Attachment B:
CBFO Recovery Act Project - TRU Waste Accelerated Disposition
Project Operating Plan, Rev. 2

BACKGROUND

Recovery Act Project:	CBFO Recovery Act Project - TRU Waste Accelerated Disposition
TAFS:	89-09/10-0253
Project Identification Code:	2002190
Recovery Act Bill Reference:	PL 111-5 Title IV – Energy and Water Development, Defense Environmental Cleanup (H.R. 1-26)
Project Cost:	$172,375,000
Budget Authority:	06049**,** FD.10.10.00.0 - $172,375,000
Program Office:	Environmental Management (EM)
Recovery Program Plan:	EM - Defense
Management Office:	Carlsbad Field Office (CBFO) Dave Moody, CBFO Manager 575-234-7300 dave.moody@wipp.ws

LEADS

Implementation:	Not Applicable
Breakthrough:	Not Applicable
Laboratory:	Not Applicable

I. SUMMARY & OBJECTIVES

A. Summary

Unlike the TRU waste sites involved in the management and removal of TRU waste from their sites to reduce the TRU waste footprint to enable the TRU waste sites to either demolish and decommission on-site facilities for the purpose of site cleanup or to allow other TRU waste site mission-related activities to occur, the Carlsbad Field Office (CBFO) does not manage a site for the purposes of cleaning it up. CBFO manages the capabilities to characterize, certify, transport and ultimately dispose of TRU waste at WIPP. This is an important distinction to consider when reviewing this project operating plan. CBFO provides capabilities to facilitate the cleanup of defense-generated TRU waste from all TRU wastes sites that the Office of Environmental Management has targeted for cleanup. These capabilities are necessary to facilitate TRU waste cleanup across the nation. Without these capabilities, there is no path forward for TRU waste disposition. The CBFO Recovery Act Project supports all the TRU waste sites, most of which (but not all) are being provided Recovery Act funds for defense environmental cleanup.

CBFO manages the National Transuranic (TRU) Program and the Waste Isolation Pilot Plant (WIPP) to directly support the completion of the safe cleanup of the environmental legacy of nuclear weapons development and government-sponsored nuclear energy research, specifically defense-generated transuranic waste. Transuranic (TRU) waste is defined as waste containing more than 100 nanocuries of alpha-emitting transuranic (element with an atomic number greater than 92) isotopes per gram of waste with half-lives greater than 20 years. TRU waste is separated and controlled in two categories: Contact-Handled and Remote-Handled TRU waste. Contact-Handled (CH) TRU waste is defined as TRU waste with a dose rate of 200 mrem per hour or less as measured on the surface of the container. Remote-Handled (RH) TRU waste is defined as TRU waste with a dose rate of greater than 200 mrem per hour as measured on the surface of the container. The National TRU Program (NTP) is responsible for interfacing with the TRU waste generator sites to identify the waste inventory managed as TRU, establish a certified program to characterize and certify the TRU waste to meet program transportation and disposal requirements and to transport the TRU waste off-site for ultimate disposal at WIPP. The WIPP site is responsible for the safe disposal of defense-generated TRU waste. These activities are currently managed within an approved baseline project.

The CBFO Recovery Act Project implements the purpose of the American Recovery and Reinvestment Act of 2009 (ARRA) to make use of supplemental appropriations for job preservation and creation to accelerate the disposition of defense-generated TRU waste across the nation. The CBFO Recovery Act Project, entitled "TRU Waste Accelerated Disposition" involves the accelerated TRU waste characterization, certification and transportation for disposition of defense-generated TRU waste from the following targeted generator and interim storage sites above and beyond the currently-approved CBFO baseline project using ARRA funds. The TRU waste targeted by this project is as follows:

- Large-sized waste containers and Pad 1 drums of legacy CH and RH TRU waste remaining at Savannah River Site (SRS) [South Carolina]
- RH TRU waste from Idaho National Laboratory (INL) [Idaho]
- CH TRU waste from Hanford [Washington]
- CH and RH TRU waste from Area G at Los Alamos National Laboratory (LANL) [New Mexico]
- CH and RH TRU waste from Oak Ridge National Laboratory (ORNL) [Tennessee]
- CH and RH TRU waste from Argonne National Laboratory (ANL)
- CH and RH TRU waste from other small quantity sites as waste becomes available. Those small quantity sites that are targeted for this project are as follows:
  - Bettis Atomic Power Laboratory (BAPL) [Pennsylvania]
  - General Electric – Vallecitos Nuclear Center (GEVNC) [California]
  - Lawrence Berkeley National Laboratory (LBNL) [California]
  - Lawrence Livermore National Laboratory (LLNL) [California]
  - NRD LLC (NRD) [New York]
  - Nevada Test Site (NTS) [Nevada]
  - Sandia National Laboratory (SNL [New Mexico]

The scope of work to accelerate the targeted TRU waste described above is as follows:

- Characterization and certification of large-sized waste containers of CH TRU waste and accelerated characterization and certification of remaining drums of CH and RH TRU waste at SRS.
    - This will involve establishing a certified capability to characterize and certify TRU waste in large-sized waste containers, which currently does not exist at SRS in the baseline project and establishing additional resources to work multiple shifts for characterizing and certifying TRU waste to support the SRS 24-hour/7-days per week repackaging/remediation operations funded under the SRS Recovery Act Project scope of work.
- Modification of WIPP site infrastructure to maintain the capability to transport, receive, and process TRU waste and support accelerated TRU waste receipt.
- Retrieval, repackaging and/or remediation of targeted TRU waste, as necessary, to support accelerated TRU waste disposition across the TRU waste complex.
    - Most of the TRU waste sites are at a point where a large portion of their waste requires repackaging and/or remediation to resolve issues identified earlier either when the waste went through characterization processes and was rejected because it didn't meet program requirements or due to existing knowledge of the waste that it doesn't currently meet program requirements as it is currently stored and/or managed. This aspect of the CBFO Recovery Act Project scope is focused on supplementing or replacing repackaging and/or remediation capability at a TRU waste site, if needed. This will be accomplished using the same mobile modular concept used by the Central Characterization Project (CCP) for all of its other processes for standardization and to take advantage of economies of scale.
- Accelerated characterization and certification of CH and RH TRU waste with a focus on difficult waste at targeted TRU waste sites to support near-term site cleanup and footprint reduction milestones/goals.
    - This will involve establishing technical expert resources to evaluate current TRU waste inventory information and assist in developing strategies for resolving difficult issues previously identified with specific waste streams at some of the TRU waste sites. Once those strategies are developed, those waste streams may be prioritized higher than previously planned and the necessary characterization, certification, and transportation resources may be allocated to accelerate the disposition of those waste streams.
- Increased transportation resources to support accelerated TRU waste disposition across the complex.

- The increase in transportation resources involves adding four tractor teams (a tractor team includes a tractor, two qualified and trained drivers, and the maintenance of the tractor, trailer, and ancillary equipment, not including the transportation packages).

- These additional teams will allow CBFO to directly support intersite shipments from small quantity sites to INL so that the waste can be certified for disposal to be transported to WIPP independent of the number of transportation resources needed to support shipments to WIPP. Currently, most of the small quantity sites do not have the capability to characterize and certify TRU waste for disposal at WIPP. Establishing a certified program to characterize and certify TRU waste at each small quantity site to meet WIPP disposal requirements is costly and does not utilize the economies of scale that CCP is capable of. Therefore, CCP can certify TRU waste at small quantity sites to meet transportation requirements without requiring establishment of a certified program at that site. Once the waste is certified to meet transportation requirements, it can be transported to a site that already has a certified program to certify the waste to meet WIPP disposal requirements. NEPA approval has been obtained for the small quantity sites to ship their waste to INL for that purpose.

- These additional transportation resources can also be used to support the increase in shipments to WIPP when not be used for intersite shipments.

This project is an acceleration of previously budgeted baseline work. As such, this project directly supports applicable Department of Energy (DOE) Strategic Themes/Goals as follows:

- DOE Strategic Theme 4: Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.

  - Goal 4.1 Environmental Cleanup – Complete cleanup of the contaminated nuclear weapons manufacturing and testing sites across the United States.

  - Goal 4.2 Managing the Legacy – Manage the Department's post-closure environmental responsibilities and ensure the future protection of human health and the environment.

- DOE Strategic Theme 5: Management Excellence – enabling the mission through sound management.

EM Strategic Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current

mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.

Carlsbad Field Office mission**:** To safely, compliantly, and efficiently dispose of defense-generated TRU waste in an environmentally sound manner.

This project will accelerate the characterization and disposition of already targeted TRU waste targeted and as a result, clean up legacy TRU waste from sites several years earlier than anticipated. The CBFO baseline (developed in 2005 and CD-3 approved) will be altered only to the affect that some work that was already included in the CBFO baseline will be completed well-ahead of schedule.

This project is not a new focus area in the program office mission. It is only an acceleration of the currently planned CBFO baseline. Therefore, it has already been integrated into the baseline. Since the contracts and grants already exist for this work, no new solicitations or grant assistance is necessary. All applicable contracts will be modified to apply the funds necessary to facilitate project implementation.

B. Public Benefits

Acceleration of TRU waste disposition results in several near and long-term benefits to the public. The defense-generated TRU waste that is targeted by this project was generated many years ago (approximately 10 – 50 years), and since that time, has been stored and accumulated in large quantities, both in subsurface and surface locations, at many DOE facilities around the nation. The storage and management of TRU waste at those facilities pose several hazardous risks to the workers at those facilities and the public living near those facilities, compounded by the length of time that TRU waste can remain radioactive (hundreds of thousands of years). A path for TRU waste disposition had not been provided by the Government until March 1999, when the Waste Isolation Pilot Plant was authorized for TRU waste disposal and received its first shipment of TRU waste. This allowed a path for TRU waste disposition and an avenue to remove the TRU waste from the DOE facilities.

From a near-term perspective, the removal of TRU waste from the facilities where it is currently stored and managed represents the immediate removal of the hazardous risk to workers and the public once the inventory of TRU waste at a specific site has been removed. Even the reduction of the TRU waste inventory stored at these sites represents an immediate equivalent reduction of risks to the workers and public. Therefore, as the rate of TRU waste disposition increases, the higher the near-term benefit to the workers and the public by removing the risks of managing TRU waste. As a result, the number of resources needed to store and maintain this waste is reduced as the inventory decreases. Once TRU waste has been completely removed from a facility, the need for maintaining the buildings and structures used to store and manage the waste can be reevaluated and if determined to be unnecessary for its near-term mission, those buildings and structures can be demolished, removing the need the continue the funding required to maintain them. From an economic perspective, this project is expected to create many new jobs in

areas of construction, design, fabrication and manufacturing, technical and scientific services, administrative, and management for both the removal of TRU waste from DOE facilities and the subsequent demolition of buildings and structures in locations around the nation.

From a long-term perspective, removing the need for funding the maintenance of those buildings and structures to comply with regulatory commitments to local, state, and federal agencies represents savings to the taxpayers. As the number of demolitions of those buildings and structures increase, the taxpayer savings increase as well, allowing those funds to be allocated elsewhere.

This project is focused on removing or preparing for the removal of the largest amount of TRU waste, as is practical, above that currently projected with baseline funds, through the end of FY11.

C. Recovery Act Project Impacts

This project accelerates work that has already been identified in the associated sites' baselines and the disposition of a specific inventory of TRU waste. Specific accomplishments include:

- Characterization and disposition of CH and RH TRU waste currently in large waste containers and CH and RH TRU waste in drums from SRS (cleanup legacy TRU waste at SRS [South Carolina]).
- Fabrication of previously-approved TRU waste container types
- Modification of WIPP site infrastructure to maintain the capability to transport, receive, and process TRU waste and support accelerated TRU waste receipt
- Characterization and disposition of legacy TRU waste stored at four large quantity sites in addition to SRS (i.e., Hanford [Washington], INL [Idaho], LANL [New Mexico], and ORNL [Tennessee]) to support footprint reduction.
- Near-term completion of TRU waste cleanup and footprint reduction at small quantity sites (e.g., LLNL, LBNL, and GEVNC [California], NTS [Nevada], SNL [New Mexico], ANL [Illinois], BAPL [Pennsylvania], etc.) through shipment to INL for waste certification prior to final shipment to WIPP for disposal.

Previous versions of this plan contained the testing, certification, approval and fabrication of the TRUPACT-III package for transporting large-sized waste containers of TRU waste and shielded containers for transporting and disposing of TRU waste with high dose rates. However, since one of the EM guiding principles requires that regulatory approval be obtained for ARRA work and TRUPACT-III and shielded containers have not yet received approval by NRC, NMED and EPA for use, that specific scope of work was removed from this project operating plan.

The intended results described above directly support the completion of the safe cleanup of the environmental legacy of nuclear weapons development and government-sponsored nuclear energy research, specifically defense-generated TRU waste. This directly supports the responsible resolution to the problem through sound management.

II. COST & SCHEDULE

A. Budget

The total budget amount allocated to the CBFO Recovery Act Project for will be $172.4M. This is 3.4% of the total amount of $5.127B appropriated for defense environmental cleanup.

The budget for the CBFO Recovery Act Project will initiate additional work scope for existing contractors and national laboratory participants of CBFO. The funds will be provided to the appropriate contractors within appropriate contract modifications within 7 days of allocation. No contract or grant solicitations and awards are necessary. No budget is planned for CBFO (federal) personnel labor activities for the CBFO Recovery Act Project. Existing CBFO personnel will be detailed to manage and oversee CBFO Recovery Act Project work using existing program direction under the baseline. The budget for the following non-federal participants is as follows:

WTS is the management and operating contractor for WIPP, provides engineering resources to design, fabricate and maintain transportation packaging capabilities, and manages and operates the Central Characterization Project (CCP) who provides TRU waste characterization resources in direct support for this effort to accelerate TRU waste disposition. WTS' work and the work of its subcontractors are estimated to cost approximately $155M for the 2 ½ year duration of the project through the end of FY11.

The Los Alamos National Laboratory – Carlsbad Operations (LANL-CO) is an affiliate of the Los Alamos National Laboratory located in Los Alamos, New Mexico. CBFO funds LANL-CO to provide direct support of Department's environmental management mission to provide the safe cleanup of TRU waste by providing technical experts and operators to provide acceptable knowledge gathering and preparation, TRU waste inventory preparation, difficult waste strategic development, and TRU waste mobile loading capabilities. Specifically for the CBFO Recovery Act Project, LANL-CO will provide the same type of support but more of it through additional human resources. LANL-CO's work is estimated to cost approximately $8.5M for the 2 ½ year duration of the project through the end of FY11.

Like LANL-CO, the Sandia National Laboratory – Carlsbad (SNL-C) office is an affiliate of its parent laboratory (Sandia National Laboratory) based in Albuquerque, New Mexico. CBFO also funds SNL-C to provide direct support of the Department's environmental management mission to provide the safe cleanup of TRU waste. SNL-C's responsibilities under the CBFO base program are to provide scientific expertise to analyze WIPP repository performance with respect to applicable EPA regulations. Specifically for the CBFO Recovery Act Project, SNL-C will provide project support to CBFO through educational efforts. SNL-C's work is estimated to cost approximately $200K for the 2 ½ year duration of the project through the end of FY11.

Navarro is the Carlsbad Technical Assistance Contractor (CTAC) and provides technical human resources to support quality assurance, safety, environmental compliance programs under CBFO's base program. For the CBFO Recovery Act Project, CTAC will provide additional technical support in the areas specified above to assist the Government in the oversight of Recovery Act work. CTAC's work is estimated to cost approximately $3M for the 2 ½ year duration of the project through the end of FY11.

Visionary Solutions (VS) is one of two transportation carrier contractors who provides TRU waste transportation services under CBFO's base program. For the CBFO Recovery Act Project, VS will provide an additional four tractor teams above the eleven tractor teams they provide to CBFO's base program. VS' work is estimated to cost approximately $5M for the 2 ½ year project through the end of FY11.

There no implementation barriers that are specific to this project that would not be captured in the PSO level discussion.

The CBFO Recovery Act Project budget will be obligated and expended throughout the project duration as shown in Tables 1a, 1b, 2a, and 2b below.

Table 1a: Budget Implementation 12 Week Obligations ($M)

	Week of ARRA Activities (Beginning the Week of April 6)											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
CBFO Recovery Act Project - TRU Waste Accelerated Disposition, FD.10.10.00.0, CB-1000												

Table 1b: Budget Implementation 12 Week Expenditures ($M)

	Week of ARRA Activities (Beginning Week of April 6)											
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
CBFO Recovery Act Project - TRU Waste Accelerated Disposition, FD.10.10.00.0, CB-1000												

Table 2a: Budget Implementation Monthly & Yearly Obligations ($M)

	FY 2009 Q3			FY 2009 Q4			FY 2010 Q1		
	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
CBFO Recovery Act Project - TRU Waste Accelerated Disposition, FD.10.10.00.0, CB-1000									
	FY 2010 Q2			FY 2010 Q3			FY 2010 Q4		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept
	FY 2011 Q1			FY 2011 Q2			FY 2011 Q3 & Q4		
	Oct	Nov	Dec	Jan	Feb	Mar	Apr – Sept		
	FY 2012			FY 2013			FY 2014		FY 2015

Table 2b: Budget Implementation Monthly & Yearly Expenditures ($M)

	FY 2009 Q3			FY 2009 Q4			FY 2010 Q1		
	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
CBFO Recovery Act Project - TRU Waste Accelerated Disposition, FD.10.10.00.0, CB-1000									
	FY 2010 Q2			FY 2010 Q3			FY 2010 Q4		
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept
	FY 2011 Q1			FY 2011 Q2			FY 2011 Q3 & Q4		
	Oct	Nov	Dec	Jan	Feb	Mar	Apr – Sept		
	FY 2012			FY 2013			FY 2014		FY 2015

Note: The following cost reporting procedure will apply to submission of monthly cost reports for Recovery Act work specified in the accelerated work scope baseline.

(a) The contractor will separately identify costs that pertain to the Recovery Act work. The contractor will provide a monthly report that identifies the total amount drawn on the letter of credit. This monthly report shall separate and identify Recovery Act costs associated with each appropriation at the Recovery Act program and project levels.

(b) The contractor shall certify in each monthly report that the costs included in the report for Recovery Act work were incurred only to accomplish the Recovery Act work in accordance with the accelerated work scope.

(c) Project schedule and obligations and expenditure forecasts assume an allocation of funds by April 10, 2009.

Funds Returned and Offsetting Collections

Recovery Act Project does not anticipate generating any returned funds or offsetting collections.

Table 3: Funds Returned and Offsetting Collections ($M)

	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Recovery Act Project does not anticipate generating any returned funds or offsetting collections.							

Indirect Costs

In accordance with the indirect cost definition provided in the Project Operating Plan instructions from EM dated March 4, 2009, indirect costs associated with site operations (e.g., GFSI) will be covered using base program dollars.

Table 3a: Direct & Indirect Costs ($M) and FTEs (#)

COST/FTE TYPE	FY 2009		FY 2010				FY 2011			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
DIRECT										
Labor										
FTEs										
Material										
INDIRECT										
Labor										
FTEs										
Materials										
OTHER										
Capital										
Other										
TOTAL										

COST/FTE TYPE	FY 2012	FY 2013	FY 2014	FY 2015
DIRECT				
Labor				
FTEs				
Material				
INDIRECT				
Labor				
FTEs				
Material				
OTHER				
Capital				
Other				

TOTAL				

Reduced Future Budget Needs and Future Cost Savings

The CBFO Recovery Act Project only expands the capability to disposition TRU waste (i.e., increased waste processing [repackaging/remediation, characterization, and transportation] rates and added capability to disposition large containers of TRU waste and TRU waste with high radiation dose rates) earlier than anticipated by the baseline schedule within the existing CBFO program. Most of the work associated with increased waste processing rates is accomplished through subcontracts and task orders that will be terminated or reduced at the end of the project. This work is already integrated into the CBFO baseline (developed in 2005 and approved as CD-3 in 2008). This integrated work is accelerated by the funding described in this project operating plan. There will not be any costs associated with phase out or integration that is not already included in the ARRA funding. No additional funding will be required for monitoring or managing grants or contracts.

The CBFO baseline developed in 2005 and approved as CD-3 in 2008 was based upon dispositioning certain inventories of legacy TRU waste from specific TRU waste sites in specific fiscal years. For example, the legacy TRU waste at SRS currently contained and stored in large waste containers and in drums on Pad 1 was projected to be repackaged, characterized and shipped starting in FY09 and continuing through FY14. Due to projected budget shortfalls for SRO in FY10, the repackaging effort for that population of legacy waste was not going to start to be repackaged until FY11 or later. Since SRO is going to receive $475M in FY09 through FY11, enacted by the Recovery Act, they will be able to repackage that waste and the CBFO Recovery Act Project will provide accelerated characterization and disposition of that waste. The characterization of the SRS legacy TRU waste will be characterized by the end of FY11 and the shipments of that waste will continue into FY12 until it is all cleaned up from SRS. Likewise, at other TRU waste sites, where their projected outyear budgets were not going to support the disposition of all of their legacy waste inventories, Recovery Act funding will enable that waste to be characterized and/or dispositioned in FY09 – FY11. This is expected to reduce outyear budget needs and future costs to the U.S. Government by approximately $10M per year starting in FY12.

B. Milestones

Weekly/Monthly Milestones	Date	Comments
80% ARRA Funds Allocated to CBFO Recovery Act Project	4/10/09	
Apply ARRA funds to WTS and CTAC contracts and LANL-C and SNL-C	4/17/09	
WTS, CTAC, and LANL-C initiate hiring of additional technical staff to support project	4/24/09	
Place order for 4 additional tractor teams with VS	5/1/09	
WTS lease office space for CBFO Recovery Act Project IPT	5/8/09	
Contract for 700 pipe overpack containers ready for bid	5/15/09	
Complete preparation for CBFO audit/EPA inspection for SRS Large Waste Container Characterization Line certification		
LANL-C hire additional mobile loading personnel	5/22/09	
Complete certification of GEVNC CH waste for transportation to INL and ship to INL	5/29/09	
Deploy additional labor resources at SRS and ORNL to increase characterization rates	Jun-09	
4 additional tractor teams available for use	Jul-09	
Complete preparation for CBFO audit/EPA inspection for CCP-Hanford certification	Aug-09	
Contract for 700 pipe overpack containers in place		
Complete design work for South Access Road reconstruction	Sep-09	
CCP-SRS obtain site certification to characterize large waste containers		
Add an additional shift of visual examination for RH and CH waste at ORNL	Oct-09	
WTS Subcontract for fabrication of 5 HalfPACT Units Out for Bid	Nov-09	
Complete characterization/certification of GEVNC CH waste at INL and ship to WIPP	Dec-09	
CCP-Hanford obtain site certification for CH waste	Jan-10	
To be determined as planning matures and progress in made (TBD)	Feb-10	
TBD	Mar-10	
WTS award subcontract for 5 fabrication of HalfPact Units	Apr-10	
Light Weight Facility Cask installation complete	May-10	
TBD	Jun-10	
TBD	Jul-10	
Fabrication of 700 pipe overpack containers complete	Aug-10	
TBD	Sep-10	

Weekly/Monthly Milestones	Date	Comments
Remaining 20% ARRA funds Allocated to CBFO Recovery Act Project	Oct-10	
South Access Road reconstruction complete	Nov-10	
TBD	Dec-10	
TBD	Jan-11	
TBD	Feb-11	
TBD	Mar-11	
TBD	Apr-11	
TBD	May-11	
TBD	Jun-11	
TBD	Jul-11	
TBD	Aug-11	
Complete characterization of all CBFO Recovery Act Project targeted TRU waste	Sep-11	
ARRA funds costed		

Schedule Risk

The above schedule estimates are very likely, if TRU waste sites provide projected TRU waste feed rates given additional waste repackaging/remediation, characterization, certification, and transportation resources provided under this project operating plan and if regulators meet schedules for permit modifications/renewal, initial site certifications and recertifications, tier approvals, and other certifications and approvals, as applicable.

No capital asset projects required for the scope of work in this project operating plan.

Table 5: Delivery Schedule for Capital Asset Projects N/A (until OECM and DOE agree on 413.3A graded approach)

Program/OECM Milestone	Delivery (End) Date	Comments
Develop capital asset projects Integrated Project List	N/A	
Develop Parametric Performance Baseline (Individual Projects)	N/A	
If < $100 M Perform IPR, > $100 M Perform EIR (Individual Projects)	N/A	
Approve Performance Baseline	N/A	
Approve Start of Construction	N/A	
Approve Project Completion	N/A	

III. PERFORMANCE

A. Performance Measures

Since this project only accelerates work that is already included in the CD-3 approved CBFO baseline, the same TRU Waste Dispositioned performance metrics reported by each TRU waste site to EM-32 (Dan Melamed) can be used for measuring the performance of TRU waste acceleration for this project.

Table 6: Project Performance Targets

Recovery Act Project Identification Code	2002190
Linkage To S-1 Priorities	Nuclear Security and Legacy
Linkage to Current Program Goal (if applicable)	DOE Strategic Theme 4: Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production. Goal 4.1 Environmental Cleanup – Complete cleanup of the contaminated nuclear weapons manufacturing and testing sites across the United States. Goal 4.2 Managing the Legacy – Manage the Department's post-closure environmental responsibilities and ensure the future protection of human health and the environment. EM Strategic Goals – To safely disposition large volumes of nuclear waste; safeguard materials that could be used in nuclear weapons; deactivate and decommission thousands of contaminated facilities no longer needed by the Department to carry on its current mission; EM is fulfilling its commitments to reduce overall risk and complete cleanup across all sites for generations to come.
Two-Year Outcome-Oriented Performance Measure	Performance measures and targets for the CBFO Recovery Act Project will be quantified by the number of cubic meters of TRU waste dispositioned per quarter as reported by the sites to EM-32. For quantitative performance measures and expected numbers of accelerated cubic meters dispositioned as a result of this project, see Note below.
First Year Performance Target (2009)	
Q3 - Project-Level Quarterly Performance Milestone(s)	
Q4 - Project-Level Quarterly	

Performance Milestone(s)	
Second Year Performance Target (2010)	
Q1 - Project-Level Quarterly Performance Milestone(s)	
Q2 - Project-Level Quarterly Performance Milestone(s)	
Q3 - Project-Level Quarterly Performance Milestone(s)	
Q4 - Project-Level Quarterly Performance Milestone(s)	
Third Year Performance Target (2011)	
Q1 - Project-Level Quarterly Performance Milestone(s)	
Q2 - Project-Level Quarterly Performance Milestone(s)	
Q3 - Project-Level Quarterly Performance Milestone(s)	
Q4 - Project-Level Quarterly Performance Milestone(s)	All the TRU Waste targeted by the CBFO Recovery Act Project will be Characterized and/or Dispositioned (See Note below)

Note: This project accelerates the disposition of specific inventories of difficult to manage TRU waste. Specific sites impacted by this project include:

- Savannah River Site, SC: Approximately 4,500 cubic meters of TRU waste by the end of FY11 to clean up legacy TRU waste from SRS.
- Argonne National Laboratory, IL: Approximately 49 cubic meters of TRU waste by the end of FY11 to clean up legacy TRU waste from ANL.
- Los Alamos National Laboratory, NM: Removal of legacy TRU waste from storage at LANL to support footprint reduction at Area G by the end of FY11.
- Idaho National Laboratory, ID: Approximately 82 cubic meters of RH TRU waste by the end of FY11 to reduce their TRU waste footprint and prevent the loss of RH disposal space at WIPP.
- Oak Ridge National Laboratory, TN: Certification of an additional 231 cubic meters of RH TRU waste above their near-term baseline and an additional 421 cubic meters of CH TRU waste above their near-term baseline by the end of FY11. The transportation and disposal of this waste will be complete in FY12 within the CBFO baseline funds.

- Hanford, WA: Certification of a significant backlog of TRU waste to support accelerated TRU waste disposition to support footprint reduction from the River Corridor.
- Other small quantity sites, as TRU waste is identified for disposition at WIPP include LLNL, LBNL, and GEVNC [California], NTS [Nevada], SNL [New Mexico], ANL [Illinois], and BAPL [Pennsylvania].

B. National Strategic Benefits

This environmental clean-up project has no direct, short-term carbon or oil reduction benefits – Not applicable.

Table 7: National Strategic Benefits

1.	Carbon Emission Reductions: Estimated 5-year undiscounted CO_2 reduction (in metric tons of CO_2 equivalent) is Not Applicable
2.	Oil Consumption Reductions: Estimated 5-year reduction in undiscounted oil consumption (in barrels of oil equivalent) is Not Applicable

IV. MANAGEMENT

A. Secretarial-level Items

1. Intended Results and Linkage to Secretary's Priorities - Implementation of the CBFO Recovery Act Project will result in job creating/preservation and the acceleration of TRU waste disposition.

Table 8: Secretary's Priorities

Secretary's Priorities	Project Impacts (Qualitative)	Project Impacts (Quantitative)
Science and Discovery	N/A	N/A
Clean, Secure Energy	N/A	N/A
Economic Prosperity	Job creation/preservation through CBFO due to ARRA funding)	Many new jobs and/or retention of current jobs are expected with this Recovery Act project
National Security and Legacy	Cleanup of TRU waste from EM sites (i.e., footprint reductions and near-term completions)	Qualitative measures are the cubic meters dispositioned and will be reported by the TRU waste sites to the Office of Environmental Management's Office of Program Planning and Budget (EM-32)
Climate Change	N/A	N/A

2. Collaboration and Coordination - CBFO is responsible for the disposition of TRU waste by interfacing and collaborating with many participants, then coordinating TRU waste characterization, certification, transportation and disposal activities to facilitate TRU waste disposition. To identify the TRU waste inventory to be dispositioned, CBFO and its contractors must collect TRU waste data and information related to its generation from the TRU waste sites. Most of the TRU waste sites are managed under the Office of Environmental Management (EM). However, some of the TRU waste sites are currently managed under the Office of Nuclear Engineering (NE), the National Nuclear Security Administration (NNSA) and the Office of Science programs within the Department of Energy (DOE). This effort will require those offices to interface with EM to ensure issues outside of EM control are resolved to facilitate TRU waste disposition.

In addition to the interface with the federal and contractor counterpart organizations within DOE, CBFO must also interface with all of the states and tribal governments through which the TRU waste will be transported. To facilitate better coordination of the large number of states and tribes, CBFO interfaces with State Regional Groups (SRGs). The specific SRGs that CBFO interfaces with are technical working groups and governor's appointees from the Western Governor's Association, the Southern States' Energy Board, and the Councils of State Governments from the Midwest and Northeast regions. DOE has implemented and funded cooperative agreements and implementation guides with each of these SRGs and their associated states and tribal governments that specify protocols for transporting TRU waste through those regions. No changes to these cooperative agreements are necessary for implementation of this project operating plan.

Also, in order to meet TRU waste program requirements, CBFO must obtain approval and concurrence from its regulators (i.e., the New Mexico Environment Department [NMED – regulates the hazardous waste component of the waste], the Environmental Protection Agency [EPA – regulates the radioactive component of the waste], and the Nuclear Regulatory Commission [NRC – certifies the packages that TRU waste is transported in and regulates the management of those packages]), as applicable, for specific aspects of characterizing, transporting and disposing of TRU waste. CBFO certifies organizations to characterize and certify the waste for transportation and disposal using an audit/surveillance process of those organizations conducting waste characterization/certification activities at those sites. EPA conducts inspections of those same activities. After an audit/surveillance is conducted, CBFO produces a report for NMED and EPA concurrence. Once concurrence is received, CBFO can certify the organization to characterize and certify TRU waste. All new proposals for TRU waste packages and changes to existing certificates of compliance for TRU waste packages require NRC approval. Changes to operations at WIPP require review and approval by both NMED and EPA as specified by the WIPP Hazardous Waste Facility Permit and applicable EPA 40 CFR 191 and 194 regulations. This requires much coordination involving meetings, constant communications, joint observation of activities, etc.

B. Federal Infrastructure Investments

There are no infrastructure investment project activities associated with this Recovery Act Project.

Accelerating the removal and proper disposal reduces risk of releases of this material to the environment

C. Line Management

CBFO intends to use existing DOE/EM/site systems and practices to effectively monitor and report on the CBFO Recovery Act Project activities, including:

- Fully implement all ARRA transparency and reporting requirements through modifications to the contract that will fund the CBFO Recovery Act Project.

- Apply project management principles to CBFO Recovery Act Project execution, including reviewing and validating EM project cost and schedule baselines consistent with DOE Order 413.3 and identifying project risks and strategies for managing them.

- Continue use of industry standard Earned Value Management System (EVMS) to compare actual project scope, cost, and schedule performance against planned performance as depicted in the baseline.

- Continue monitoring of the contractors' EVMS reports to ensure the CBFO Recovery Act Project is on track and, if not or if trends are in a negative direction, to develop and implement corrective actions.

- Hold monthly management reviews to provide updates on the CBFO Recovery Act Project to EM's senior-most executives.

- Issue task orders with CTAC to provide limited augmentation of federal procurement, budget and finance, project controls, and technical oversight capabilities for the CBFO Recovery Act Project.

- Assign appropriately qualified personnel to the CBFO Recovery Act Project to provide technical and programmatic oversight of the contractors performing the work and are the day-to-day governmental interface and manager for the project.

- Communicate ARRA requirements for transparency and accountability, including the tracking of costs and labor separately from the baseline, regularly to CBFO and contractor participants.

- Use an Integrated Project Team (IPT) of Federal and contractor staff with project knowledge and subject matter expertise essential to the successful planning and execution of the project – including safety, risk management, engineering, contracts administration, and project controls.

- Continually identify and evaluate risks to the CBFO Recovery Act Project and assign roles and responsibilities for managing those risks.

D. Needs from Staff Offices

1) Human Capital

CBFO is in the process of filling needed vacancies for baseline work. No additional support from EMCBC above that required for the work under the baseline is anticipated.

Table 9: Information on Hiring Under the Recovery Act

# & Type of Positions (Title, Series and Grade)	**Location** (HQ or Field – w/location)	**Federal or Contractor**	**Timeframe** (1-6mos; 6+mos; other; specify date needed if possible)
	Not Applicable - No Federal personnel will be hired for this project		

2) General Counsel

No additional support from HQ, EM, and EMCBC above that required for the work under the baseline is anticipated.

3) Policy & International Affairs

No additional support from EM above that required for the work under the baseline is anticipated.

4) Chief Financial Officer

No additional support from EMCBC above that required for the work under the baseline is anticipated.

5) Public Affairs

No additional support from EMCBC and EM above that required for the work under the baseline is anticipated.

6) Congressional and Intergovernmental Affairs

No additional support from EM above that required for the work under the baseline is anticipated . Will need continued support from EM-10 to assist in the collaboration and coordination with the regulators, specifically NMED, EPA, and NRC where regulatory reviews/approvals are needed.