

## Project Operating Plan – [D&D]

### Attachment B:

INL - Cleanup of Surplus Nuclear Facilities

### Project Operating Plan

#### BACKGROUND

<b>Recovery Act Project:</b>	INL - Cleanup of Surplus Nuclear Facilities (D&D)
<b>TAFS:</b>	89-09/10-0253
<b>Project Identification Code:</b>	2002040
<b>Recovery Act Bill Reference:</b>	PL 111-5 Title IV – Energy and Water Development, Defense Environmental Cleanup (H.R. 1-26)
<b>Project Cost:</b>	\$217,875,000
<b>Budget Authority:</b>	06049, FD.03.10.00.0 - \$217,875,000
<b>Program Office:</b>	Environmental Management (EM)
<b>Recovery Program Plan:</b>	EM - Defense
<b>Management Office:</b>	Idaho Operations Office, Manager, Richard Provencher, (208)526-7300

#### LEADS

<b>Implementation:</b>	N/A
<b>Breakthrough:</b>	N/A
<b>Laboratory:</b>	N/A

#### I. SUMMARY & OBJECTIVES

##### Summary:

This project includes the following objectives listed below:

- Accelerate deactivation and decommissioning (D&D) of nuclear and radiological facilities that no longer have a mission along with supporting facilities. The initial work will focus on the upfront work planning, facility characterization, formulation and approval of regulatory documents for the facilities at the Idaho Nuclear Technology & Engineering Center (INTEC) previously known as (CPP), Materials and Fuels Complex (MFC), Advanced Test Reactor Complex (previously known as the Test Reactor Area, (TRA)), and the Power Burst Facility (PBF) area. The work scope will complete D&D on CPP-601/640 Fuel Reprocessing Complex, the Material Test Reactor Facility, Waste Experimental Reduction Facility (WERF) Incinerator Building, Hot Cells Facility, Experimental Breeder Reactor II (EBR-II) reactor complex. Facilities will be demolished in the areas discussed resulting in a footprint reduction of 812,277 square feet.
- Accelerate movement of spent fuel from wet storage to dry storage allowing for fuel consolidation resulting in accelerated footprint reduction and improved security position. A total of sixteen shipments of EBR II fuel from wet to dry storage will be completed.

This Recovery Act work ties to the following DOE and EM Strategic Goals and Themes:

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

DOE Strategic Goal 5 – Management and Excellence – Enabling the Department’s mission through sound management and business practices.

EM 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.

**Public Benefits:** Public benefits include cost savings and safety. At least (#TBD) on-site jobs will be retained or created by implementing this project. Major types of workers required for this work include construction labor, engineers, heavy equipment operators, field technicians, truck drivers, and administrative support workers. The large number of workers trained by completing this project will be available for future missions. Personnel brought in for the initiative could also provide a local source of new workers due to the current aging DOE workforce and natural attrition. Surrounding area businesses will also experience a job creation benefit from this work scope initiative. Additional off-site jobs will likely be created in the surrounding communities due to the influx of new workers.

High risk facilities, such as nuclear reactors or radioactive hot shops will be deactivated and demolished reducing any potential safety and health risks to workers, the public and the environment

**Recovery Act Project Impacts:** Besides the public benefits listed above, the Recovery Act will:

- Life cycle cost savings are estimated to be nearly \$280M.
- Facilities will be demolished in the areas discussed resulting in a footprint reduction of 812,277 square feet.

## II. COST & SCHEDULE

### Budget

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

	Week of ARRA Activities (Beginning Week of March 9)											
	1	2	3	4	5	6	7	8	9	10	11	12
[D&D]												

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

	Week of ARRA Activities (Beginning Week of March 9)											
	1	2	3	4	5	6	7	8	9	10	11	12
[D&D]												

**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	
[D&D]	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 2010			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	
[D&D]	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 2010			FY 2013			FY 2014		FY 2015	

Funds Returned and Offsetting Collections

There are no offsetting collections with this work or funding.

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

	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
[Provide description and amounts for Funds Returned and Offsetting Collections]							

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### Indirect Costs

It is estimated that the percent of project costs that will be indirect is 25% based on the definitions below.

#### Definitions

**DIRECT:** Represents cost categories that are directly tied to a specific project or end item.

**INDIRECT:** Represents costs allocable to projects that are not direct costs. Indirect costs should only be reported by sit and facility operating contractors (i.e., Management & Operating contractors)]

### Changes to Baseline Budget

Changes to out-year baseline budgets will occur as most accelerated work is being pulled from post 2012.

**Table 4: Changes to Baseline Budgets (\$M)**

Changes to Baseline Budget	Increase/Decrease	FY 09	FY 10	FY 11	FY 12	FY 13	FY 14	FY 15
Program Direction After FY 2010 (Example Only)	Increase							
Continuation of New Programs (Example Only)	Increase							
Project Acceleration (Example Only)	Decrease							

**NOTES:** The out-year planning range estimate had no D&D occurring during the 2013 – 2020 time frame. Therefore, D&D completed using recovery act funding reduces costs and scope beyond the 2020 time frame. Therefore, there are no significant changes in the baseline during the FY 09-FY 15 time frame.

#### Milestones

***Milestone Dates are conceptual and will be adjusted based on detailed cost estimates, field implementation schedules, and implementation contracting for the activity.***

Activity	Date
Regulator Briefings (Citizens Advisory Board (CAB), State, Tribes)	Mar-09
Initiate job sourcing	Mar-09
TRA 604 characterization complete	May-09
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	Sep-09

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MTR Building Interior Demo Complete TRA 604 Demo Complete TRA 610 Interior Demo Complete	Dec-09
TRA 610 Exterior Demo Complete	May-10
MTR Exterior Demo Complete	May-10
Complete EBR II Readiness Assessment CPP 601 Exterior demo complete	Jul-10
TRA 632 Characterization Complete VCO Lines under Hot Cell Characterization Complete CPP 602 Characterization Complete	Dec-10
TRA 632 Interior Demo Complete VCO Lines under Hot Cell Demo Complete CPP 602 Interior Demo Complete	May-11
CPP 601/640 Fuel Reprocessing Demo Ready	Jul-11
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	Sep-11

**NOTES:** Whereas the contractor has deactivated, decommissioned and demolished many similar building and facilities as listed above, there is a high level of confidence in the D&D schedule. The largest schedule risk will be driven by the VCO lines as it is uncertain exactly how “hot” they will be as they reside under a hot cell.

### Table 5: Delivery Schedule for Capital Asset Projects

N/A (until OECM and EM agree on the 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

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### Performance Measures

- Performance measures to be used for D&D activities will be square footage and footprint reduced (in acres).
- The measure used to track performance in the spent fuel area will be shipments made from CPP-666 to MFC.

Table 6: Project Performance Targets

Recovery Act Project Identification Code	2002040
Linkage To S-1 Priorities	Nuclear Security and Legacy
Linkage to Current Program Goal (if applicable)	DOE Strategic Goal 4 – Environmental Responsibility – Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.  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.
Three-Year Outcome-Oriented Performance Measure (FY2011)	Reduce the EM footprint by demolishing facilities and achieving a footprint reduction of 812,277 sq. ft.
First Year Performance Target (FY 2009)	Reduce the EM footprint by eliminating 8,855 sq. ft. of facilities.
Q3 - Project-Level Quarterly Performance Milestone(s)	TRA 604 characterization complete
Q4 - Project-Level Quarterly Performance Milestone(s)	Complete Demolition of the following facilities: TRA 630, TRA 661
Second Year Performance Target (FY2010)	Reduce the EM footprint by eliminating 86,145 sq. ft. of facilities.
Q1 - Project-Level Quarterly Performance Milestone(s)	1) Complete Demolition of the following facilities: TRA 604 2) Interior Demolition complete on the TRA 610 & MTR

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	3) Regulatory documents complete for the Voluntary Consent Order lines under the hot cell, TRA 632 & CPP 602
Q2 - Project-Level Quarterly Performance Milestone(s)	1) MTR exterior demolition complete 2) TRA 610 exterior demolition complete
Q3 - Project-Level Quarterly Performance Milestone(s)	Complete Experimental Breeder Reactor (EBR) II Readiness Assessment and Engineering Evaluation/Cost Analysis (EE/CA) approved
Q4 - Project-Level Quarterly Performance Milestone(s)	Complete several small facility demolitions
Third Year Performance Target (FY2011)	Reduce the EM footprint by eliminating 688 sq. ft. of facilities.
Q1 - Project-Level Quarterly Performance Milestone(s)	1) Characterization complete for TRA 632 & CPP 602 2) VCO lines under hot cell characterization complete
Q2 - Project-Level Quarterly Performance Milestone(s)	1) Interior demolition complete on TRA 632 & CPP 602  2) VCO lines under hot cell demolition complete
Q3 - Project-Level Quarterly Performance Milestone(s)	CPP 601/640 Fuel Reprocessing demolition ready
Q4 - Project-Level Quarterly Performance Milestone(s)	1) Demolition complete for CPP 601 & TRA 610 2) Exterior demolition complete on CPP 602 & TRA 632 3) Complete remaining small facilities demolition 4) Complete 16 shipments of EBR II fuel sent to MFC.

### National Strategic Benefits

There are no 5-year carbon emission and oil consumption reductions due to this project.

**Table 7: National Strategic Benefits**

1. Nuclear Facility D&D: Eliminates potential releases to the environment
2. Nuclear Facility D&D: Eliminates exposure risks to the workers and public

## IV. MANAGEMENT

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### Secretarial-level Items

**Table 8: Secretary's Priorities**

Secretary's Priorities	Project Impacts (Qualitative)	Project Impacts (Quantitative)
Science and Discovery		
Clean, Secure Energy		
Economic Prosperity	Increase jobs	Many new jobs (TBD) are expected to be created and/or retained from this Recovery Act work scope
National Security and Legacy	Footprint reduction	Reduce the EM footprint by demolishing 88 facilities and achieving a footprint reduction of 95,000 sq. ft.
Climate Change		

### Collaboration and Coordination

The main organizations benefiting from collaboration and coordination on this work scope and funding will be the DOE and the regulators. Therefore, close coordination will occur within the Department and with the regulators. There are no current plans to link with the Office of Science or other laboratories as this provides little if any benefit.

### Federal Infrastructure Investments

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

However, ancillary benefits may be achieved through the elimination of facilities resulting in reduced electrical power consumption and corresponding reduction of greenhouse gas emissions. Reuse/Recycle of excess materials could result in reduced consumption in fossil fuels required to process raw materials.

These facilities contain hazardous or radiological material. Accelerating the removal and proper disposal reduces risk of releases of this material to the environment

### Line Management

Performance baselines, funds costed, and activities completed will be tracked and reported monthly. Segregation of Recovery Account funding and base program funding will occur ensuring accountability and transparency. Monthly project reviews will occur to ensure accomplishments are timely and accurate.

### Needs from Staff Offices

#### 1) Human Capital

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**Table 9: Information on Hiring Under the Recovery Act**

<b># &amp; Type of Positions</b> (Title, Series and Grade)	<b>Location</b> (HQ or Field – w/location)	<b>Federal or Contractor</b>	<b>Timeframe</b> (1-6mos; 6+mos; other; specify date needed if possible)
2 Facility Representative GS 13	Field (MFC RWMC)	Federal	30 months
Rad Con Engineer	Field	Sub Contractor	24 months
Safety Engineer	Field	Sub Contractor	24 months
2 - Cost Estimators	Field	Sub Contractor	3-6 months
Administrative Tracker	Field	Sub Contractor	28 months

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