Office of Environmental Management

PSRP Name: The Office of Environmental Management (EM) Defense Environmental Cleanup		
PSRP Lead Program Office and/or Laboratory/Site Office: The Office of Environmental Management		
PSRP Lead Manager: Cynthia Anderson, Recovery Act Program Manager		
phone: (202) 586-2083	email: Cynthia.anderson@em.doe.gov	address: 1000 Independence Ave., SW Washington, DC 20585

1. Objectives

Program Purpose

The Department of Energy (DOE) Office of Environmental Management (EM) program defense funding is used for the environmental cleanup of multiple sites across the country that comprise the former nuclear weapons complex. The applicable sites are as follows: Hanford Site, Washington State (managed through the Richland Operations Office and the Office of River Protection); Savannah River Site, South Carolina; Idaho National Laboratory, Idaho; Oak Ridge National Laboratory and Y-12, Tennessee; Los Alamos National Laboratory and the Waste Isolation Pilot Plant (WIPP), managed through the Carlsbad Field Office in New Mexico; Nevada Test Site, Nevada; the Separations Process Research Unit, New York; and Mound Site, Ohio.

EM defense-funded Recovery Act work will accelerate completion of existing environmental protection and site cleanup goals, including decontamination and decommissioning (D&D) excess nuclear facilities and disposal of radioactive waste from the EM sites, in many cases much earlier than originally planned. In addition, this work will reduce environmental threats to areas surrounding the sites. Recovery Act funded work will produce a significant number of jobs both directly and indirectly.

Public Benefits

Public benefits resulting from Recovery Act funding range from job creation, to cost savings over the life-cycle of the EM program, to enhanced environmental protection due to the cleanup and closure of the EM sites from the former nuclear weapons complex. High-risk facilities, such as nuclear reactors and other structures, will be deactivated and demolished reducing potential safety and health risks.

Recovery Act funding will be used by EM site contractors to accelerate cleanup of the former weapons complex and nuclear research facilities. The site contractors and subcontractors will hire workers to perform the additional soil and groundwater remediation, decontamination and decommissioning, and waste processing activities. Types of jobs created include well drillers, soil excavation personnel, construction and demolition personnel, waste processors and handlers, railroad train crews and waste truck drivers. The additional jobs are expected to extend through the entire period of Recovery Act activities in EM (through September 30, 2011).

2. Projects and Activities
Kinds and Scope of Projects and Activities to be Performed

EM has demonstrated success in transuranic and solid waste disposition, soil and groundwater remediation, and facility decontamination and decommissioning. EM will effectively spend the $6 billion in Recovery Act funding because these cleanup activities are associated with:

- Proven technologies—on-the-shelf plans and projects ready to be implemented
- Regulatory infrastructure in place—established regulatory framework with regulator and community support
- Acquisition structure in place—flexible contract vehicles allow quick expansion of environmental cleanup workforces
- Project Management structure in place—ability to track and measure performance

EM has identified opportunities at 11 sites in 8 states that meet Recovery Act principles.

The Hanford Site, Richland Operations Office will use Recovery Act funds to demolish nuclear and support facilities, remediate waste sites, remediate contaminated groundwater, and retrieve solid waste from burial grounds. Accelerated cleanup of facilities, waste sites, and groundwater along the Columbia River will take place to support shrinking the active area of cleanup at the 586-square-mile Hanford Site to 75 square miles or less by 2015, more than five years ahead of the current schedule. Also, waste retrieval from the burial grounds will be accelerated by at least six years.

The Office of River Protection will use Recovery Act funds to accelerate the design and construction of the infrastructure and systems to transfer radioactive liquid waste from aging underground tanks to a waste treatment facility for immobilization and disposal beginning in 2019. Designs for the High-Level Waste Canister Storage and Effluent Treatment facilities will be accelerated. The Effluent Treatment Facility and an analytical laboratory will be upgraded to continue waste volume reduction operations and support continued retrieval of waste from aging single-shell tanks. Single-shell tank integrity programs will ensure safe storage of waste in the interim until it can be processed.

The Savannah River Site (SRS) Recovery Act funds will accelerate decommissioning of nuclear facilities and contaminated areas throughout the site, including in-situ decommissioning of two nuclear materials production reactors. Recovery Act work also includes shipping more than 4,500 cubic meters of waste out of South Carolina and will reduce the site's industrial area by 40 percent, or 79,000 acres, by September 2011. The Recovery Act funds will accelerate transuranic (TRU) waste packaged for disposal at the WIPP by five years from 2016. The decommissioning of the four nuclear facilities will also be accelerated by at least five years.

The Idaho National Laboratory (INL) Recovery Act funds will be used to accelerate demolition of 88 excess nuclear and radiological facilities resulting in a footprint reduction of more than 800,000 square feet. Targeted waste will be retrieved per the 1995 Settlement Agreement with the State of Idaho and shipment of waste off-site for disposal will be accelerated. Targeted waste

retrieval is accelerated by three to four years with the Recovery Act funding and demolition of the excess nuclear and radiological facilities will be accelerated by two to four years.

The Oak Ridge Recovery Act funds will be provided to the Oak Ridge National Laboratory (ORNL) and Y-12 sites to accelerate demolition of highest risk surplus contaminated facilities and remediate the most significant source of mercury contamination to surface water, demolish surplus contaminated facilities and perform soil remediation, and accelerate remote-handled (RH) and contact-handled (CH) transuranic (TRU) waste treatment to complete the treatment and disposition of the waste. Legacy TRU waste disposition is accelerated at least one year. The facilities demolished under the Recovery Act were scheduled for demolition two to fifteen years later.

At Los Alamos National Laboratory (LANL), 35 buildings and structures across the complex will be demolished, reducing the LANL footprint by more than 150,000 square feet.

ARRA funding to the Carlsbad Field Office will accelerate legacy TRU waste characterization and shipment preparation as well as increase TRU shipments to the Waste Isolation Pilot Plant (WIPP) repository from one large quantity site (SRS) and several small quantity sites including, Bettis Atomic Power Laboratory (Pennsylvania); General Electric Vallecitos Nuclear Center, Lawrence Berkeley National Laboratory, and Lawrence Livermore National Laboratory (California); Argonne National Laboratory (Illinois); Nevada Test Site (Nevada); and Sandia National Laboratories (New Mexico). Also, transuranic waste shipments will be accelerated from four other large quantity sites to WIPP (i.e., Hanford, INL, LANL, and ORNL).

At three locations within the Nevada Test Site, soil will be analyzed to identify its composite waste characteristics and groundwater monitoring wells will be installed to provide additional data on groundwater contamination to support future cleanup work. Three major facilities and two smaller structures will be decontaminated and demolished.

At the Separations Process Research Unit (SPRU) facility in New York, cleanup activities at the North Field Land Area include removing contaminated soil for offsite disposal, performing sampling to confirm cleanup results, and regrading and reseeding the area. Funding will also be used to D&D two nuclear facilities at Knolls Atomic Power Laboratory.

At the Mound Site (Ohio), ARRA funds will be used for remediation of Operable Unit 1 (historic landfill).

The following table lists the amount of funding by project and presents associated activities:

Site	Project	Funding	Activity Categories
Hanford	Hanford Central Plateau D&D Recovery Act Project	$740,120,000	Accelerate and complete decontamination and decommissioning (D&D) of additional facilities located in the Central Plateau
	Hanford River Corridor D&D Recovery Act Project	$442,265,000	Accelerate D&D of facilities in the River Corridor

Site	Project	Funding	Activity Categories
	Hanford River Corridor Soil and Groundwater Recovery Act Project	$77,815,000	Complete construction of additional groundwater remediation systems
	Hanford TRU Waste Recovery Act Project	$228,520,000	Accelerate certification and shipment of remote handled transuranic waste (RH-TRU) Accelerate retrieval and repackaging of contact handled transuranic waste (CH-TRU) Complete treatment of legacy mixed low level waste (MLLW) in the 200 Area
	Hanford Central Plateau Soil and Groundwater Recovery Act Project	$145,780,000	Complete construction of additional groundwater remediation systems
	Subtotal, Hanford	$1,634,500,000	
Office of River Protection	Office of River Protection Recovery Act Project	$326,035,000	Accelerate infrastructure upgrades to support radioactive liquid tank waste operations
Savannah River Site (SRS)	SRS TRU & Solid Waste Recovery Act Project	$541,000,000	Accelerate disposition of TRU and low level waste
	SRS D&D P & R Areas Recovery Act Project	$579,000,000	Complete D&D of facilities located in the P & R Areas
	SRS D&D M & D Areas Recovery Act Project	$130,000,000	Complete D&D of facilities located in the M & D Areas
	SRS D&D, Soil & Groundwater Activities Site-wide Recovery Act Project	$365,400,000	D&D, soil remediation, and groundwater remediation of A-, C-, F-, G-, H-, K- and N-Areas
	Subtotal, Savannah River Site	$1,615,400,000	
Idaho National Laboratory (INL)	INL Recovery Act Project	$217,875,000	Accelerate and complete D&D of additional excess nuclear facilities
	INL TRU Waste Recovery Act Project	$130,000,000	Increase retrieval and processing of TRU waste Accelerate additional shipments of CH TRU waste from smaller DOE sites to the Advanced Mixed Waste Treatment Facility
	INL Soil and Groundwater Recovery Act Project	$120,000,000	Accelerate completion of waste retrievals
	Subtotal, Idaho National Laboratory	$467,875,000	
Oak Ridge	Oak Ridge Defense Y-12 D&D Recovery Act Project	$327,000,000	Prepare the highest risk excess facility at Y-12 (Alpha-5) for accelerated D&D
	Oak Ridge Defense ORNL D&D Recovery Act Project	$151,110,000	Demolish surplus contaminated facilities at the Oak Ridge National Laboratory (ORNL) and perform soil remediation
	Oak Ridge Defense TRU Waste Recovery Act Project	$80,000,000	Process CH-TRU and RH-TRU at an accelerated rate
	Subtotal, Oak Ridge	$558,110,000	
Los Alamos	D&D Acceleration	$118,200,000	Accelerate D&D of additional facilities

Site	Project	Funding	Activity Categories
	Soil and Groundwater	$78,800,000	Cleanup of a major former original landfill, Material Disposal Area (MDA) B
	Subtotal, Los Alamos	$197,000,000	
Carlsbad	WIPP Recovery Act Project	$172,375,000	Increase the amount of TRU certified and shipped to the Waste Isolation Pilot Plant (WIPP)
Nevada Test Site	Nevada Recovery Act Project	$44,325,000	Remove contaminated soil from corrective action units Install groundwater monitoring wells Demolish additional facilities
Separations Process Research Unit (SPRU)	SPRU Recovery Act Project	$31,775,000	Remove contaminated soil Accelerate completion of D&D of facilities
Mound	Mound Operable Unit 1 Recovery Act Project	$19,700,000	Complete remediation of Operable Unit 1
Headquarters and Field	Program Direction	$25,635,000	Provide program direction for Recovery Act projects
Headquarters	Management Reserve	$34,270,000	Management reserve for Recovery Act projects
	TOTAL	**$5,127,000,000**	

3. Characteristics

Types of Financial Awards To Be Used

EM does not contemplate significant activity in the area of financial assistance. Some limited amount of funds provided under the Recovery Act may be awarded via financial assistance instrument. The awards will largely be limited to supplementing existing financial awards on current projects through additional task orders. The additional awards will support increased levels of activity resulting from acceleration of work.

Type of Recipient

Not applicable to the EM Defense Program.

Type of Beneficiary

Not applicable to the EM Defense Program.

4. **Major Planned Program Milestones**

Milestones for the major projects are listed below:

Milestone Type	Milestone Description	Date
Procurement	Hanford – Initiate procurement activities for River Corridor Soil and Groundwater	September 30, 2009
Execution	Hanford – Initiate remediation of 618-10 Trench	March 31, 2010
Execution	Hanford – Complete remediation of 618-10 Trench	September 30, 2011
	Hanford – Complete procurement actions for River Corridor D&D	September 30, 2009
Execution	Hanford – Complete demolition of 10 facilities at 100K Area	September 30, 2010
Execution	Hanford – Complete 10 waste sites at 100K Area	September 30, 2010
Execution	Hanford – Complete ERDF Cell 9	September 30, 2011
Execution	Hanford – Complete demolition of 20 facilities at 100K Area	September 30, 2011
Execution	Hanford – Complete 70 waste sites at 100K Area	September 30, 2011
Execution	Hanford – Initiate construction of pump and treat system for 100 D/H Areas	March 31, 2010
Execution	Hanford – Initiate construction of pump and treat system for 100 West Area operable units	March 31, 2010
Execution	Hanford – Complete construction of final remedies for groundwater in the River Corridor and Central Plateau	September 30, 2011
Execution	Hanford – Complete disposition of 4 facilities within the Central Plateau	December 31, 2009
Execution	Hanford – Complete disposition of 4 facilities within the Central Plateau	March 31, 2010
Execution	Hanford – Complete disposition of 10 facilities within the Central Plateau	December 31, 2010
Execution	Hanford – Complete disposition of 13 facilities within the Central Plateau	September 30, 2011
Execution	Hanford – Initiate retrieval of RH TRU waste	September 30, 2010
Execution	Hanford – Complete retrieval of 85% (~5,200 cubic meters) of CH TRU waste	September 30, 2011
Execution	Hanford – Complete treatment of backlog of current legacy waste (~970 cubic meters)	September 30, 2011
Execution	Hanford – Complete repackaging of 90% of CH TRU waste	September 30, 2011
Execution	Hanford – Complete retrieval of 50% of RH waste	September 30, 2011
Execution	Idaho – Exhumation/retrieval of 0.30 acres of buried waste	December 31, 2009
Execution	Idaho – Exhumation/retrieval of 0.39 acres of buried waste	March 31, 2010
Execution	Idaho – Exhumation/retrieval of 0.09 acres of buried waste	June 30, 2010
Execution	Idaho – Exhumation/retrieval of 0.09 acres of buried waste	September 30, 2010
Execution	Idaho – Exhumation/retrieval of 0.10 acres of buried waste	December 31, 2010
Execution	Idaho – Exhumation/retrieval of 0.12 acres of buried waste	March 31, 2011
Execution	Idaho – Exhumation/retrieval of 0.15 acres of buried waste	June 30, 2011
Execution	Idaho – Exhumation/retrieval of 0.53 acres of buried waste	September 30, 2011
Execution	Idaho – Ship additional 800 cubic meters of debris MLLW offsite	September 30, 2009
Execution	Idaho – Complete retrieval of an additional 1,200m3 of Transuranic Storage Area – Retrieval Area (TSA-RE) waste	September 30, 2009
Execution	Idaho – Ship additional 90m3 of organic MLLW offsite	September 30, 2009
Execution	Idaho – Ship additional 500m3 of Low Level Waste (LLW) debris	September 30, 2009

Milestone Type	Milestone Description	Date
Execution	Idaho – Treat additional 190m3 problematic waste drums	September 30, 2009
Execution	Idaho – Complete retrieval of all legacy TRU & MLLW located in TSA-RE	September 30, 2010
Execution	Idaho – Treat additional 1,000m3 of problematic waste drums at Advanced Mixed Waste Treatment Project (AMWTP)	September 30, 2010
Execution	Idaho – Disposition 40m3 of organic MLLW offsite	September 30, 2010
Execution	Idaho – Treat additional 1,500m3 of problematic waste drums at AMWTP	September 30, 2011
Execution	Idaho – Disposition 40m3 of organic MLLW offsite	September 30, 2011
Execution	Idaho – Disposition 92m3 of RH U-233 waste to Nevada Test Site (NTS)	September 30, 2011
Execution	Idaho – TRA 630 Demo Complete TRA 661 Demo Complete TRA 632 Regulatory Documents Complete CPP 602 Regulatory Documents Complete Voluntary Consent Order (VCO) lines under Hot Cell Regulatory Documents Complete	September 30, 2009
Execution	Idaho – MTR Building Interior Demo Complete TRA 604 Demo Complete TRA 610 Interior Demo Complete	December 31, 2009
Execution	Idaho – TRA 610 Exterior Demo Complete MTR Exterior Demo Complete	May 31, 2010
Planning	Idaho – Complete EBR II Readiness Assessment	July 31, 2010
Execution	CPP 601 Exterior demo complete	July 31, 2010
Execution	Idaho – TRA 632 Characterization Complete VCO Lines under Hot Cell Characterization Complete CPP 602 Characterization Complete	December 31, 2010
Execution	Idaho – TRA 632 Interior Demo Complete VCO Lines under Hot Cell Demo Complete CPP 602 Interior Demo Complete	May 31, 2011
Execution	Idaho – CPP 601/640 Fuel Reprocessing Demo Ready	July 31, 2011
Execution	Idaho – CPP 601 final D&D Complete TRA 610 Demo Complete TRA 632 Exterior Demo Complete VCO Lines under Hot Cell Complete CPP 602 Exterior Demo Complete	September 30, 2011
Execution	Oak Ridge – Complete demolition and disposal of 3026 Wooden Superstructure.	September 30, 2010
Execution	Oak Ridge – Complete removal and disposal of 320 cubic meters contaminated soils.	September 30, 2011
Execution	Oak Ridge – Complete footprint reduction by 213,000 square feet.	September 30, 2011
Execution	Oak Ridge – Complete capping of 7 acres of solid waste burial grounds.	September 30, 2011
Execution	Oak Ridge – Complete removal and disposal of legacy materials from ~8,000 square feet.	September 30, 2011
Execution	Oak Ridge – Expand EMWMF disposal facility by ~500,000 cubic years	September 30, 2010

Milestone Type	Milestone Description	Date
Execution	Oak Ridge - Complete removal and disposal of legacy materials from ~700,000 square feet.	September 30, 2011
Execution	Oak Ridge – Complete removal and disposal of 31,000 cubic yards of scrap.	September 30, 2011
Execution	Oak Ridge – Complete expansion of sanitary landfill.	September 30, 2011
Planning	Oak Ridge – Transuranic Waste Processing - Hire 2nd operating shift personnel and initiate training	June 30, 2009
Planning	Oak Ridge – Transuranic Waste Processing - 2nd shift operations begin	September 30, 2009
Planning	Oak Ridge – Transuranic Waste Processing - Hire 3rd operating shift personnel and initiate training	December 31, 2009
Planning	Oak Ridge – Transuranic Waste Processing – 3rd shift operations begin	March 31, 2010
Execution	Oak Ridge – Complete processing 400 cubic meters of CH TRU Debris	September 30, 2011
Execution	Oak Ridge – Complete processing 200 cubic meters of RH TRU Debris	September 30, 2011
Execution	Savannah River Site – Initiate RCRA Closure of B-Area hazardous waste storage facility	September 30, 2009
Execution	Savannah River Site – Complete CH TRU Waste Polybox repackaging (800 boxes)	December 31, 2009
Execution	Savannah River Site – Complete DUO disposition (16,000 drums)	March 31, 2010
Execution	Savannah River Site – Complete repackaging of 25 large steel boxes (1,050 cubic meters) of TRU waste	June 30, 2010
Execution	Savannah River Site – Complete disposition of all DUO (16,000 drums) and TRU Pad 1 soil cover and waste removal	September 30, 2010
Execution	Savannah River Site – Complete construction of the TRUPACT III loading facility	December 31, 2010
Execution	Savannah River Site – Disposition more than 4,500 cubic meters of legacy TRU waste and reduce the site's solid waste footprint by 75 percent	September 30, 2011
Procurement	Savannah River Site – Issue Request for Proposal (RFP) for the D&D contract for 105-R Reactor building	June 30, 2009
Procurement	Savannah River Site – Definitize PEMP/Award Fee Plan vis formal contract modification	September 30, 2009
Procurement	Savannah River Site – Award D&D subcontract for 105-P Reactor building closure ($80M), Award D&D subcontract for 105-R Reactor building closure ($80M)	December 31, 2009
Execution	Savannah River Site – Complete vegetation removal at P Ash Basin and P007 Outfall	March 31, 2010
Execution	Savannah River Site – Complete grouting of 106-P process water storage tanks and 109-P purge water storage basin	June 30, 2010
Execution	Savannah River Site – Begin grouting of 105-P Reactor building	September 30, 2010
Execution	Savannah River Site – Complete evaporation of water from the P Reactor Disassembly Basin (~4,000,000 gallons)	March 31, 2011
Execution	Savannah River Site – Achieve P and R Area Completions	September 30, 2011

Milestone Type	Milestone Description	Date
Procurement	Savannah River Site – Issue Request for Proposal (RFP) for M Area Operable Unit Soil Remediation. Award contract for three (3) D Area Operable Unit Thermal Detritiation Treatment Cells Definitize PEMP/Award Fee Plan vis formal contract modification Award M Area OU soil remediation contract	September 30, 2009
Execution	Savannah River Site – Complete construction of three D Area Operable Unit thermal detritiation treatment cells	March 31, 2010
Procurement	Savannah River Site – Issue Request for Proposal (RFP) for D&D contract for D Area Powerhouse and 38 buildings	June 30, 2010
Execution	Savannah River Site – Achieve M Area Completion (first area completed under Recovery Act)	September 30, 2010
Procurement	Savannah River Site – Award D&D contract for D Area Powerhouse and 38 buildings ($30M)	December 31, 2010
Execution	Savannah River Site – Achieve D Area Completion	September 30, 2011
Procurement	Savannah River Site – Award A Area facility D&D contract, Issue Request for Proposal (RFP) for demolition of 184-K Power House, Definitize PEMP/Award Fee Plan vis formal contract modification, Issue Request for Proposal (RFP) for the D&D of Heavy Water Components Test Reactor (770-U), Issue Request for Proposal (RFP) for demolition of 185-3K Cooling Tower, Complete demolition of 292-F Stack adjacent to 235-F,	September 30, 2009
Procurement	Savannah River Site – Award contract for demolition of 184-K Power House, Award contract for demolition of 185-3K Cooling Tower	December 31, 2009
Execution	Savannah River Site – Complete removal of Chemical, Metals, and Pesticides Pits Waste Unit above ground remediation system	March 31, 2010
Execution	Savannah River Site – Complete construction of H Area groundwater base injection system	June 30, 2010
Execution	Savannah River Site – Complete D&D of F A-Line (221-F) Building, Complete demolition of 185-3K Cooling Tower	September 30, 2010
Execution	Savannah River Site – Complete characterization of four A Area waste units, Complete D&D of K-Area Powerhouse (184-K)	December 31, 2010
Execution	Savannah River Site – Complete D&D of F/H groundwater treatment facilities, Complete D&D of 728-N Cask Repair Facility, 645-N Storage Facility for non-radioactive hazardous waste, and 690-N Process Heat Exchanger Repair Facility	March 31, 2011
Execution	Savannah River Site – Complete D&D of Heavy Water Components Test Reactor (770-U), Complete D&D of 261-H Consolidated Incinerator Facility (CIF)	September 30, 2011

5. **Monitoring and Evaluation**

The Department of Energy and the Office of Environmental Management will monitor and evaluate the performance of the program in two major areas; corporate control at the Department level, and EM Processes at the Office of Environmental Management level.

I. Corporate Controls

Recovery Leadership & Operations
The DOE Recovery Office is the central point for implementation and execution of Recovery Act activities. A recovery operations team will oversee implementation management such as monitoring project status, evaluating cost and schedule progress, ensuring thorough reporting, coordinating with external entities, and holding monthly performance and review meetings with senior departmental managers on the implementation status of specific recovery projects.

Recovery Funding Oversight, Performance
In addition to DOE's standard funds control mechanisms, Recovery Act funds are subject to additional process controls to ensure funds are not co-mingled, are tracked to enable reporting, and are spent responsibly. DOE recovery funds are released for implementation in a staged approach. Programs develop initial project plans that include performance metrics and require management approval.

Office of Internal Review (OIR)
DOE's OIR helps programs ensure that internal controls are in place, effective, and support the risk-based approach to managing Recovery Act activities. OIR programs are being implemented or expanded to ensure the Recovery Act objectives are met and DOE managers and partners are both held accountable for successful execution and have the appropriate tools to ensure that success. These programs include coordinating DOE's "Internal Control Acknowledgment" program, conducting agency wide assessments and analyses, and performing oversight of Recovery Act programs, including site and field visits. OIR worked with key impacted programs to produce initial vulnerability assessments identifying potential program specific and cross-cutting risks to ensure successful execution.

II. EM Processes

EM has chartered an integrated project team (IPT), the EM Recovery Act Team, to ensure proper planning and execution of Recovery Act funds. The IPT is led by the program manager and has ultimate responsibility and accountability for delivering the project successfully. The program manager is a member of the federal Senior Executive Service and possesses the executive core competencies required to lead the project through this period of government transformation. The program manager is supported by Federal Project Directors (FPD) who have satisfied the certification requirements prescribed in the Department's Project Management Career Development Program (PMCDP), and have been certified by the PMCDP Certification Review Board. The FPDs are senior federal managers and are seasoned project directors certified by the

PMCDP Certification Review Board. The IPT members are experts in the areas of safety/operational readiness, planning, project management, budget, contracting, regulatory compliance, and communications. The team is actively engaged with the field office sites in all elements of Recovery Act implementation

EM has assigned Recovery Act Site Representatives to support the field offices. These individuals will streamline communications and decision-making between Headquarters and the field sites, while facilitating the integration, rapid sharing of lessons learned, and compliance with Recovery Act requirements.

As a prerequisite to receiving Recovery Act funds, the site offices have been required to submit to Headquarters checklist items that ensure each site is in a state of readiness and has implemented measures that prevent waste, fraud, and abuse. The checklist items verify that each site office has the necessary systems and processes in place for safety, oversight, contracting, change control, reporting, risk management, and regulator and stakeholder involvement.

At Headquarters, EM is engaging with other offices such as General Counsel, the Chief Financial Officer, the Office of Management and Administration, the Office of National Environmental Policy Act Compliance and others to ensure all appropriate requirements for the use of Recovery Act funds are met. Independent assessments will be conducted for the EM Recovery Act projects.

At the EM sites, the vast majority of the work will be executed through the expansion of existing contracts. This approach greatly reduces the risk associated with project performance. Appropriate funding modifications will be enacted to implement and segregate the Recovery Act funds for reporting purposes. All projects will be executed by the contractors according to DOE Order 413.3A, Program and Project Management, with appropriate performance measurement baselines and DOE oversight. Acceptable performance on these projects will also be measured using performance metrics (e.g., cost, schedule, and scope) as established in baselines; cost and schedule performance indicators (cost performance index and schedule performance index) according to DOE-approved Earned Value Management Systems will be used as required by DOE Order 413.3A.

In addition, the EM Headquarters Integrated Project Team will be conducting on-site reviews to examine the readiness to execute the EM Recovery Act scope and assist in understanding of guidance and requirements.

6. **Measures**

EM major performance measures include acres of land that will be cleaned up, percentage of the site footprint reduction that will be achieved, waste that will be removed off-site (by waste type), and D&D square footage that will be achieved. EM manages all of its work using project management protocols and will apply the same rigor in managing the Recovery Act projects. Projects will also regularly report monthly, quarterly, and project-to-date project performance measures include cost and schedule variances, cost and schedule performance indexes,

contingency use, milestone status reports, risk register updating/status reporting, indirect cost rate, results, and impacts. EM will make project review information available to the public through the EM website, as appropriate.

Measure Text	Measure Type	Measure Frequency	Direction of Measure	Unit of Measure	Explanation of Measure	Year	Original Program Target	Revised Full Program Target	Target (incremental change in performance)	Actual	Goal Lead
Nuclear Facilities Demolished	Output	Monthly	+	Each	Each EM facility is accounted for in the Facility Information Management System (FIMS). When the facility is demolished, it is recorded in FIMS as demolished. Demolition is usually removal of all structures and equipment down to the foundation.	2009 – 2011	11	13	2		Cynthia Anderson
Radiological Facilities Demolished	Output	Monthly	+	Each	Each EM facility is accounted for in the Facility Information Management System (FIMS). When the facility is demolished, it is recorded in FIMS as demolished. Demolition is usually removal of all structures and equipment down to the foundation.	2009 – 2011	25	85	60		Cynthia Anderson
Industrial Facilities Demolished	Output	Monthly	+	Each	Each EM facility is accounted for in the Facility Information Management System (FIMS). When the facility is demolished, it is recorded in FIMS as demolished. Demolition is usually removal of all structures and equipment down to the foundation.	2009 – 2011	78	254	176		Cynthia Anderson

Measure Text	Measure Type	Measure Frequency	Direction of Measure	Unit of Measure	Explanation of Measure	Year	Original Program Target	Revised Full Program Target	Target (incremental change in performance)	Actual	Goal Lead
Waste sites remediated	Output	Monthly	+	Each	The number of waste sites where all active (soil and groundwater) remediation activities are complete	2009 – 2011	507	589	82		Cynthia Anderson
CH TRU disposed	Output	Monthly	+	Cubic meters	CH TRU waste shipped to and disposed of at WIPP	2009 – 2011	30,601	35,126	4,525		Cynthia Anderson
RH TRU Disposed	Output	Monthly	+	Cubic meters	RH TRU waste shipped to and disposed of at WIPP	2009 – 2011	971	1,071	100		Cynthia Anderson
LLW and MLLW disposed	Output	Monthly	+	Cubic meters	Disposal of LLW from non-Comprehensive Environmental Response, Compensation, and Liability Act activities	2009 – 2011	57,959	85,688	27,729		Cynthia Anderson
Footprint demolished	Output	Monthly	+	Square feet	The building floor space demolished as a result of D&D activities.	2009 – 2011		3,244,420			Cynthia Anderson
Acres remediated	Outcome	Monthly	+	Acres	The resulting acreage remediated as the result of the waste sites remediated	2009 – 2011		87			Cynthia Anderson
Acres of site operational footprint reduced	Outcome	Monthly	+	Acres	The resulting site operational footprint reduced as the result of D&D and waste site remediation activities	2009 – 2011		117,130			Cynthia Anderson

7. **Transparency and Accountability**

DOE leverages its existing corporate systems to track and report on Recovery Act activities and to ensure effective funds management. The DOE's iManage Data Warehouse (IDW) is a corporate enterprise system integrating financial, budgetary, procurement, and program information to monitor project execution. Each Recovery Act program is tracked using unique Treasury Appropriation Fund Symbols (TAFS); each component project is identified by a unique Project Identification Code (PIC).

IDW is a central data warehouse linking common data elements from each of the Department's corporate business systems and serving as a "knowledge bank" of information about portfolios, programs or projects including budget execution, accumulated costs, performance achieved, and critical milestones met. The IDW contains information from multiple corporate systems and will be a tool used to meet information needs for Recovery Act oversight and reporting to Recovery.gov.

The Performance Measure Manager (PMM) is the Department's performance tracking system. PMM tracks high-level budgetary performance and is being expanded to accommodate Recovery Act performance tracking needs. Performance evaluations will be organized and reported along with results from the Department's annual budgetary activities in the Annual Performance Report (APR). Performance results will be uploaded into the IDW for required agency reporting.

DOE's Agency Wide Recovery Plan for additional information on DOE's financial and performance tracking mechanisms. The plan can be found here: www.energy.gov/recovery.

At the EM Sites, appropriate funding modifications will be enacted to implement the Approved Funding Programs and segregate the Recovery Act funds for reporting purposes. Separate budget and accounting codes have been established for Recovery Act work in order to manage, implement, measure and account for these funds. To ensure adequate controls only 80 percent of Recovery Act funds are being allotted to the sites for obligation against contracts. The remaining 20 percent is being held at Headquarters and will be released after the projects are demonstrating adequate performance. Additionally, only 24 percent (i.e., 30 percent of the 80 percent) of Recovery Act funds can incur costs until all contractor baseline plans have been submitted, reviewed, and approved.

At the sites, EM manages all of its activities using strict project management principles. Federal Project Directors responsible for managing the Recovery Act projects are required to be trained and certified for the magnitude and total cost of each project.

- Certification Level 4: Total Project Cost (TPC) exceeding $400 million (M)
- Certification Level 3: TPC greater than $100M and equal to or less than $400M
- Certification Level 2: TPC greater than $20M and equal to or less than $100M
- Certification Level 1: TPC greater than $5M and equal to or less than $20M

If a Federal Project Director is managing a portfolio of projects, the required Federal Project Director certification level is determined by the project with the highest TPC dollar value. EM may assign lower or higher required project management certification levels than may be indicated by the TPC alone to cleanup projects of various complexity, risk, and visibility per coordination with the Certification Review Board (CRB). Likewise, when new hires or reassigned incumbents assume Federal Project Director positions, their certification level may be higher or lower than that indicated by the TPC dependent on a project's degrees of complexity, risk, or visibility.

Annual performance goals for all federal managers executing Recovery Act work will be developed. The managers' success in meeting these goals will be assessed as part of their annual performance reviews.

8. **Federal Infrastructure Investments**

Not applicable to the EM Defense Program.

9. **Barriers to Effective Implementation**:

A number of barriers to successful implementation of EM Defense funded Recovery Act activities were identified by the Sites in the Office of Environmental Management (EM) complex including:

- Project planning and management
- Contract management and performance
- Staffing shortages which affect ability to oversee the Recovery Act work
- Personnel to be trained in a timely manner
- Compliance with Safety requirements in aging facilities
- Transportation impacts
- Continued need to have effective interaction with stakeholders and regulators as Recovery Act work progresses.

The risk mitigation to these barriers at the Sites include the establishment of Federal Project Directors responsible for managing the Recovery Act projects who are trained and certified for the magnitude and total cost of each project. At EM Headquarters, an Integrated Project Team has been established for the management and oversight of Recovery Act work at the EM Sites. In addition, separate budget and accounting codes have been established for Recovery Act work in order to manage, implement, measure and account for these funds. EM Headquarters will hold in reserve 20 percent of funding from the sites in order to ensure acceptable performance is met. All projects subject to the requirements of DOE Order 413.3 will be executed by the contractors according to DOE Order 413.3A with appropriate performance measurement baselines and Department of Energy oversight. Independent assessments and monthly monitoring reviews will be conducted of the EM Recovery Act projects and a schedule for these assessments and reviews has been established. Contractor performance evaluations/information

will be conducted in accordance with FAR 42.15, Contractor Performance Information. Also, FAR Subpart 15.3, Source Selection, covers the use of past performance information during source selection.

Regarding staffing shortages and personnel training, EM Sites are actively recruiting resources to perform this work and in the interim may be using qualified subcontractors to execute Recovery Act work as well as ensure proper work practices are followed. All workers will need to meet appropriate training and qualification requirements before work can begin.

To ensure safety requirements are met, the EM Sites will review and supplement as necessary safety documentation before work proceeds. DOE staff will ensure the proper safety measures are in place. Oversight of this work will be accomplished by qualified, experienced Federal staff.

EM Recovery Act work is a continuation of work already identified and may be part of already established environmental compliance agreements with our stakeholders and regulators. EM is also aware of a continued need to work with our stakeholders and regulators on meeting our current environmental compliance agreements as well as transportation requirements including routes, and has been in ongoing dialogue with our stakeholders and regulators on Recovery Act work since enactment of this law in February 2009.

10. Environmental Review Compliance

Funding from the Defense Environmental Cleanup account is predominantly being used for ongoing projects and activities for which NEPA reviews; Comprehensive Environmental Response, Compensation and Liability Act documentation; and compliance with other environmental requirements are complete. Where compliance is not complete, DOE will incorporate appropriate actions into its project planning and implementation.