due date changed to 12/15/2009 and met
Santa Susana Field Laboratory Site-wide Ecological Group RCRA Facility Investigation Report	Consent Order	9/23/2010	No change
Santa Susana Field Laboratory Surficial Media Corrective Measures Study Report	Consent Order	12/6/2011	No change
Santa Susana Field Laboratory Groundwater Corrective Measures Study Report	Consent Order	5/14/2012	No change
Santa Susana Field Laboratory All Groups Corrective Measures Implementation Workplan	Consent Order	1/21/2015	No change
Santa Susana Field Laboratory Groundwater Corrective Measures Implementation Workplan	Consent Order	2/20/2015	No change
All Groups (Soils) Corrective Measures Implementation Construction Complete	Consent Order	6/23/2017	No change
Santa Susana Field Laboratory Groundwater Corrective Measures Implementation Construction Complete	Consent Order	6/26/2017	No change
All Groups Corrective Measures Implementation Report	Consent Order	12/27/2017	No change
Idaho National Laboratory			
SFE-106 tank system closure certificate	Consent Order	1/26/2009	Met
Evaluate status of purified waste solvent line, INTEC 601-3 facility	Consent Order	3/31/2009	Met
Submit Closure Certificate for Site Tank 005, Tank System TRA-007	Consent Order	5/11/2009	Met

¹ For milestones that are not new, commitment dates are taken from the original NDAA report, United States Department of Energy Office of Environmental Management, *Report to Congress: Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War*, January 2009.

² This table is current through June 2010.

³ EM physical cleanup work will be completed in 2011, and regulatory closeout of EM legacy work will occur in 2011.

⁴ DOE is currently in negotiations with the State of California that may result in revisions to current milestones.

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Approve Calcine Disposition Project Critical Decision-1 (or CD-1A)	STP	9/30/2009	Due date changed to first Quarter of 2011
Complete annual treatment volumes	STP	9/30/2009	Met
Issue Record of Decision (ROD) for EIS for path forward to treat calcine waste	Batt Settlement Agreement	12/31/2009	Met
Submit certification for fluorine disposition process cell components	Consent Order	6/24/2010	No change
Integrated Waste Treatment Unit: Commence full-scale system performance testing	STP	6/30/2010	No change
Submit draft Closure Plan for RCRA permit application for catch tanks, TRU Pipeline	Consent Order	9/30/2010	No change
Submit Group 7 draft Remedial Action Report	FFA	2/29/2012	No change
Submit draft Operable Unit 3-13 Waste Area Group 3 Phase II Remedial Action Report	FFA	5/11/2012	No change
Inspect/Remove Test Area North "Brown Lines" Subunit #1 piping	Consent Order	9/30/2012	No change
Submit RCRA Part B permit –retrieval and treatment (if required) of HLW calcine	Batt Settlement Agreement and STP	12/1/2012	No change
Complete treatment of sodium bearing waste	Batt Settlement Agreement	12/31/2012	No change
Cease use of tank farm	Consent Order	12/31/2012	No change
Submit Zone 1 remediation draft Remedial Action Report	FFA	9/30/2013	No change
Submit draft Operable Unit 10-04 Phase II Remedial Action Report for TNT/RDX (trinitrotoluene/royal demolition explosive) remediation	FFA	11/30/2015	No change
Ship all TRU waste to WIPP	Batt Settlement Agreement	12/31/2018	No change
Submit final Remedial Action Report for Operable Unit 10-04	Consent Order	9/28/2020	No change
Transfer all spent fuel from wet storage	Batt Settlement Agreement	12/31/2023	No change
Complete treatment of all calcine waste	Batt Settlement Agreement	12/31/2035	No change
Los Alamos National Laboratory			
Install regional groundwater monitoring well R-30	Consent Order	2/15/2009	Due date changed to 5/14/2010
Submit Investigation Work Plan for Lower Sandia Canyon Aggregate Area	Consent Order	4/30/2009	Met
Submit Investigation Work Plan for Portillo/Fence Canyon Aggregate Area	Consent Order	4/30/2009	Met
Submit Investigation Report for North Canyons (Guaje/Barrancas/Rendija/Bayo)	Consent Order	6/30/2009	Met
Submit Investigation Work Plan for Lower Mortandad/Cedro Canyon Aggregate Area	Consent Order	10/31/2009	Met

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date¹	Status²
Submit Investigation Work Plan for Chaquehui Canyon Aggregate Area	Consent Order	11/30/2009	Met
Submit Material Disposal Area T Remedy Completion Report	Consent Order	12/31/2009	Milestone on hold pending remedy selection by state regulator
Submit Investigation Work Plan for Two Mile Canyon Aggregate Area	Consent Order	1/31/2010	Met
Preliminary Results (Vapor-Monitoring Well Installation Work Plan for Material Disposal Area H, Solid Waste Management Unit 54-004, at Technical Area 54)	Consent Order	02/12/2010	New milestone met
Completion Report for DP Canyon Grade Control Structure	Consent Order	03/01/2010	New milestone
Completion Report for Pueblo Canyon Grade Control Structure and Replacement of Monitoring Station E060	Consent Order	03/01/2010	New milestone
Summary Report for 2009 Remedial Activities at Technical Area 16 260 Outfall Solid Waste Management Unit 16-021(c)-99	Consent Order	03/01/2010	New milestone
Submit general facility information	Consent Order	3/31/2010	No change
Annual Sediment Sampling Report for Sediment Monitoring in Pajarito Canyon Watershed	Consent Order	3/31/2010	New milestone
DP Aggregate Phase II Investigation Report	Consent Order	4/1/2010	New milestone
Completion Report for Sediment Removal and Sampling from LA-SMA-2 (Solid Waste Management Unit 01-001(f))	Consent Order	5/1/2010	New milestone
Periodic Monitoring Report for Vapor-Sampling Activities at Material Disposal Area T, Consolidated Unit 21-016(a)-99, Technical Area 21 for Fourth Quarter 2009	Consent Order	04/30/2010	New milestone
Submit 260 Outfall Surface CMI Long-Term Monitoring and Maintenance Plan	Consent Order	04/30/2010	New milestone
Submit documentation of Completion of Rock Armoring of Steam Banks in South Fork of Acid Canyon	Consent Order	04/30/2010	New milestone
Submit Completion Report for Sediment Removal and Sampling from LA-SMA-2	Consent Order	05/01/2010	New milestone
Report summarizing Solar Vapor Extraction (SVE) Pilot Test at MDA G	Consent Order	5/30/2010	New milestone
Upper Sandia Canyon Aggregate Area Investigation Report	Consent Order	5/30/2010	New milestone
Submit Investigation Report for Solid Waste Management Units 49-005(a), -006, Areas of Concern C-49-002, -005(b), -008(a-b)(Areas 5,6, and 10)	Consent Order	5/31/2010	No change
Submit Investigation Report for Solid Waste Management Units 49-001(a-g), 49-003, Area of Concern C-49-008(d)(Material Disposal Area AB, Areas 1,3,4,11, and 12)	Consent Order	5/31/2010	No change
Submit Investigation Report for Threemile Canyon Aggregate Area	Consent Order	6/30/2010	New milestone
Submit Pueblo Aggregate Area Phase II Investigation Report	Consent Order	6/30/2010	New milestone
Submit Investigation Work Plan for Lower Pajarito Canyon Aggregate Area	Consent Order	7/31/2010	No change
Submit Investigation Work Plan for Upper Water Canyon Aggregate Area	Consent Order	8/31/2010	No change

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Submit S-Site Aggregate Area Investigation Report	Consent Order	8/31/2010	No change
Submit Remedy Completion Report for Solid Waste Management Unit 50-009 (Material Disposal Area C)	Consent Order	9/5/2010	Milestone on hold pending remedy selection by state regulator
Submit Investigation Work Plan for Starmer/Upper Pajarito Canyon Aggregate Area	Consent Order	9/30/2010	No change
Install regional monitoring well at Technical Area-53	Consent Order	9/30/2010	Canceled
Install groundwater monitoring well at Los Alamos watershed	Consent Order	9/30/2010	Canceled
Submit Investigation Work Plan for Frijoles Canyon Aggregate Area	Consent Order	10/31/2010	No change
Submit Investigation Report for Upper Canada del Buey Aggregate Area	Consent Order	10/31/2010	New milestone
Submit Remedy Completion Report for Solid Waste Management Unit 21-015 (Material Disposal Area B)	Consent Order	12/31/2010	No change
Submit Investigation Report for Water Canyon/Canon de Valle	Consent Order	12/31/2010	No change
Submit Phase II Investigation Work Plan for Solid Waste Management Units (SWMUs) 39-001(a), 39-002(a) Area 1, 39-006(a), 39-007(A), 39-010, and AOC 39-002(b)	Consent Order	12/31/2010	New milestone
Submit DP West Building 21-002 Building Foot Print Letter Work Plan	Consent Order	01/14/2011	New milestone
Submit Investigation Report for Ancho/Chaquehui/Indio Canyons	Consent Order	2/28/2011	No change
Submit Remedy Completion Report for Solid Waste Management Unit 21-014 (Material Disposal Area A)	Consent Order	3/11/2011	Due date changed to 5/31/2012
Submit Lower Sandia Aggregate Area Investigation Report	Consent Order	3/31/2011	New milestone
Submit Phase II Investigation Report for Middle Los Alamos Canyon Aggregate Area	Consent Order	3/31/2011	New milestone
Submit 2011 General Facility Information update	Consent Order	3/31/2011	New milestone
Submit Investigation Report for Potrillo/Fence Aggregate Area	Consent Order	5/15/2011	New milestone
Submit Remedy Completion Report for Solid Waste Management Units 21-013(b,g), 21-018(a,b) (Material Disposal Area V)	Consent Order	6/2/2011	Due date changed to 5/31/2012
Submit Remedy Completion Report for Material Disposal Area L	Consent Order	7/9/2011	Milestone on hold pending remedy selection by state regulator (same milestone was repeated in <i>Status Report</i>)
Submit Investigation Report for Portillo/Fence Canyons	Consent Order	8/31/2011	No change
Submit Los Alamos Pueblo Canyon Aggregate Areas Remedy Completion Reports	Consent Order	8/31/2011	Milestone on hold pending additional environmental investigation
Submit Investigation Work Plan for Technical Area-57 Aggregate Area (Fenton Hill)	Consent Order	10/31/2011	No change

Appendix A – List of Enforceable Milestones

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Submit Remedy Completion Report for Solid Waste Management Units 21-017(a-c), 21-022(f) (Material Disposal Area U)	Consent Order	11/6/2011	Met
Submit Upper Mortandad Canada del Buey Aggregate Area Investigation Report	Consent Order	11/20/2011	New milestone
Submit Remedy Completion Report for Solid Waste Management Units 21-001, 2-010(a-h), 21-011(a,c-j), 21-016(a-c), and 21-028(a), and Areas of Concern C-21-009 and C-21-12 (Material Disposal Area T)	Consent Order	12/19/2011	Milestone on hold pending remedy selection by state regulator (same milestone was repeated in <i>Status Report</i>)
Submit Canon de Valle Aggregate Area, Technical Area-16 Investigation Report	Consent Order	1/15/2012	No change
Submit Investigation Report for Technical Area-14 subaggregate (Canon de Valle Aggregate Area)	Consent Order	2/15/2012	No change
Submit Canon de Valle aggregate area, Technical Area-15 Investigation Report	Consent Order	6/15/2012	No change
Submit Investigation Work Plan for Lower Water/Indio Canyon aggregate area	Consent Order	9/30/2012	No change
Submit Los Alamos/Pueblo Canyon aggregate areas Remedy Completion Reports	Consent Order	11/30/2012	Milestone on hold pending additional environmental investigation (Same milestone was repeated twice in <i>Status Report</i>)
Submit Investigation Work Plan for South Ancho Canyon aggregate area	Consent Order	3/31/2013	No change
Submit Remedy Completion Report for Material Disposal Area AB, Solid Waste Management Units 49-001(a-g), 49-003, and Area of Concern-49-008(d)	Consent Order	1/31/2015	No change
Submit Remedy Completion Report for Material Disposal Area G	Consent Order	12/6/2015	No change
Nevada Test Site			
Submit Corrective Action Unit 546 Corrective Action Decision Document	FFA	1/7/2009	Met
Submit Corrective Action Unit 97 Phase I Flow Model Presentation	FFA	01/15/2009	New milestone and met
Submit Corrective Action Unit 99 Phase I Source Term Presentation	FFA	01/21/2009	New milestone and met
Submit Corrective Action Unit 370 Corrective Action Decision Document	FFA	3/2/2009	Met
Submit Corrective Action Unit 97 Phase I Source Term	FFA	3/9/2009	Met
Begin Corrective Action Unit 101 Phase II drilling operations	FFA	4/27/2009	Due date changed to 5/28/2009 and met
Submit Corrective Action Unit 371 Corrective Action Investigation Plan	FFA	03/31/2009	New milestone and met
Begin Corrective Action Unit 102 Phase II drilling operations	FFA	4/27/2009	Due date changed to 5/28/2009 and met
Submit Corrective Action Unit 547 Streamlined Approach For Environmental Restoration Plan	FFA	5/30/2009	Due date changed to 5/31/2010 and met
Submit Corrective Action Unit 97 Phase I Flow Model	FFA	6/29/2009	Due date changed to 7/15/2009 and met

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Submit Corrective Action Unit 134 Closure Report	FFA	6/30/2009	Met
Submit Corrective Action Unit 372 Corrective Action Investigation Plan	FFA	06/30/2009	New milestone and met
Submit Corrective Action Unit 107 Closure Report	FFA	7/10/2009	Met
Submit Corrective Action Unit 98 Model Document for external peer review	FFA	7/31/2009	Due date changed to 4/09/2010
Submit Corrective Action Unit 114 Streamlined Approach for Environmental Restoration Plan	FFA	8/17/2009	Met
Submit Corrective Action Unit 139 Closure Report	FFA	8/31/2009	Met
Submit Corrective Action Unit 98 Model Verification Report	FFA	9/4/2009	Canceled
Submit Corrective Action Unit 98 Phase II Transport Model (Documentation Package)	FFA	9/30/2009	New milestone and met
Submit Corrective Action Unit 166 Closure Report	FFA	9/30/2009	Met
Submit Corrective Action Unit 116 Closure Report	FFA	9/30/2009	Due date changed to 9/30/2011
Submit Corrective Action Unit 106 Corrective Action Investigation Plan	FFA	10/6/2009	Due date changed to 5/31/2010
Corrective Action Unit 101 Drilling Operations Presentation	FFA	10/27/2009	New milestone and met
Corrective Action Unit 102 Drilling Operations Presentation	FFA	10/27/2009	New milestone and met
Submit Corrective Action Unit 117 Closure Report	FFA	11/30/2009	Met
Submit Corrective Action Unit 546 Corrective Action Plan	FFA	12/23/2009	Canceled
Submit Corrective Action Unit 367 Corrective Action Investigation Plan	FFA	12/31/2009	New milestone and met
Submit Corrective Action Unit 130 Closure Report	FFA	2/16/2010	No change
Submit Corrective Action Unit 99 Phase I Source Term	FFA	2/19/2010	Due date changed to 12/09/2010
Submit Corrective Action Unit 374 Corrective Action Investigation Plan	FFA	02/26/2010	New milestone
Submit Corrective Action Unit 98 Document for External Review Presentation	FFA	03/25/2010	New milestone
Submit Corrective Action Unit 375 Corrective Action Investigation Plan	FFA	04/30/2010	New milestone
Submit Corrective Action Unit 547 Closure Report	FFA	5/30/2010	Due date changed to 5/31/2011
Present Corrective Action Unit 97 Flow Model Presentation	FFA	07/15/2010	New milestone
Complete Corrective Action Unit 98 Monitoring Well Network Report	FFA	07/23/2010	No change
Present Corrective Action Unit 101 Drilling Operations Presentation	FFA	08/19/2010	New milestone

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date¹	Status²
Present Corrective Action Unit 102 Drilling Operations Presentation	FFA	08/19/2010	New milestone
Submit Corrective Action Unit 371 Corrective Action Decision Document/Closure Report	FFA	08/31/2010	New milestone
Submit Corrective Action Unit 408 Closure Report	FFA	09/30/2010	No change
Submit Corrective Action Unit 106 Corrective Action Decision Document	FFA	10/6/2010	Milestone suspended pending regulatory revision
Submit Corrective Action Unit 372 Corrective Action Decision Document	FFA	10/15/2010	New milestone
Submit Corrective Action Unit 366 Corrective Action Investigation Plan	FFA	02/14/2011	New milestone
Submit Corrective Action Unit 98 Corrective Action Decision Document/Corrective Action Plan	FFA	06/02/2011	New milestone
Present Corrective Action Unit 97 Transport Model Presentation	FFA	07/14/2011	New milestone
Present Corrective Action Unit 101 Drilling Operations Presentation	FFA	08/18/2011	New milestone
Present Corrective Action Unit 102 Drilling Operations Presentation	FFA	08/18/2011	New milestone
Present Corrective Action Unit 99 Flow Model Presentation	FFA	09/15/2011	New milestone
Submit Corrective Action Unit 372 Corrective Action Plan	FFA	10/17/2011	New milestone
Submit Corrective Action Unit 99 Closure Report	FFA	3/20/2028	No change
Oak Ridge Reservation			
Submit ORNL Facilities Remedial Action Work Plan	FFA	1/5/2009	Due date changed to 8/31/2009 and met
Start construction (Phase 1) – Treatability Studies	FFA	2/23/2009	Due date changed to 5/27/2009 and met
Start demolition on the K-25 Building	FFA	2/28/2009	Met
Initiate shipment of remote handled TRU waste to WIPP	STP	2/28/2009	Met
Submit Water Resources Restoration Program Remediation Effectiveness Report	FFA	3/30/2009	Met
Submit Environmental Management Waste Management Facility Waste Acceptance Criteria Attainment Capacity Assurance Report	FFA	3/30/2009	Met
Submit Bethel Valley D&D Reactor Area Facilities Remedial Action Work Plan	FFA	4/30/2009	Due date changed to 2018
Submit Alpha 4 D&D Engineering Evaluation/Cost Analysis	FFA	4/30/2009	Due date changed to 9/30/2009 and met
Complete processing of 35 cubic meters of remote handled waste inventory	STP	4/30/2009	Quantity combined with related milestone due 9/30/2010
Submit ORNL Small Facilities D&D Waste Handling Plan	FFA	5/26/2009	Canceled - to be rescheduled

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Submit Upper East Fork Poplar Creek West End Mercury Area Remediation Remedial Design Report/Remedial Action Work Plan	FFA	6/25/2009	Due date changed to 5/13/2010
Start construction on Powerhouse	FFA	6/30/2009	Met
K-25/K-27 Excess Material Removal Completion Letter Nickel and Classified Chemicals	FFA	6/30/2009	Milestone inadvertently excluded from prior report – currently in informal dispute process
Submit Bethel Valley Chemical Development Lab Facilities Waste Handling Plan	FFA	7/15/2009	Canceled - to be rescheduled
Submit Bethel Valley D&D Isotope Area Facilities Waste Handling Plan	FFA	7/15/2009	Due date changed to 3/30/2012
Submit Bethel Valley Isotopes (Bldg 3026 C&D) Final Waste Handling Plan	FFA	8/15/2009	Met
Submit Bethel Valley Tank Area Facilities Waste Handling Plan	FFA	8/15/2009	Canceled - to be rescheduled
Submit Alpha-4 D&D Document 1 Action Memorandum	FFA	8/24/2009	Due date changed to 4/22/2010
Start construction on ORNL soils and sediments	FFA	9/30/2009	Met
Start construction on Bethel Valley Groundwater Engineering Studies	FFA	9/30/2009	Canceled
Start construction on Corehole 8	FFA	9/30/2009	Due date changed to 1/22/2011
Submit Bethel Valley D&D Reactor Area Facilities Waste Handling Plan	FFA	9/30/2009	Canceled - to be rescheduled
Start construction on East Tennessee Technology Park ponds	FFA	9/30/2009	Met
Submit K-770 Completion Letter	FFA	9/30/2009	Due date changed to 6/30/2010
Submit Exposure Units 9 & 11 Phased Construction Completion Report	FFA	9/30/2009	Due date changed to 12/30/2009 and met
Submit Exposure Units 11, 12, 17, 18, 29, & 38 Phased Construction Completion Report	FFA	9/30/2009	Met
Submit Upper East Fork Poplar Creek Soils Remediation - Soil Engineering Work Plan RAWP	FFA	9/30/2009	Met
Submit Bear Creek Valley ROD Phase 2 (Burial Ground) ROD	FFA	9/30/2009	Canceled - to be rescheduled
Submit the Upper East Fork Poplar Creek Sediments (81-10 Area) Treatability Study Work Plan	FFA	9/30/2009	Met
Complete processing of 280 cubic meters of contact handled waste for a project total of 587 cubic meters	STP	9/30/2009	Met
Complete processing of 96 cubic meters of remote handled waste for a project total of 131 cubic meters	STP	9/30/2009	Quantity combined with similar milestone due 9/30/2010
Submit the FY 2009 Earned Value Phased Construction Completion Report	FFA	11/15/2009	Met
Submit Work Plan (Phase 2) - Field Studies/Field Implementation	FFA	12/7/2009	Milestone missed. Milestone in informal dispute process

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date¹	Status²
Contract mobilization for the Molten Salt Reactor Experiment Flush & Fuel Salt Removal	FFA	12/30/2009	New Milestone based on resolution of informal dispute is 9/30/12
Submit the Molten Salt Reactor Experiment Flush and Fuel Salt Removal Engineering Evaluation Report	FFA	1/30/2010	Met
Submit Water Resources Restoration Program Remediation Effectiveness Report	FFA	3/30/2010	No change
Submit Exposure Units 31, 32, and 36 Phased Construction Completion Report	FFA	3/31/2010	Canceled and broken out into three separate milestones (see below)
Submit Zone 2 Exposure Unit 31 Phased Construction Completion Report (PCCR)	FFA	5/19/2010	New milestone (see above)
Submit Zone 2 Exposure Unit 36 Phased Construction Completion Report (PCCR)	FFA	3/30/2009	New milestone (see above) and Met
Submit Zone 2 Exposure Unit 32 Phased Construction Completion Report (PCCR)	FFA	3/31/2010	New milestone (see above)
Submit Environmental Management Waste Management Facility Waste Acceptance Criteria Attainment Capacity Assurance Report	FFA	4/1/2010	No change
Submit ETP Ponds Removal Action Report	FFA	5/9/2010	No change
Submit Public Involvement Plan	FFA	5/31/2010	No change
Submit Corehole 8 Removal Action Report	FFA	6/30/2010	Due date changed to 9/24/2011
Submit the Powerhouse Phased Construction Completion Report	FFA	6/30/2010	No change
Submit K-1070-B Burial Ground Phased Construction Completion Report	FFA	7/1/2010	Milestone missed. Milestone in informal dispute process
Start construction for the Upper East Fork Poplar Creek West End Mercury Area remediation	FFA	7/1/2010	Met
Submit ETP Zone 1 D1 Remedial Action Report	FFA	8/1/2010	No change
Start construction (Phase 2) - Field studies/Field Implementation	FFA	8/16/2010	Milestone missed. Milestone in informal dispute process
Submit the ORNL Soil & Sediments Phased Construction Completion Report (Phase I)	FFA	9/30/2010	Canceled - to be rescheduled
Start construction on the Y-12 Salvage Yard, Scrap Removal	FFA	9/30/2010	Met
Submit the Upper East Fork Poplar Creek Soils Remediation Soil Engineering Report	FFA	9/30/2010	Canceled
Submit the Upper East Fork Poplar Creek Sediments (81-10 Area) Treatability Study Report	FFA	9/30/2010	No change
Complete processing of 375 cubic meters of contact handled waste for a project total of 962 cubic meters	STP	9/30/2010	No change
Complete processing of 192 cubic meters of remote handled waste for a project total of 323 cubic meters	STP	9/30/2010	Milestone quantity revised to 85 cubic meters
Submit the K-25/K-27 FY 2010 Phased Construction Completion Report	FFA	11/15/2010	No change

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Submit the ETP Sitewide ROD Treatability Study Report	FFA	3/31/2011	Milestone in jeopardy. Milestone in informal dispute process
Additional processing of 375 cubic meters of Contact Handled Transuranic (CH TRU) Waste	STP	9/30/2011	New milestone
Additional processing of 140 cubic meters of Remote Handled Transuranic (RH TRU) Waste	STP	9/30/2011	New milestone
Submit Phased Construction Completion Report for Decontamination and Decommissioning (D&D) of Remaining Low-Risk, Low-Complexity (LR/LC) Facilities	FFA	12/15/2011	New milestone
Submit Phased Construction Completion Report for Decontamination and Decommissioning of Remaining Potentially Uncontaminated Facilities (PUF)	FFA	12/15/2011	New milestone
Submit K-25/K-27 Phased Construction Completion Report (PCCR) Earned Value Report	FFA	11/15/2011	New milestone
Submit Groundwater Monitoring Remediation Effectiveness Report	FFA	3/30/2012	New milestone
Submit EM Waste Facility Remedial Investigation/Feasibility Study (RI/FS)	FFA	9/28/2012	New milestone
Submit Groundwater Monitoring Remediation Effectiveness Report	FFA	3/30/2012	New milestone
Submit Strategy for processing Remote Handled Transuranic (RH TRU) Sludge	STP	6/30/2012	New milestone
Complete processing of Contact Handled Transuranic (CH TRU) Waste	STP	9/30/2012	New milestone
Additional processing of 210 cubic meters of Remote Handled Transuranic (RH TRU) Waste	STP	9/30/2012	New milestone
Submit East Tennessee Technology Park Site Wide Record of Decision (ROD) Feasibility Study/Proposed Plan (FS/PP) Report	FFA	9/30/2012	New milestone
Submit Phased Construction Completion Report for Decontamination and Decommissioning of Remaining Facilities Poplar Creek (3 High Risk)	FFA	9/30/2012	New milestone
Submit K-25 Waste Handling Plan for High Risk Equipment	FFA	3/30/2012	New milestone
Submit Oak Ridge National Laboratory Non Reactor Facilities Waste Handling Plan for 2026	FFA	3/30/2012	New milestone
Submit Oak Ridge National Laboratory Non Reactor Facilities Waste Handling Plan for Isotope Facilities	FFA	3/30/2012	New milestone
Submit Oak Ridge National Laboratory Phased Construction Completion Report (PCCR) (3026) Hot Cell	FFA	9/30/2012	New milestone
Submit Environmental Management Waste Management Facility Capacity Assurance Removal Action Report	FFA	4/1/2012	New milestone
Submit UEFP Phase II Salvage Yard Soils Waste Handling Plan	FFA	9/30/2012	New milestone
Submit Y-12 Building Alpha 5 Waste Handling Plan	FFA	7/24/2012	New milestone
Submit the Molten Salt Reactor Experiment D&D Removal Action Report	FFA	9/30/2016	No change
Submit the ETP Sitewide Remedial Action Removal Action Report	FFA	9/30/2016	No change

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date¹	Status²
Submit the Alpha 4 Removal Action Report	FFA	9/30/2016	No change
Submit the Bear Creek Valley S-3 Ponds Remedial Action Report	FFA	9/30/2016	No change
Submit the ORNL Soil & Sediments Remedial Action Report	FFA	9/30/2017	No change
Submit K-25/K-27 Removal Action Report for Approval	FFA	9/30/2017	No change
Submit Remaining Facilities Removal Action Report	FFA	9/30/2017	No change
Submit the Zone 2 Remedial Action Report	FFA	9/30/2017	No change
Submit Upper East Fork Poplar Creek Phase 1 ROD	FFA	9/30/2017	No change
Submit the Y-12 Transition Facility Removal Action Report	FFA	9/30/2017	No change
Submit the Bear Creek Valley White Wing Scrap yard Remedial Action Report	FFA	9/30/2017	No change
Submit the Chestnut Ridge Remedial Action Report	FFA	9/30/2017	No change
Office of River Protection (Hanford)			
Start Cold Commissioning – Waste Treatment Plant	FFA (Tri-Party Agreement – TPA)	2/28/2009	Missed - to be deleted upon approval of formal change request
Complete startup and turnover activities for required transfer system upgrades to allow transfer of LAW feed.	TPA	3/31/2009	Missed - to be deleted upon approval of formal change request
Annual assessment by WA Department of Ecology and DOE of the adequacy of information and need for additional interim compliance measures	TPA	7/31/2009	Met
Submit biennial update to single shell tank retrieval sequence document	TPA	3/1/2010	In abeyance pending approval of formal change request
DOE, U.S. EPA and Washington Department of Ecology shall meet to establish new milestones, if necessary	TPA	4/30/2010	In abeyance pending approval of formal change request
Complete negotiations of additional agreement requirements for work to support completion of treatment complex	TPA	6/30/2010	Request to change due date to 6/30/2012 pending approval
Annual assessment of the adequacy of information and need for additional interim measures	TPA	7/31/2010	No change
Complete Canister Storage Facility construction	TPA	8/31/2010	Request to change due date to 12/31/2014 pending approval
Submit Phase 2 RCRA Feasibility Investigation/Corrective Measures Study	TPA	12/31/2010	To be deleted upon approval of formal change request
Complete Hot Commissioning – Waste Treatment Plant	TPA	1/31/2011	No change
Achieve interim completion of single shell tank S-112 waste retrieval and closure	TPA	6/30/2011	No change

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Achieve interim completion of single shell tank S-102 waste retrieval and closure	TPA	6/30/2011	To be deleted upon approval of formal change request
Submit biennial update to single shell tank retrieval sequence document	TPA	3/1/2012	To be deleted upon approval of formal change request
DOE, U.S. EPA and Washington Department of Ecology shall meet to establish new milestones, if necessary	TPA	4/30/2012	Request to change due date to 6/30/2015 pending approval
Submit Phase 2 Corrective Measures Implementation Work Plan for Waste Management Area C	TPA	7/31/2012	To be deleted upon approval of formal change request
Initiate negotiations of single shell tank waste retrievals for remainder of single shell tanks	TPA	10/31/2012	To be deleted upon approval of formal change request
Ecology and DOE shall complete negotiations for waste retrieval from remaining single shell tanks	TPA	2/27/2013	To be deleted upon approval of formal change request
Submit Biennial Update to single shell tank retrieval sequence document	TPA	3/1/2014	To be deleted upon approval of formal change request
DOE, U.S. EPA and Washington Department of Ecology shall meet to establish new milestones, if necessary.	TPA	4/30/2014	To be deleted upon approval of formal change request
Submit Biennial Update to single shell tank retrieval sequence document	TPA	3/1/2016	To be deleted upon approval of formal change request
DOE, U.S. EPA and Washington Department of Ecology shall meet to establish new milestones, if necessary	TPA	4/30/2016	To be deleted upon approval of formal change request
Complete the pretreatment and vitrification of no less than 10% of Hanford Tank waste by mass and 25% by activity	TPA	2/28/2018	Request to change due date to "date WTP achieves initial plant operations" pending approval
Complete work supporting acquisition/operation of Waste Treatment Plant	TPA	2/28/2018	To be deleted upon approval of formal change request
Submit Biennial Update to single shell tank retrieval sequence document	TPA	3/1/2018	To be deleted upon approval of formal change request
DOE, U.S. EPA and Washington Department of Ecology shall meet to establish new milestones, if necessary	TPA	4/30/2018	To be deleted upon approval of formal change request
Retrieve waste from all remaining single shell tanks	TPA	9/30/2018	To be deleted upon approval of formal change request
Complete closure of single shell tank farms with approved closure plans	TPA	9/30/2024	Request to change due date to 1/31/2043 pending approval
Complete closure of all single shell tank farms	TPA	9/30/2024	To be deleted upon approval of formal change request
Complete vitrification of Hanford HLW	TPA	12/31/2028	To be deleted upon approval of formal change request
Complete pretreatment and immobilization of Hanford LAW	TPA	12/31/2028	To be deleted upon approval of formal change request
Complete pretreatment processing of Hanford tank waste	TPA	12/31/2028	Request to change due date to 12/31/2047 pending approval
Complete pretreatment processing and vitrification of Hanford HLW and LAW tank waste	TPA	12/31/2028	To be deleted upon approval of formal change request
Provide additional double shell tank capacity	TPA	TBD	Request to change due date to "WTP Hot Start" pending approval

Appendix A – List of Enforceable Milestones

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Acquire/modify facilities for storage/disposal of immobilized HLW and immobilized LAW	TPA	TBD	Request to change due date to 12/31/2014 pending approval
Paducah Gaseous Diffusion Plant			
Submit D1 Removal Action Work Plan for the Surface Water Operable Unit (On-Site)	FFA	2/5/2009	Due date changed to 5/25/2009 and met
Submit D1 Remedial Investigation Work Plan for the Site-Wide Soils Operable Unit	FFA	3/12/2009	Met
Issue D1 Burial Grounds Feasibility Study Report	FFA	7/2/2009	Due date changed to 4/28/2010
Submit version D1 Focused Feasibility Study for Southwest Plume, 90% Design	FFA	7/28/2009	Met
Characterize all Priority C DOE Material Storage Areas	Agreed Order	9/30/2009	Met
Submit D1 Remedial Action Completion Report for the Groundwater Operable Unit (C-400)	FFA	4/26/2011	No change
Submit D1 Remedial Action Completion Report for the Site-Wide Soils Operable Unit Remediation	FFA	9/30/2015	No change
Submit D1 Removal Action Completion Report (C-410, C-340, and 15 inactive facilities) for the Decontamination and Decommissioning (17 Inactive Facilities)	FFA	9/30/2017	No change
Submit D1 Response Action Completion Report for the Surface Water Operable Unit (Off-Site)	FFA	12/13/2017	No change
Submit D1 Remedial Action Completion Report for the Burial Grounds Operable Unit	FFA	9/30/2019	No change
Submit D1 Proposed Plan for Southwest Plume Sources	FFA	3/25/2010	New milestone
Submit D1 Record of Decision (ROD) for Southwest Plume Sources	FFA	9/17/2010	New milestone
Submit D1 Remedial Design Work Plan for Southwest Plume Sources	FFA	11/18/2010	New milestone
Submit D1 Remedial Action Completion Report for Southwest Plume Sources	FFA	6/28/2015	New milestone
Submit D1 Remedial Investigation Report for the Site-Wide Soils Operable Unit Remediation	FFA	9/30/2010	New milestone
Submit D1 Feasibility Study for the Site-Wide Soils Operable Unit Remediation	FFA	5/28/2011	New milestone
Submit D1 Proposed Plan for the Burial Grounds Operable Unit	FFA	10/24/2010	New milestone
Submit D1 Engineering Evaluation/Cost Analysis (EE/CA) for Disposition of Inactive Facilities	FFA	2/10/2010	Met
Submit D1 Action Memorandum for Disposition of Inactive Facilities	FFA	9/30/2010	New milestone
Submit Removal Action Work Plan for Disposition of Inactive Facilities	FFA	1/28/2011	New milestone
Portsmouth Gaseous Diffusion Plant			
Submit Phase III Remedial Action Report for the remediation of X-701B Solid Waste Management Unit	Consent Decree	6/1/2009	Met

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Perform polychlorinated biphenyl activities in the process buildings to maintain compliance	TSCA FFA	9/30/2009	Met
Perform polychlorinated biphenyl activities in process buildings to maintain compliance	TSCA FFA	9/30/2010	No change
Submit Final Certification Report for the remediation of the X-701B Solid Waste Management Unit	Consent Decree	12/31/2010	Milestone deleted - Project cancelled after Phase II
Complete Site Treatment Plan milestone for future offsite incineration	STP	3/31/2011	No change
Complete Site Treatment Plan milestone for commercial stabilization	STP	3/31/2011	No change
Perform polychlorinated biphenyl activities in process buildings to maintain compliance	TSCA FFA	9/30/2011	No change
Richland Operations Office (Hanford)			
Submit Evaluation of Tritium Treatment Technology	TPA	3/31/2009	Met
Submit Revision of mixed TRU waste and MLLW Project Management Plan	TPA	3/31/2009	Met
Complete negotiations on revising milestones consistent with Final Action Memoranda	TPA	3/31/2009	Met
Submit an annual Hanford Land Disposal Restrictions Report	TPA	4/30/2009	Met
Submit revised Feasibility Study Report and revised proposed plan for 200-CW-1 Operable Unit	TPA	5/31/2009	Due date changed to 11/30/2010
Treat a minimum of 300 cubic meters cumulative of large and/or remote handled MLLW	FFA ("TPA")	6/30/2009	Met
Initiate discussions annually to reaffirm selected wells	TPA	6/30/2009	Met
Conclude negotiations and revise TPA milestone M-024-57 by August of each year.	TPA	8/1/2009	Met
Complete transition and dismantlement of 241-Z Waste Treatment Facility	TPA	9/30/2009	Met
Complete Removal of the K-East Basin structure	TPA	9/30/2009	Met
Submit 200-MW-1 Operable Unit Feasibility Study and proposed plan	TPA	9/30/2009	Due date changed to 2/28/2010 and met
Submit 105/109-N Reactor Interim Safe Storage Design Report	TPA	9/30/2009	Met
Complete Fast Flux Test Facility sodium drain	TPA	9/30/2009	Met
Submit report for remote handled waste & boxes of remote handled/contact handled waste	TPA	9/30/2009 and annually through 9/30/2013	Canceled and scope combined with another milestone
Initiate soil remediation at K-East Basin (105-KE)	TPA	10/31/2009	Met
Submit revised Remedial Design/Remedial Action (RD/RA) work plans for 100K Records of Decision as primary documents with new proposed milestones including the treatment of sludge	TPA	11/30/2009	Scope increased and due date changed to 3/31/2011
Submit a Remedial Investigation (RI) Phase II Report for the 200-PO-1 Groundwater Operable Unit	TPA	12/30/2009	Canceled

Appendix A – List of Enforceable Milestones

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Complete removal of 6/19 high priority facilities	TPA	12/30/2009	Met
Retrieve suspect TRU from the burial ground (12,200 cubic meters)	TPA	12/31/2009	Changed to an unenforceable Target Date, subject to mandatory renegotiation of a new enforcement date
Designate all newly generated contact handled waste at the point of generation	TPA	12/31/2009	Due date changed to TBD subject to mandatory negotiation of a new enforceable date
Complete treatment of all contact handled MLLW	TPA	12/31/2009	Due date changed to TBD subject to mandatory negotiation of a new enforceable date
Treat/certify contact handled mixed TRU waste	TPA	12/31/2009	Changed to an unenforceable Target Date, subject to mandatory renegotiation of a new enforcement date
Treat mixed low level waste to meet Land Disposal Restriction requirements	TPA	12/31/2009	This should be deleted as it is already listed above. (Complete treatment of all contact handled MLLW)
DOE shall install a cumulative of 105 wells	TPA	12/31/2009	Met
Complete interim remediation actions at Area 100-B/C	TPA	12/31/2009	Met
Parties Will Complete M-91 Negotiations & DOE will submit Change Package	TPA	2/28/2010	New milestone, Request to change date pending approval
Complete Negotiations to Set Schedule to Complete Remedial Investigation/Feasibility Study (RI/FS) Process	TPA	2/28/2010	New milestone, Request to change date pending approval
Conduct biennial assessments of information and data access needs with U.S. EPA and Ecology	TPA	3/31/2010	No change
Submit an annual Hanford Land Disposal Restrictions Report	TPA	4/30/2010	No change
Submit Revised Feasibility Study Report and Proposed Plan for 200BC Cribs/Trenches for Operable Unit 200-BC-1	TPA	4/30/2010	Due date changed to 9/30/2010
Initiate Discussions of Well Commitments	TPA	6/1/2010	New milestone
Treat 300 cubic meters per year remote handled Mixed Low Level Waste (MLLW) & large container contact handled MLLW	TPA	6/30/2010	Met
Submit Fast Flux Test Facility Surveillance and Maintenance Plan	TPA	6/30/2010	Met
Submit Annual Revision of Transuranic-Mixed (TRUM) and Mixed-Low Level Waste (MLLW) Project Management Plan (PMP) to Ecology	TPA	6/30/2010	Milestone inadvertently excluded from prior report, Under negotiations
Submit A Proposed Plan For 200-UW-1	TPA	6/30/2010	New milestone
Submit Revised Remedial Design/Remedial Action (RD/RA) Work Plans For 100A Interim Remedial Actions	TPA	6/30/2010	New milestone

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Submit 200-ZP-1 Remedial Design Report	TPA	8/31/2010	New milestone
Complete transition and dismantlement of the 216-Z-9 Crib Complex	TPA	9/30/2010	Canceled
Complete interim remedial actions for 6 specific wastes sites in the 300-FF-2 Operable Unit	TPA	9/30/2010	No change
Complete disposition of surplus facilities	TPA	9/30/2010	Met
Closure of non-permitted mixed waste units in 324 Building Radiochemical Engineering Cells B&D	TPA	9/30/2010	Due date changed to 9/30/2012
Submit 200-BP-5 Operable Unit Feasibility Study and proposed plan	TPA	10/31/2010	Due date changed to 12/31/2012
Submit a 200-UP-1 Operable Unit Combined Remedial Investigation and Feasibility Study Report as well as a proposed plan	TPA	11/30/2010	Due date changed to 9/30/2012
Complete Interim Remedial Actions	TPA	11/30/2010	No change
Treat 7,600 cubic meters (cumulative) contact handled mixed TRU MLLW	TPA	12/31/2010	Met
Complete retrieval of contact handled retrievably stored waste	TPA	12/31/2010	Due date changed to TBD subject to mandatory negotiation of a new enforceable date
Submit the Feasibility Study Report and a revised recommended remedy(ies) for 200-PW-2 and 200-PW-4 Operable Units	TPA	12/31/2010	Canceled
Submit a feasibility study report and revised proposed plan for Operable Unit 200-SC-1	TPA	12/31/2010	Under negotiation
Expand Pump and Treat System at 100-HR-3 Operable Unit (OU) to 500 gmp Capacity	TPA	12/31/2010	New milestone
DOE Shall Complete Construction of 90 Wells	TPA	12/31/2010	New milestone
Submit Treatability Test Plan As Amendment of 200-BP-5 WP	TPA	12/31/2010	New milestone
Initiate full scale retrieval of remote handled retrievably stored waste	TPA	1/1/2011	Changed to an unenforceable Target Date, subject to mandatory renegotiation of a new enforcement date
Complete Fast Flux Test Facility transition and initiate surveillance and maintenance phase	TPA	2/28/2011	Met
Submit 200-MW-1 Operable Unit (OU) Proposed Plan to EPA	TPA	2/28/2011	New milestone
Submit Revised Remedial Design/Remedial Action (RD/RA) Work Plans for 100K Area Records of Decision (RODS)	TPA	3/31/2011	New milestone
Submit An Annual Hanford Land Disposal Restrictions Report	TPA	4/30/2011	Milestone inadvertently excluded from prior report No change
Submit Annual Revision of Transuranic-Mixed (TRUM) and Mixed-Low Level Waste (MLLW) Project Management Plan (PMP) to Ecology	TPA	6/30/2011	Milestone inadvertently excluded from prior report No change

Appendix A – List of Enforceable Milestones

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Complete closure of the PFP 241-Z Treatment, Storage and/or Disposal Unit	TPA	9/30/2011	Met
Complete transition and dismantlement of the 241-Z Waste Treatment Facility	TPA	9/30/2011	Met
Complete 105-KE and 105-KW Reactor interim safe storage in accordance with the remedial design/remedial action work plan [original language amended]	TPA	9/30/2011	Due date changed to 7/31/2014
Treat/certify contact handled mixed TRU waste (8,600 cubic meters cumulative)	TPA	12/31/2011	Canceled
Submit a revised Feasibility Study Report & revised proposed plan for 200-TW-1 and 200-PW-5 Operable Units	TPA	12/31/2011	Canceled
Submit a revised Feasibility Study Report and a revised recommended remedy(ies) for 200-TW-2 Operable Unit	TPA	12/31/2011	Canceled
Submit 200 Area Chemical Laboratory Waste Operable Units Feasibility Study	TPA	12/31/2011	Canceled
Complete all 200 Area Non-Tank Farm Operable Unit pre-ROD site investigations under approved work plan schedules	TPA	12/31/2011	Due date changed to "TBD"
Complete 200 Area Remedial Investigation Feasibility Study Process for all Non-Tank Farm Operable Units	TPA	12/31/2011	Due date changed to "TBD"
Complete Removal of 12/19 high priority facilities (should be 11/19)	TPA	12/31/2011	No change
Complete the interim remedial actions for Area 100 H	TPA	12/31/2011	No change
Complete the interim remedial actions for Area 100 D	TPA	12/31/2011	No change
Expand Pump and Treat System at 100-HR-3 to 800 gmp Capacity	TPA	12/31/2011	New milestone
Groundwater Treatment System <50 gpm for Tc-99 Plume at S/SX Tank Farm	TPA	12/31/2011	New milestone
Begin Phase I Operation of new 200 West Pump & Treat System	TPA	12/31/2011	New milestone
Submit Feasibility Study (FS) Report & Proposed Plan (PP) for 200-PO-1 Operable Unit (OU)	TPA	12/31/2011	New milestone
DOE Shall Complete Construction Of All Wells Listed	TPA	12/31/2011	New milestone
Complete the Interim Remedial Actions For 100-IU-2 And 100-IU-6	TPA	2/28/2012	New milestone
Submit Annual Revision Of Transuranic-Mixed Waste (TRUM) And Mixed-Low Level Waste (MLLW) Project Management Plan (PMP) to Ecology	TPA	6/30/2012	Milestone inadvertently excluded from prior report No change
Complete acquisition of capabilities and/or facilities necessary for retrieval, designation, storage and treatment prior to disposal of post-1970 TRU/mixed TRU waste	TPA	6/30/2012	Due date changed to TBD subject to mandatory negotiation of a new enforceable date
Begin treating remote handled mixed TRU waste & boxes & large containers of contact handled mixed TRU waste	TPA	6/30/2012	Changed to an unenforceable Target Date, subject to mandatory renegotiation of a new enforcement date
Submit a Surveillance & Maintenance Plan	TPA	6/30/2012	No change

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Complete 105-N Reactor interim safe storage	TPA	9/30/2012	No change
Complete interim remediation for all Area 300 "Inside The Fence" waste sites	TPA	9/30/2012	No change
Designate contact handled retrievably stored waste as mixed to meet applicable federal and state land disposal restriction standards	TPA	12/31/2012	Changed to an unenforceable Target Date, subject to mandatory renegotiation of a new enforcement date
Designate all remote handled TRU and boxes of contact handled TRU above ground	TPA	12/31/2012	No change
Conduct biennial assessments of information and data access needs with U.S. EPA and Washington Department of Ecology	TPA	12/31/2012	Original due date reported incorrectly. Correct due date is 3/31 biennially
Complete all interim response actions for all Area 100 areas	TPA	12/31/2012	No change
Complete interim remedial actions for 300-FF-2 waste sites	TPA	12/31/2012	No change
Complete the interim response actions for Area 100-N	TPA	12/31/2012	No change
Complete the interim response actions for Area 100-K	TPA	12/31/2012	No change
DOE Shall Complete the Construction of all Wells for CY2012	TPA	12/31/2012	New milestone
Submit PP For All 100 & 300 Area Operable Units (OUs) to Complete Remedial Investigation/Feasibility Study (RI/FS) Process	TPA	12/31/2012	New milestone
Submit Implementation Workplan To Prepare Transuranic/Transuranic Mixed (TRU/TRUM) Waste	TPA	12/31/2012	Milestone inadvertently excluded from prior report No change
Complete Interim Response Actions 100K Area Not in Phase 1/2/3	TPA	12/31/2012	New milestone
Submit revisions of Hanford Site TRU/mixed TRU waste Project Management Plan	TPA	6/30/2013 and annually through 6/30/2022	This should be deleted as it is already listed above.
Treat remote handled mixed TRU waste & contact handled mixed TRU waste at minimum rate of 300 cubic meters per year	TPA	6/30/2013 and annually through 6/30/2025	Changed to an unenforceable Target Date, subject to mandatory renegotiation of a new enforcement date
Complete transition of the 242-Z and 236-Z buildings	TPA	9/30/2013	No change
Complete removal of 15/19 high priority facilities	TPA	9/30/2013	Number of facilities changed from 15 to 13
Initiate substantial and continuous remediation on the 309 Facility Dedicated Radioactive Liquid Waste Sewer (300 RLWS) and the 300 Area Process Sewer (300-15) systems	TPA	9/30/2013	No change
Submit evaluation of tritium treatment technology	TPA	3/31/2014	No change

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date¹	Status²
Complete retrieval of non-caisson remote handled retrievably stored waste	TPA	12/31/2014	No change
Complete Disposition Of 300 Area Surplus Facilities	TPA	9/30/2015	No change
Complete transition of the 234-5Z, 234-5ZA, 243-Z, 291-Z/291-Z-1 facilities	TPA	9/30/2015	No change
Complete removal/transfer/initiate storage of Phase III 300 Area special waste	TPA	9/30/2015	No change
Complete all interim 300 Area remedial actions (excluding 618-10 and 11 burial grounds)	TPA	9/30/2015	No change
Complete The Interim Response Actions For The 100K Area Phase 2	TPA	12/31/2015	New milestone
Complete Plutonium Finishing Plant Facility transition & selected disposition activities	TPA	9/30/2016	No change
Include cesium/strontium treatment and/or repackaging parameters in DOE Request for Proposals	TPA	6/30/2017	No change
Complete all interim Area 300 remedial actions (including 618-10 and 11)	TPA	9/28/2018	Due date previously reported incorrectly. Correct due date is 9/30/2018
Establish schedule and milestones for Sodium Disposition facilities	TPA	9/30/2018	No change
Complete retrieval of the 200A Caisson remote handled retrievably stored waste in 218-W-4B Operable Unit	TPA	12/31/2018	No change
Complete remedial actions for all non-tank farm operable units	TPA	9/30/2024	No change
Complete Revegetation of 300-FF-2 Waste Sites	TPA	3/13/2013	New milestone
Sandia National Laboratories			
Submit the Corrective Measure Evaluation (CME) Report for the Burn-Site Groundwater area	Consent Order	9/30/2010	Due date changed to "TBD" pending additional groundwater characterization
Submit Corrective Measure Implementation (CMI) Report for the Mixed Waste Landfill	Consent Order	Due 180 days after completion of Soil Cover	Met
Savannah River Site			
Remove the Battelle remote handled TRU waste from SRS	MOA	1/1/2009	This is a non-enforceable milestone ⁵
Submit Statement of Basis/Proposed Plan for P-Area OU (includes 9 subunits w/ 9 associated milestones)	FFA	2/4/2009	Met
Issue third Five-Year Remedy Review	FFA	2/12/2009	Met
Issue the Record of Decision (ROD) for M Area Operable Unit (includes 19 sub-units with 19 associated milestones)	FFA	3/30/2009	Met

⁵ Eighty-three of the 108 TRU waste drums were shipped to WIPP in FY09. The remaining 25 drums are awaiting the State of New Mexico's approval for shipment to WIPP.

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Complete periodic monitoring and submit the Lower Three Runs Integrator Operable Unit Periodic Report #3	FFA	5/30/2009	Met
Start C-Area Burning/Rubble Pit and Old C-Area Burning/Rubble Pit remedial action	FFA	6/18/2009	Met
Complete monitoring and submit the D-Area Groundwater Operable Unit Groundwater Monitoring Report	FFA	7/31/2009	Met
Complete periodic monitoring and submit the Steel Creek Integrator Operable Unit Periodic Report #3	FFA	8/31/2009	Met
Initiate the Savannah River Floodplain Swamp Integrator Operable Unit Second Phase II field start	FFA	9/2/2009	Met
Submit FFCAct Site Treatment Plan Annual Update	STP	11/15/2009 and annually through 2027	2009 milestone met
Submit workplan for C-Area Operable Unit (includes 6 sub-units with 6 associated milestones)	FFA	12/31/2009	Under negotiation
Issue ROD for P-Area Operable Unit (includes 9 sub-units with 9 associated milestones)	FFA	6/2/2010	No change
Initiate the field start for C-Area Operable Unit (includes 6 sub-units with 6 associated milestones)	FFA	9/30/2010	No change
Complete bulk waste removal for 2 tanks	FFA	9/30/2010	No change
Submit H-Tank Farm Performance Assessment	FFA	3/31/2011	No change
Start-up of Salt Waste Processing Facility operations	Special Condition in Saltstone Disposal Facility Landfill Permit	9/30/2011	New milestone
Complete bulk waste removal for 1 tank	FFA	9/30/2011	No change
Operationally close radioactive liquid waste Tanks 19 and 18	FFA	12/31/2012	No change
Complete bulk waste removal for 2 tanks	FFA	9/30/2014	No change
Complete F/H Areas Hazardous Waste Management Facility and the Mixed Waste Management Facility semi-annual groundwater monitoring and submit Corrective Action Report	FFA	10/30/2014	No change
Operationally close 4 radioactive liquid waste tanks	FFA	9/30/2015	No change
Complete bulk waste removal for 2 tanks	FFA	9/30/2016	No change
Complete bulk waste removal for 3 tanks	FFA	9/30/2017	No change
Operationally close 2 radioactive liquid waste tanks	FFA	9/30/2017	No change
Complete bulk waste removal for 6 tanks	FFA	9/30/2018	No change
Complete bulk waste removal for 1 tank	FFA	9/30/2019	No change
Operationally close 2 radioactive liquid waste tanks	FFA	9/30/2019	No change

Appendix A – List of Enforceable Milestones

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Operationally close 5-radioactive liquid waste tanks	FFA	9/30/2021	No change
Operationally close 7 radioactive liquid waste tanks	FFA	9/30/2022	No change
Maintain Defense Waste Processing Facility canister production sufficient to remove all waste from tanks by 2028	STP	1/1/2028	No change
Stanford Linear Accelerator Center (SLAC)⁶			
Submit West SLAC Risk Assessment Report	Compliance Order	1/2/2009	Due date changed to 194 days after approval of the West SLAC Operable Unit Remedial Investigation Report
Submit Research Yard/Interaction Region-6 Remedial Investigation Report	Compliance Order	3/19/2009	Due date changed to 6/26/2010
Submit Groundwater/Volatile Organic Compounds Feasibility Study/Risk Assessment Plan	Compliance Order	4/3/2009	Canceled and split into two separate milestones (See below)
Submit Final Groundwater/Volatile Organic Compounds Remedial Action Plan	Compliance Order	216 days after the approval of the Groundwater Volatile Organic Compound Operable Unit Feasibility Study	New milestone (See above)
Submit Final Groundwater/Volatile Organic Compounds Remedial Design Report	Compliance Order	216 days after the approval of the Groundwater Volatile Organic Compound Remedial Action Plan	New milestone (See above)
Submit Research Yard/Interaction Region-6 Risk Assessment Report	Compliance Order	6/19/2009	Due date changed to 208 days after the approval of the Remedial Investigation Report
Submit West SLAC Feasibility Study/Risk Assessment Plan	Compliance Order	10/19/2009	Canceled and split into two separate milestones (See below)
Submit Final West SLAC Operable Unit (OU) Remedial Action Plan	Compliance Order	216 days after approval of the West SLAC Operable Unit Feasibility Study	New milestone (See above)
Submit Final West SLAC Operable Unit (OU) Remedial Design Report	Compliance Order	216 days after approval of the West SLAC Operable Unit Remedial Action Plan	New milestone (See above)
Submit West SLAC Feasibility Study Report	Compliance Order	12/3/2009	Due date changed to 260 days after approval of the West SLAC Operable Unit Risk Assessment

⁶ EM physical cleanup work will be completed in 2011, and regulatory closeout of EM legacy work will occur in 2012.

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix A List of Enforceable Milestones			
Enforceable Milestone	Agreement	Commitment Date ¹	Status ²
Submit Groundwater Volatile Organic Compounds Feasibility Study Report	Compliance Order	12/3/2009	Due date changed to 11/19/2009 and met
Submit Groundwater/Volatile Organic Compounds RAP Implementation Report	Compliance Order	5/5/2010	Due date changed to 571 days after approval of the Groundwater Volatile OC OU Remedial Design Report
Submit Final West SLAC OU Operations and Maintenance Plan	Compliance Order	7/9/2010	Due date changed to 466 days after approval of the West SLAC Operable Unit Remedial Design Report
Submit Final Groundwater Volatile Organic Compounds OU Operations and Maintenance Plan	Compliance Order	4/12/2010	Due date changed to 526 days after approval of the Groundwater Operable Unit Remedial Design Report
Submit West SLAC OU RAP Implementation Report	Compliance Order	5/5/2010	Due date changed to 536 days after approval of the West SLAC Operable Unit Remedial Design Report
Submit Final West SLAC OU Risk Management Plan	Compliance Order	10/1/2012	Due date changed to 216 days after approval of the West SLAC Operable Unit Remedial Action Plan Implementation Report
Submit Final Groundwater Volatile Organic Compounds OU Risk Management Plan	Compliance Order	10/1/2012	Due date changed to 171 days after approval of the Groundwater Volatile Organic Compound Operable Unit Remedial Action Plan Implementation Report
Submittal of Final West SLAC Operable Unit (OU) Remedial Investigation Report	Compliance Order	TBD	Milestone inadvertently excluded from prior report
Submittal of Final West SLAC Operable Unit (OU) Remedial Investigation (RI) Compliance Schedule	Compliance Order	4/15/2010	New milestone
West Valley Demonstration Project			
Meet Fiscal Year shipping requirements as specified in the STP	STP	09/30/2010	New milestone

APPENDIX B – EM LIFE-CYCLE COST BY PROJECT BASELINE SUMMARY

The update of Appendix B shows the FY 2008 life-cycle cost estimate by PBS reported in the *Status of Environmental Management Initiatives*, the FY 2010 (updated) life-cycle cost estimate by PBS, the changes in costs between the two estimates, and an explanation of change. The FY 2010 estimates includes “new scope” associated with excess facilities that EM has been able to accept from other Departmental programs for remediation and demolition as a result of receipt of ARRA funding. This work scope is identified separately in Appendix B to distinguish it from existing (or legacy work scope) and is labeled as “new scope.” The cost estimate for completing this new work scope is \$532 to \$597 million.

In FY 2008 the projected life-cycle cleanup cost was \$274 to \$329 billion. By comparison, the FY 2010 projected life-cycle cleanup cost is \$273 to \$327 billion. The updated life-cycle cost projection reflects estimated cost savings of about \$4 billion that result from the ARRA funded acceleration of existing work scope. ARRA projects have also resulted in cost avoidances of approximately \$3 billion. At several sites such as Idaho National Laboratory, Oak Ridge National Laboratory, Y-12 Site, and Argonne National Laboratory excess facilities were transferred from another Departmental program for remediation or demolition. EM is using \$600 million of ARRA funding to address this “new scope” not previously in the EM program. By eliminating this future liability five to ten years earlier, these ARRA projects are estimated to save the Department \$500 million.

ARRA projects have also resulted in estimated cost avoidances of approximately \$3 billion. For example ARRA funding at Idaho, Oak Ridge, Savannah River Site, and Hanford has enabled these transuranic waste generator sites to accelerate shipments to the Waste Isolation Pilot Plant (WIPP) by many years, avoiding a schedule extension and higher operating levels, resulting in cost avoidance of \$2.5 billion at WIPP compared to what the cost would have been had the ARRA funding not been received. EM anticipates that several \$100 million worth of additional cleanup scope could be accomplished if Recovery Act projects are completed below costs and ahead of schedule without consuming management reserve and contingency funds.

Estimated cost savings and avoidances from ARRA projects have been off-set by several cost increases:

- Acceptance of \$600 million in excess facility work scope from other Departmental programs
- A cost increase of \$440 million for the Salt Waste Processing Facility at the Savannah River Site
- A cost increase of \$316 million for the Depleted Uranium Hexafluoride Facility at the Paducah Site
- An estimated increase of \$265 million for Technology Development needs.

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Table 2

**Summary of Life-cycle Cost Changes by Site
(totals rounded to nearest million)**

Site	FY 2008 Life-Cycle Cost	Other Baseline Changes (High Range)*	ARRA Savings (High Range)*	ARRA New Scope (High Range)*	FY 2010 Life-Cycle Cost	ARRA Cost Avoidance (High Range)
	\$ Millions					
Argonne National Laboratory	78 - 78	1 0 85	150 - 164	-116		
Hanford (Richland)	58,527 - 61,302	-30 -2,033 0	56,310 - 59,239	0		
Hanford (River Protection)	56,937 - 74,867	5 -82 0	56,897 - 74,790	0		
Idaho National Laboratory	26,117 - 33,031	127 -432 218	26,007 - 32,944	-110		
Los Alamos National Laboratory	2,647 - 3,593	8 0 0	2,674 - 3,601	-96		
Moab	999 - 1,042	0 -72 0	923 - 970	0		
Nevada Test Site	2,457 - 2,787	-4 -40 0	2,438 - 2,743	0		
Oak Ridge Reservation	10,061 - 10,636	102 0 271	10,410 - 11,009	-345		
Paducah Gaseous Diffusion Plant	10,759 - 17,658	299 -4 0	11,095 - 17,953	0		
Portsmouth Gaseous Diffusion Plant	9,079 - 16,073	13 -6 0	9,239 - 16,080	0		
Savannah River Site	52,880 - 63,716	426 -1,150 0	52,713 - 62,992	0		
Waste Isolation Pilot Plant	6,830 - 7,425	2 -120 0	6,712 - 7,307	-2,500		
West Valley Demonstration Project	1,849 - 2,009	0 -61 0	1,788 - 1,948	0		
Technology Development	2,807 - 2,807	265 0 0	3,073 - 3,073	0		
Other Sites	32,346 - 32,449	-109 -5 24	32,267 - 32,357	0		
EM Total	274,373 - 329,473	1,105 -4,005 597	272,696 - 327,170	-3,167		

*Appendix B shows by site the total change between 2008 and 2010 High Ranges, which is the sum of the three middle columns above.

Appendix B – Life-Cycle Costs by Project Baseline Summary

Please note that in the detailed listing in Appendix B, costs avoidances are listed for information purposes within the respective site, but are not added to the site and summary totals. For display purposes, programmatic totals for existing (legacy scope), new scope and cost avoidances are shown separately at the end of the Appendix.

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Argonne National Laboratory-East	CH-ANLE-0030	Soil and Water Remediation-Argonne National Laboratory-East	30	30	30	30	0	0	Legacy cleanup completed in 2009
Argonne National Laboratory-East	CH-ANLE-0040	Nuclear Facility D&D-Argonne National Laboratory-East	48	48	48	48	0	0	Legacy cleanup completed in 2009
Argonne National Laboratory-East	CH-ANLE-0040.NEW	New Scope	-	-	72	85	72	85	Accepted excess D&D, facility cleanout, and TRU waste scope from Office of Science with ARRA funding
Argonne National Laboratory-East	CH-ANLE-0040.NEW	Cost Avoidance	-	-	-116	-116	-	-	Cost avoidance enabled by ARRA funded acceleration of work scope not part of EM's original portfolio
Argonne National Laboratory-East Total	Total Cost		78	78	150	164	72	86	
Brookhaven National Laboratory	BRNL-0030	Soil and Water Remediation-Brookhaven National Laboratory	266	266	267	267	0	0	
Brookhaven National Laboratory	BRNL-0040	Nuclear Facility D&D-Brookhaven Graphite Research Reactor	110	123	113	123	3	0	Revised cost estimate as a result of D&D lessons learned
Brookhaven National Laboratory	BRNL-0041	Nuclear Facility D&D-High Flux Beam Reactor	50	78	67	81	18	3	Revised cost estimate as a result of D&D lessons learned
Brookhaven National Laboratory	BRNL-0041.NEW	New Scope	-	-	3	4	3	4	Accepted excess Office of Science facility for remediation of soil and debris

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Brookhaven National Laboratory	BRNL-0100	Brookhaven Community and Regulatory Support	3	3	3	3	0	0	
Brookhaven National Laboratory Total	Total Cost		429	470	453	477	24	7	
Energy Technology Engineering Center	CBC-ETEC- 0040	Nuclear Facility D&D-Energy Technology Engineering Center	280	326	342	393	62	67	Regulatory- driven additional characterization requirements
Energy Technology Engineering Center Total	Total Cost		280	326	342	393	62	67	
Fernald Total	Total Cost		3,561	3,561	3,463	3,463	-98	-98	Legacy cleanup completed in 2006
Hanford Site	HQ-SNF- 0012X-RL	SNF Stabilization and Disposition- Storage Operations Awaiting Geologic Repository	3	3	3	3	0	0	
Hanford Site	RL-0011	NM Stabilization and Disposition- PFP	3,454	3,484	3,152	3,253	-302	-231	ARRA cost savings attributable to acceleration of PFP D&D
Hanford Site	RL-0012	SNF Stabilization and Disposition	2,974	3,002	2,974	3,002	0	0	
Hanford Site	RL-0013C	Solid Waste Stabilization & Disposition	13,840	15,148	13,486	14,797	-354	-351	ARRA cost savings attributable to acceleration of TRU waste disposition
Hanford Site	RL-0020	Safeguards and Security	3,585	3,585	3,585	3,585	0	0	
Hanford Site	RL-0030	Soil and Water Remediation- Groundwater/ Vadose Zone	8,056	8,243	7,749	7,934	-306	-309	ARRA cost savings attributable to accelerated installation of groundwater treatment and monitoring facilities

Appendix B – Life-Cycle Costs by Project Baseline Summary

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Hanford Site	RL-0040	Nuclear Facility D&D-Remainder of Hanford	19,051	20,046	18,041	19,112	-1,010	-934	ARRA cost savings attributable to acceleration of D&D of U Plant and Outer Zone facilities in Central Plateau
Hanford Site	RL-0041	Nuclear Facility D&D-River Corridor Closure Project	4,900	5,059	4,660	4,824	-241	-235	ARRA cost savings attributable to acceleration of D&D and remediation activities at River Corridor area
Hanford Site	RL-0042	Nuclear Facility D&D-Fast Flux Test Facility Project	1,247	1,316	1,247	1,317	0	1	
Hanford Site	RL-0043	HAMMER Facility	7	7	7	7	0	0	
Hanford Site	RL-0044	B-Reactor Museum	1	1	2	2	1	1	
Hanford Site	RL-0080	Operate Waste Disposal Facility	70	70	70	70	0	0	
Hanford Site	RL-0100	Richland Community and Regulatory Support	1,208	1,208	1,204	1,204	-4	-4	
Hanford Site	RL-0900	Pre-2004 Completions	130	130	129	129	-1	-1	
Hanford Site Total	Total Cost		58,527	61,302	56,310	59,239	-2,217	-2,063	
HQ, Completed Sites, Other Total⁷	Total Cost		16,043	16,043	16,031	16,031	-12	-12	Difference between planned and actual costs
Idaho National Laboratory	CH-ANLW- 0030	Soil and Water Remediation- Argonne National Laboratory-West	8	8	8	8	0	0	
Idaho National Laboratory	HQ-SNF- 0012X	SNF Stabilization and Disposition- Storage Operations Awaiting Geologic Repository	60	60	60	60	0	0	

⁷ In prior report, completed site activities categorized under Headquarters for display purposes.

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Idaho National Laboratory	HQ-SNF-0012X-ID	SNF Stabilization and Disposition-Storage Operations Awaiting Geologic Repository	19	19	19	19	0	0	
Idaho National Laboratory	HQ-SNF-0012Y	SNF Stabilization and Disposition-New/Upgraded Facilities Awaiting Geologic Repository	67	67	67	67	0	0	
Idaho National Laboratory	ID-0011	NM Stabilization and Disposition	19	43	19	43	0	0	
Idaho National Laboratory	ID-0012B-D	SNF Stabilization and Disposition-2012 (Defense)	522	681	522	681	0	0	
Idaho National Laboratory	ID-0012B-N	SNF Stabilization and Disposition-2012 (Non-Defense)	9	9	24	24	15	15	
Idaho National Laboratory	ID-0012C	SNF Stabilization and Disposition-2035	4,401	5,358	4,401	5,358	0	0	
Idaho National Laboratory	ID-0013	Solid Waste Stabilization and Disposition	3,217	3,923	3,214	3,918	-3	-5	ARRA cost savings attributable to CH TRU and solid waste acceleration
Idaho National Laboratory	ID-0013.NEW	New Scope	-	-	86	100	86	100	Accepted RH TRU for disposition from NE
Idaho National Laboratory	ID-0013.NEW	Cost Avoidance	-	-	-30	-30	-	-	Cost avoidance enabled by ARRA funded acceleration of RH TRU work scope not part of EM's original portfolio
Idaho National Laboratory	ID-0014B	Radioactive Liquid Tank Waste Stabilization and Disposition-2012	1,733	2,100	1,841	2,211	108	111	Revised cost estimate for Sodium Bearing Waste Treatment Facility

Appendix B – Life-Cycle Costs by Project Baseline Summary

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Idaho National Laboratory	ID-0014B-T	Radioactive Liquid Tank Waste Stabilization and Disposition-2012 (T)	65	65	71	71	6	6	
Idaho National Laboratory	ID-0014C	Radioactive Liquid Tank Waste Stabilization and Disposition-2035	6,715	9,486	6,702	9,486	-13	0	
Idaho National Laboratory	ID-0030B	Soil and Water Remediation-2012	1,547	1,619	1,574	1,676	28	57	Cost increase reflects acceleration of buried waste scope
Idaho National Laboratory	ID-0030C	Soil and Water Remediation-2035	4,454	6,118	4,373	6,029	-81	-90	ARRA cost savings due to acceleration of buried waste scope
Idaho National Laboratory	ID-0040B	Nuclear Facility D&D-2012	831	837	717	722	-114	-115	ARRA cost savings reflect acceleration of D&D of CPP nuclear/ radioactive facilities
Idaho National Laboratory	ID-0040B.NEW	New Scope	-	-	115	118	115	118	Accelerated D&D of TRA, PBF, and MFC facilities transferred from NE
Idaho National Laboratory	ID-0040B.NEW	Cost Avoidance	-	-	-80	-80	-	-	Cost avoidance enabled by ARRA funded acceleration of D&D work scope not part of EM's original portfolio
Idaho National Laboratory	ID-0040C	Nuclear Facility D&D-2035	1,783	1,968	1,564	1,721	-219	-246	ARRA cost savings due to acceleration of facility D&D
Idaho National Laboratory	ID-0050B	Non-Nuclear Facility D&D-2012	147	147	109	109	-38	-38	ARRA cost savings due to acceleration of facility D&D
Idaho National Laboratory	ID-0050C	Non-Nuclear Facility D&D-2035	0	0	0	0	0	0	

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Idaho National Laboratory	ID-0100	Idaho Community and Regulatory Support	212	212	212	212	0	0	
Idaho National Laboratory	ID-0900	Pre-2004 Completions	310	310	310	310	0	0	
Idaho National Laboratory Total	Total Cost		26,117	33,031	26,007	32,944	-110	-87	
Inhalation Toxicology Laboratory Total	Total Cost		10	10	11	11	1	1	
Lawrence Livermore National Laboratory	VL-LLNL-0013	Solid Waste Stabilization and Disposition- Lawrence Livermore National Laboratory	72	72	72	72	0	0	
Lawrence Livermore National Laboratory	VL-LLNL-0030	Soil and Water Remediation- Lawrence Livermore National Laboratory - Main Site	134	134	136	136	2	2	
Lawrence Livermore National Laboratory	VL-LLNL-0031	Soil and Water Remediation- Lawrence Livermore National Laboratory - Site 300	122	122	122	122	0	0	
Lawrence Livermore National Laboratory Total	Total Cost		328	328	330	330	2	2	
Los Alamos National Laboratory	VL-LANL-0013	Solid Waste Stabilization and Disposition-LANL Legacy	801	850	801	850	0	0	
Los Alamos National Laboratory	VL-LANL-0030	Soil and Water Remediation- LANL	1,630	2,489	1,648	2,489	18	0	Revised cost estimate due to regulatory-driven increase in number of groundwater wells

Appendix B – Life-Cycle Costs by Project Baseline Summary

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Los Alamos National Laboratory	VL-LANL-0030	Cost Avoidance	-	-	-61	-61	-	-	Additional ARRA funding allows EM to avoid cost impacts of schedule delay that would have otherwise occurred
Los Alamos National Laboratory	VL-LANL-0040-D	Nuclear Facility D&D-LANL (Defense)	198	237	206	241	8	4	Increased cost estimate due to change in disposal plan to include shipment of waste off site
Los Alamos National Laboratory	VL-LANL-0040-D	Cost Avoidance	-	-	-29	-29	-	-	Additional ARRA funding allows EM to avoid cost impacts of schedule delay that would have otherwise occurred
Los Alamos National Laboratory	VL-LANL-0040-N	Nuclear Facility D&D-LANL (Non-Defense)	17	17	19	21	2	4	Revised cost estimate due to greater quantities of contaminated soil than expected
Los Alamos National Laboratory	VL-LANL-0040-N	Cost Avoidance	-	-	-6	-6	-	-	Additional ARRA funding allows EM to avoid cost impacts of schedule delay that would have otherwise occurred
Los Alamos National Laboratory Total	Total Cost		2,647	3,593	2,674	3,601	27	8	
Miamisburg	OH-MB-0031.NEW	New Scope	-	-	16	20	16	20	New scope associated with further remediation of OU-1
Miamisburg Total	Total Cost		1,884	1,884	1,961	1,965	77	81	Congressionally directed work scope

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Moab	CBC-MOAB-0031	Soil and Water Remediation-Moab	999	1,042	923	970	-76	-72	
Moab Total	Total Cost		999	1,042	923	970	-76	-72	ARRA savings attributable to accelerated mill tailings removal
Nevada Test Site	VL-NV-0013	Solid Waste Stabilization and Disposition-Nevada Test Site	98	109	101	112	3	3	
Nevada Test Site	VL-NV-0030	Soil and Water Remediation-Nevada Test Site	1,684	1,976	1,659	1,925	-25	-50	ARRA cost savings due to acceleration of soil and groundwater and D&D activities
Nevada Test Site	VL-NV-0080	Operate Waste Disposal Facility-Nevada	570	597	570	597	0	0	
Nevada Test Site	VL-NV-0100	Nevada Community and Regulatory Support	100	100	103	103	2	2	Increase due to Congressionally Directed Projects
Nevada Test Site	VL-SV-0100	South Valley Superfund	5	5	6	6	1	1	
Nevada Test Site Total	Total Cost		2,457	2,787	2,438	2,743	-19	-44	
Oak Ridge Reservation	HQ-SW-0013X-OR	Solid Waste Stabilization and Disposition-Science Current Generation	143	143	143	143	0	0	
Oak Ridge Reservation	OR-0011Y	NM Stabilization and Disposition-ETTP Uranium Facilities Management	52	52	52	52	0	0	
Oak Ridge Reservation	OR-0011Z	Downblend of U-233 in Building 3019	361	385	361	385	0	0	
Oak Ridge Reservation	OR-0013A	Solid Waste Stabilization and Disposition-2006	465	465	465	465	0	0	

Appendix B – Life-Cycle Costs by Project Baseline Summary

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Oak Ridge Reservation	OR-0013B	Solid Waste Stabilization and Disposition-2012	1,664	1,757	1,656	1,733	-8	-23	ARRA cost savings attributable to acceleration of TRU and solid waste activities
Oak Ridge Reservation	OR-0013B	Cost Avoidance	-	-	-13	-13	-	-	Additional ARRA funding allows EM to avoid cost impacts of schedule delay that would have otherwise occurred
Oak Ridge Reservation	OR-0020	Safeguards and Security	283	290	283	290	0	0	
Oak Ridge Reservation	OR-0030	Soil and Water Remediation- Melton Valley	350	350	351	351	1	1	Cost increase of less than \$1M due to difference between planned and actual cost
Oak Ridge Reservation	OR-0031	Soil and Water Remediation- Offsites	62	63	62	63	0	0	
Oak Ridge Reservation	OR-0040	Nuclear Facility D&D-East Tennessee Technology Park (D&D Fund)	3,070	3,250	3,123	3,303	53	53	Revised cost estimate due to lessons learned from K-25 D&D
Oak Ridge Reservation	OR-0041	Nuclear Facility D&D-Y-12	1,049	1,184	1,069	1,206	20	22	Extent of contamination was greater than previously estimated
Oak Ridge Reservation	OR-0041	Cost Avoidance	-	-	-41	-41	-	-	Additional ARRA funding allows EM to avoid cost impacts of schedule delay that would have otherwise occurred
Oak Ridge Reservation	OR- 0041.NEW	New Scope	-	-	176	192	176	192	New scope transferred to EM from NNSA for D&D of excess facilities

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Oak Ridge Reservation	OR-0041.NEW	Cost Avoidance	-	-	-228	-228	-	-	Cost avoidance enabled by ARRA funded acceleration of NNSA D&D work scope not part of EM's original portfolio
Oak Ridge Reservation	OR-0042	Nuclear Facility D&D-Oak Ridge National Laboratory	1,199	1,323	1,239	1,370	39	48	Extent of contamination was greater than previously estimated
Oak Ridge Reservation	OR-0042	Cost Avoidance	-	-	-63	-63	-	-	Additional ARRA funding allows EM to avoid cost impacts of schedule delay that would have otherwise occurred
Oak Ridge Reservation	OR-0042.NEW	New Scope	-	-	64	79	64	79	New scope transferred to EM from SC for D&D of excess facilities
Oak Ridge Reservation	OR-0043	Nuclear Facility D&D-East Tennessee Technology Park (Defense)	129	131	129	131	0	0	
Oak Ridge Reservation	OR-0100	Oak Ridge Reservation Community & Regulatory Support (Defense)	146	148	146	148	0	-1	
Oak Ridge Reservation	OR-0101	Oak Ridge Contract/Post-Closure Liabilities/ Administration	105	105	105	105	0	0	
Oak Ridge Reservation	OR-0102	East Tennessee Technology Park Contract/Post-Closure Liabilities/ Administration	305	312	309	315	4	3	Higher than projected pension payments in FY 2009

Appendix B – Life-Cycle Costs by Project Baseline Summary

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Oak Ridge Reservation	OR-0103	Oak Ridge Reservation Community & Regulatory Support (D&D Fund)	44	44	44	44	0	0	
Oak Ridge Reservation	OR-0900-D	Pre-2004 Completions (Defense)	17	17	17	17	0	0	
Oak Ridge Reservation	OR-0900-N	Pre-2004 Completions (Non-Defense)	617	617	617	617	0	0	
Oak Ridge Reservation Total	Total Cost		10,061	10,636	10,410	11,009	349	373	
Paducah Gaseous Diffusion Plant	GDP D&D		5,800	12,500	5,800	12,500	0	0	
Paducah Gaseous Diffusion Plant	PA-0011	NM Stabilization and Disposition- Paducah Uranium Facilities Management	60	60	60	62	0	2	
Paducah Gaseous Diffusion Plant	PA-0011X	NM Stabilization and Disposition- Depleted Uranium Hexafluoride Conversion	1,425	1,425	1,741	1,741	316	316	Revised cost estimate for DUF6 Plant
Paducah Gaseous Diffusion Plant	PA-0013	Solid Waste Stabilization and Disposition	329	411	331	354	2	-57	
Paducah Gaseous Diffusion Plant	PA-0020	Safeguards and Security	898	898	898	898	0	0	
Paducah Gaseous Diffusion Plant	PA-0040	Nuclear Facility D&D-Paducah	2,065	2,182	2,086	2,214	21	32	Cost increase reflects addition of a portion of post-2019 GDP D&D scope to the EM baseline – this acceleration will reduce cost of post-2019 GDP D&D work
Paducah Gaseous Diffusion Plant	PA-0100	Paducah Community and Regulatory Support (Non-Defense)	11	11	11	11	0	0	

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Paducah Gaseous Diffusion Plant	PA-0102	Paducah Contract/Post-Closure Liabilities/Administration (D&D Fund)	45	45	42	47	-3	2	Revised cost estimate for PBS to better reflect scope and requirements
Paducah Gaseous Diffusion Plant	PA-0103	Paducah Community and Regulatory Support (D&D Fund)	126	126	126	126	0	0	
Paducah Gaseous Diffusion Plant Total	Total Cost		10,759	17,658	11,095	17,953	337	295	
Pantex Plant Total	Total Cost		193	193	196	196	3	3	Reflects additional costs associated with site closure in 2009
Portsmouth Gaseous Diffusion Plant	PO-0011	NM Stabilization and Disposition-Portsmouth Uranium Facilities Management	131	131	101	101	-30	-30	Scope transferred to PO-0013 due to determination that material associated with PO-0011 will be disposed as waste, rather than recycled
Portsmouth Gaseous Diffusion Plant	PO-0011X	NM Stabilization and Disposition-Depleted Uranium Hexafluoride Conversion	1,460	1,460	1,482	1,482	22	22	Revised cost estimate for DUF6 Plant
Portsmouth Gaseous Diffusion Plant	PO-0013	Solid Waste Stabilization and Disposition	496	497	525	527	28	30	Scope transferred from PO-0011 due to determination that material associated with PO-0011 will be disposed as waste, rather than recycled
Portsmouth Gaseous Diffusion Plant	PO-0020	Safeguards and Security	739	739	736	736	-3	-3	

Appendix B – Life-Cycle Costs by Project Baseline Summary

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Portsmouth Gaseous Diffusion Plant	PO-0040	Nuclear Facility D&D-Portsmouth	5,747	12,740	5,895	12,733	148	-7	Life Cycle Cost (low) revised based on External Independent Review of project baseline
Portsmouth Gaseous Diffusion Plant	PO-0041	Nuclear Facility D&D-Portsmouth GCEP	66	66	66	66	0	0	
Portsmouth Gaseous Diffusion Plant	PO-0101	Portsmouth Cold Standby	379	379	372	372	-7	-7	
Portsmouth Gaseous Diffusion Plant	PO-0103	Portsmouth Contract/Post-Closure Liabilities/Administration (D&D Fund)	41	41	41	41	0	0	
Portsmouth Gaseous Diffusion Plant	PO-0104	Portsmouth Community and Regulatory Support (D&D Fund)	19	19	21	21	1	1	Cost increase reflects establishment of a Site Specific Advisory Board in late FY 2008
Portsmouth Gaseous Diffusion Plant Total	Total Cost		9,079	16,073	9,239	16,080	159	7	
River Protection	HQ-HLW-0014X-RV	Radioactive Liquid Tank Waste Stabilization and Disposition-Storage Operations Awaiting Geologic Rep	122	122	122	122	0	0	
River Protection	ORP-0014	Radioactive Liquid Tank Waste Stabilization and Disposition	44,117	62,047	44,076	61,971	-41	-76	ARRA cost savings due to acceleration of tank farm infrastructure upgrades
River Protection	ORP-0060	Major Construction-Waste Treatment Plant	12,263	12,263	12,263	12,263	0	0	

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
River Protection	ORP-0061	Pre-Waste Treatment Plan, Transition Activity	433	433	433	433	0	0	
River Protection	ORP-0100	Office of River Protection Community and Regulatory Support	1	1	1	1	0	0	
River Protection Total	Total Cost		56,937	74,867	56,897	74,790	-41	-77	
Rocky Flats Environmental Technology Site Total	Total Cost		9,116	9,116	9,047	9,047	-68	-68	Difference between planned and actual costs
Sandia National Laboratory	VL-SN-0030	Soil and Water Remediation-Sandia	235	236	235	236	0	0	
Sandia National Laboratory Total	Total Cost		235	236	235	236	0	0	
Savannah River Site	HQ-SNF-0012X-SR	SNF Stabilization and Disposition-Storage Operations Awaiting Geologic Repository	68	68	68	68	0	0	
Savannah River Site	SR-0011A	NM Stabilization and Disposition-2006	134	134	134	134	0	0	
Savannah River Site	SR-0011B	NM Stabilization and Disposition-2012	3,790	3,790	3,756	3,756	-35	-35	
Savannah River Site	SR-0011C	NM Stabilization and Disposition-2035	7,376	8,006	7,203	7,833	-173	-173	ARRA cost savings due to supporting acceleration of TRU waste in H-Area
Savannah River Site	SR-0012	SNF Stabilization and Disposition	1,049	1,071	1,049	1,071	0	0	
Savannah River Site	SR-0013	Solid Waste Stabilization and Disposition	4,281	4,725	3,753	4,002	-529	-723	ARRA cost savings due to accelerated TRU and solid waste activities

Appendix B – Life-Cycle Costs by Project Baseline Summary

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Savannah River Site	SR-0014C	Radioactive Liquid Tank Waste Stabilization and Disposition-2035	21,896	30,388	22,336	30,828	440	440	Revised cost estimate for SWPF
Savannah River Site	SR-0014C-T	Radioactive Liquid Tank Waste Stabilization and Disposition-2035 (T)	138	138	138	138	0	0	
Savannah River Site	SR-0020	Safeguards and Security	3,601	3,601	3,614	3,614	12	12	Corrects estimate to include uncosted carryover for approved DBT workscope
Savannah River Site	SR-0030	Area Completion	4,037	4,524	4,427	4,802	390	278	Transfer of P&R area D&D scope from SR-0040. Overall D&D cost savings attributable to ARRA acceleration of D&D work
Savannah River Site	SR-0040	Nuclear Facility D&D	5,639	6,400	5,355	5,865	-284	-535	Transfer of P&R area D&D scope to SR-0030. Overall D&D cost savings attributable to ARRA acceleration of D&D work
Savannah River Site	SR-0040B	Nuclear Facility D&D-2012	1	1	1	1	0	0	
Savannah River Site	SR-0100	Non-Closure Mission Support	351	351	345	345	-6	-6	
Savannah River Site	SR-0101	Savannah River Community and Regulatory Support	321	321	338	338	17	17	Higher than projected costs in FY 2008 and FY 2009 for increased PILT payments and transfer of scope from Mission Support PBS

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Savannah River Site	SR-0900	Pre-2004 Completions	198	198	198	198	0	0	
Savannah River Site Total	Total Cost		52,880	63,716	52,713	62,992	-166	-724	
Separations Process Unit	VL-SPRU-0040	Nuclear Facility D&D-Separations Process Research Unit	222	222	147	155	-75	-67	Reflects recently approved SPRU baseline and ARRA cost savings due to acceleration of D&D work, soil remediation, and waste disposal
Separations Process Unit Total	Total Cost		222	222	147	155	-75	-67	
Stanford Linear Accelerator Center	CBC-SLAC-0030	Soil and Water Remediation-Stanford Linear Accelerator Center	46	62	52	52	6	-10	Reflects updated cost range and ARRA cost savings attributable to accelerated soil remediation and waste disposal
Stanford Linear Accelerator Center Total	Total Cost		46	62	52	52	6	-10	
Technology Development⁸	Total Cost		2,807	2,807	3,073	3,073	265	265	\$265M increase in estimated technology development needs
Waste Isolation Pilot Plant	CB-0020	Safeguards and Security	192	192	192	192	0	0	
Waste Isolation Pilot Plant	CB-0080	Operate Waste Disposal Facility-WIPP	4,918	5,363	4,882	5,328	-35	-35	ARRA cost savings attributable to accelerated infrastructure modifications

⁸ In previous report, Technology Development costs were included in the "Headquarters" category.

Appendix B – Life-Cycle Costs by Project Baseline Summary

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
Waste Isolation Pilot Plant	CB-0081	Central Characterization Project	500	570	458	528	-42	-42	ARRA cost savings attributable to accelerated certification effort
Waste Isolation Pilot Plant	CB-0090	Transportation-WIPP	944	1,024	901	981	-43	-43	ARRA cost savings attributable to accelerated TRU shipment
Waste Isolation Pilot Plant	CB-0100	US/Mexico/Border/Material Partnership Initiative	11	11	11	11	0	0	
Waste Isolation Pilot Plant	CB-0101	Economic Assistance to the State of New Mexico	259	259	260	260	1	1	Cost increase of less than \$1M due to difference between planned and actual cost
Waste Isolation Pilot Plant	CB-0900	Pre-2004 Completions	7	7	7	7	0	0	
Waste Isolation Pilot Plant (National TRU Program)	Various	Cost Avoidance	-	-	-2,500	-2,500	-	-	ARRA accelerates completion of the legacy waste disposal by 10 years and the over-all completion date by 5 years. This offsets an anticipated increase in WIPP operating schedule due to schedule delays at TRU generator sites
Waste Isolation Pilot Plant Total	Total Cost		6,830	7,425	6,712	7,307	-118	-118	
West Valley Demonstration Project	OH-WV-0012	SNF Stabilization and Disposition-West Valley	32	32	32	32	0	0	

Report to Congress -

Updated Appendices to the Status of Environmental Management Initiatives to Accelerate the Reduction of Environmental Risks and Challenges Posed by the Legacy of the Cold War

Appendix B EM Life-Cycle Cost by Project Baseline Summary Dollars in Millions (totals rounded to nearest million)									
Site	PBS Number	PBS Name	FY 2008 Life-Cycle Cost (Low)	FY 2008 Life-Cycle Cost (High)	FY 2010 Life-Cycle Cost (Low)	FY 2010 Life-Cycle Cost (High)	Life-Cycle Cost Difference (Low)	Life-Cycle Cost Difference (High)	Explanation of Life-Cycle Cost Difference
West Valley Demonstration Project	OH-WV-0013	Nuclear Facility D&D West Valley	349	377	279	308	-70	-70	ARRA cost savings attributable to accelerated TRU waste disposition
West Valley Demonstration Project	OH-WV-0014	Radioactive Liquid Tank Waste Stabilization and Disposition-West Valley High-Level Waste Storage	366	407	167	208	-199	-199	Transfer of D&D scope to OH-WV-0040
West Valley Demonstration Project	OH-WV-0020	Safeguards and Security-West Valley	46	46	52	52	6	6	Increase of \$5M due to escalating FY19-FY40, which was not in previous estimate; \$1M for Cyber Security Plan and for new security guard contractor
West Valley Demonstration Project	OH-WV-0040	Nuclear Facility D&D-West Valley	1,056	1,147	1,258	1,349	202	202	Transfer of D&D scope from OH- WV-0014
West Valley Demonstration Project Total	Total Cost		1,849	2,009	1,788	1,948	-61	-61	
EM Total	EM Total, Legacy Scope		274,373	329,473	272,164	326,573	-2,209	-2,900	
	EM Total, New Scope		-	-	532	597	532	597	
	EM Total, New plus Legacy Scope		274,373	329,473	272,696	327,170	-1,677	-2,303	
	EM Total, Cost Avoidance		-	-	-3,167	-3,167	-	-	

Report to Congress

Updated Appendices to the Status of Environmental Management Initiatives

to Accelerate the Reduction of Environmental Risks
and Challenges Posed by the Legacy of the Cold War

June 2010

DOE/EM-0005



U.S. DEPARTMENT OF
ENERGY

Office of Environmental Management
1000 Independence Avenue, SW
Washington, DC 20585
(202) 586-5000
E-mail: EM-40CustomerServiceDesk@em.doe.gov