



*Idaho Cleanup Project Progress  
Citizens Advisory Board  
May FY 2011 Status*

**James Cooper**  
**Department of Energy**  
**Idaho Operations Office**



**EM** *Environmental Management*

# *Idaho Cleanup Project Scope – ARRA Work Included*

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- Transuranic Waste Disposition
- Advanced Mixed Waste Treatment Project
- Waste Area Group 7 (Radioactive Waste Management Complex)
  - Subsurface Disposal Area Record of Decision
  - Accelerated Retrieval Project Interim Actions
- Idaho CERCLA Disposal Facility
- CERCLA Remediation
  - Waste Area Group 1 – Test Area North
  - Waste Area Group 3 – Idaho Nuclear Technology and Engineering Center
  - Waste Area Group 10 – Site-wide Miscellaneous Sites/Snake River Plain Aquifer



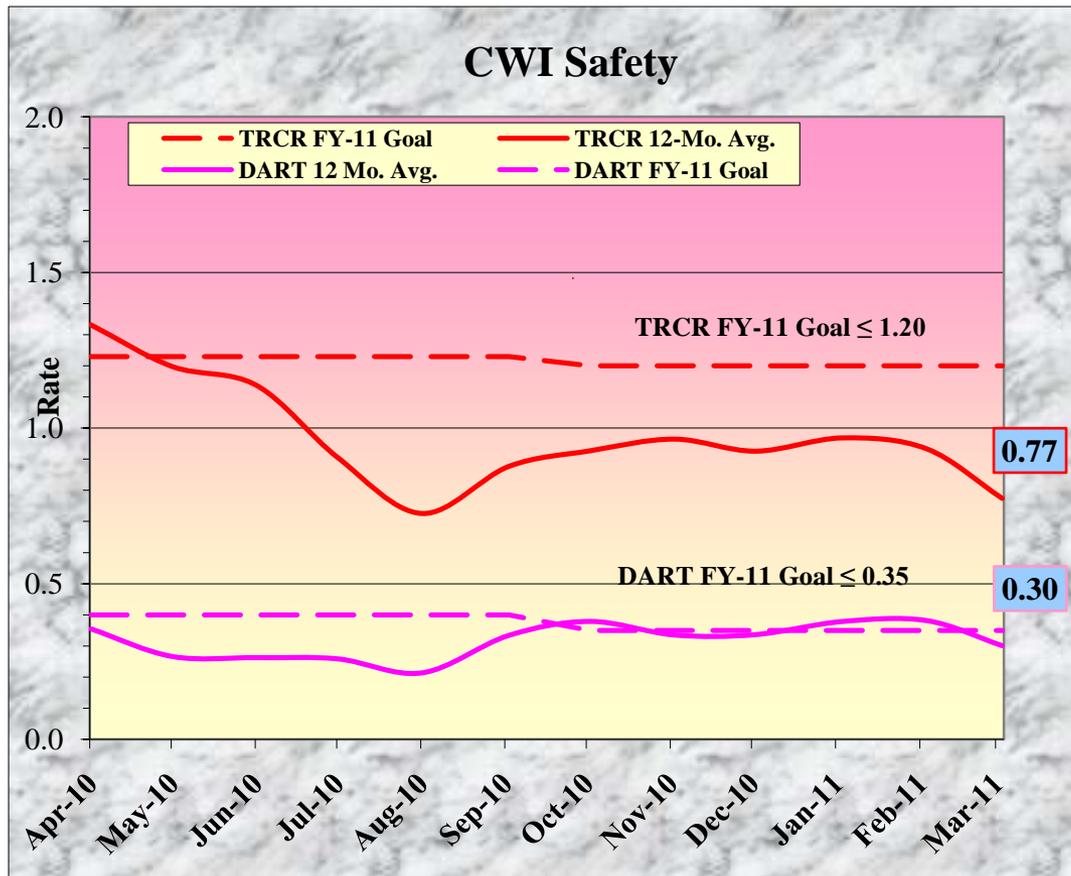
## *Idaho Cleanup Project Scope ARRA Work Included (con't)*

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- Decontamination and Decommissioning
  - Test Area North (Completed)
  - Reactor Test Complex (RTC)
  - Idaho Nuclear Technology and Engineering Center (INTEC)
  - Radioactive Waste Management Complex (RWMC)
  - Power Burst Facility (ARRA) (Completed)
  - Materials and Fuels Complex (ARRA)
- Nuclear Materials Completion (Completed)
- Integrated Waste Treatment Unit (Sodium-Bearing Waste)
- INTEC Liquid Waste Treatment Facility (Tank Farm Closure)
- Spent Nuclear Fuel Disposition
- Calcine Disposition



# CWI Safety Performance – March



## February 2011

### Eight First Aid Cases and No Recordable Injuries

- TRCR is trending within desired range and DART is just outside the desired range

### No ORPS Reportable Occurrences

## March 2011

### Eight First Aid Cases and No Recordable Injuries

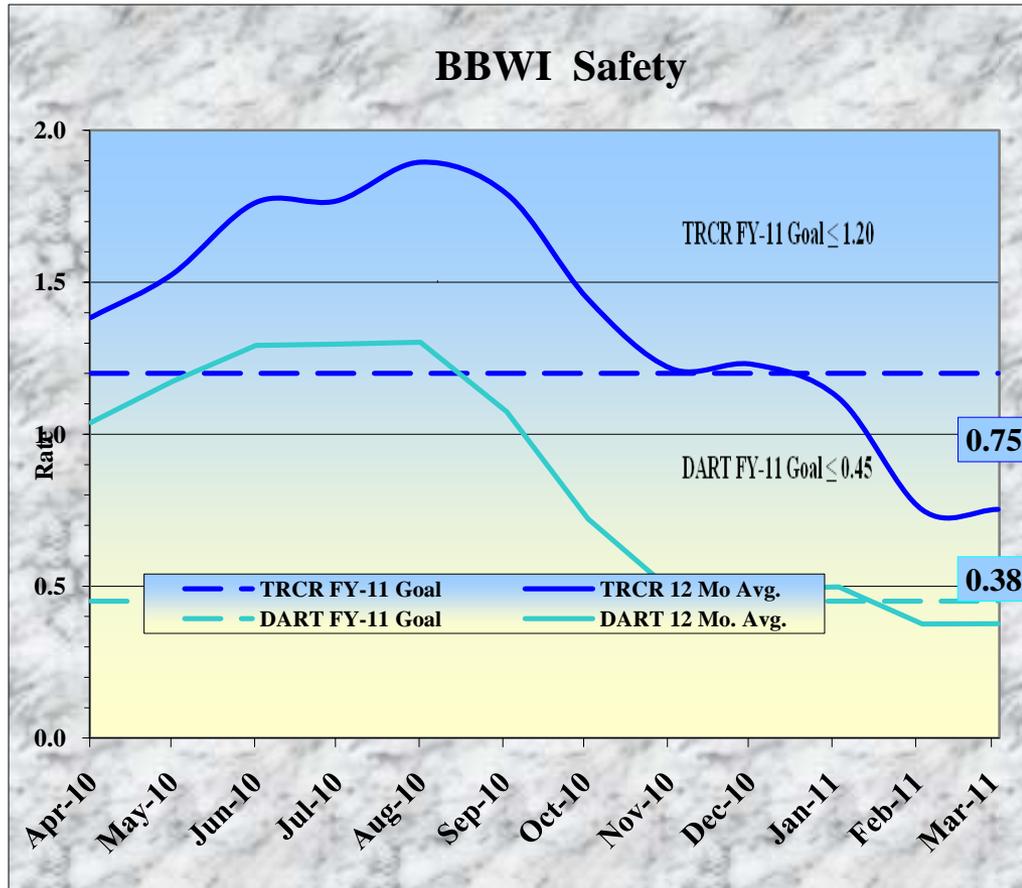
- TRCR and DART are within desired range.

### One ORPS Reportable Occurrence

- EM-ID--CWI-IWTU-2011-0001, Inadvertent Contact Between Maintenance Crane Block and Handrail. 10(2) SC4 IWTU



# BBWI Safety Performance - March



## February 2011

### Three First Aid Cases and No Recordable Injuries

- No Recordable injuries for the 5<sup>th</sup> consecutive month!
- Cumulative TRCR and DART metrics now within desired range!

### Two ORPS Reportable Occurrences

- EM-ID--BBWI-AMWTF-2011-0001, Mishandled Waste Box at Facility Box Import. 10(2) SC4 PBS-13
- EM-ID--BBWI-AMWTF-2011-0002, Discovery of Sandia Box with Expanded Sidewalls and Top in WMF 634. 3B(2) SC3 PBS-13

## March 2011

### Five First Aid Cases and No Recordable Injuries

### Two ORPS Reportable Occurrences

- EM-ID--BBWI-AMWTF-2011-0003, Individual With Lapsed Qualification Performs Authorized Employee Function on Lock/Tag Out. 10(2) and 2C(2) SC3 PBS-13
- EM-ID--BBWI-AMWTF-2011-0004, Notice of Violation for Supercompaction of Pressurized Container. 9(1) SC3 PBS-13



# Remote Handled Transuranic (RH-TRU) Waste Disposition

## Key Activities/Actions:

- Final shipment of EM RWMC RH-TRU Waste to WIPP made March 10, 2011

## Upcoming Activities:

- Continue repackaging MFC RH-TRU in CPP-666
- Resume RH-TRU shipments to WIPP May 24
- Complete conceptual design of Sodium Treatment System July 2011

Metric	Planned (Oct-April)	Actual (Oct-Apr)	FY11 Goal
Ship Remote-Handled TRU Waste to WIPP	14 m <sup>3</sup>	6 m <sup>3</sup>	27 m <sup>3</sup>

Remaining Milestone(s)	Completed	Target Date
Complete Disposition of EM RWMC RH-TRU	✓	3/31/2011
Complete ARRA RH-TRU Repackaging		June 2012



RH-72B Cask Departing Idaho to WIPP



# Contact Handled Transuranic (CH-TRU) Waste Disposition

## Key Activities/Actions:

- Constructing new AMWTP Retrieval Contamination Enclosure for final ~10 percent of waste retrieval operations
- Bechtel BWXT Idaho contract extended from April 1 – June 30, 2011
- Accelerated shipment of ARP waste to reduce backlog
- Currently 815 m<sup>3</sup> behind schedule for shipping TRU waste offsite.

Metric	Actual (FY11)	Cum
Ship Contact Handled TRU Waste Out of Idaho	2,184 m <sup>3</sup>	47,371 m <sup>3</sup>

Remaining Milestone(s)	Completed	Target Date
Complete Disposition of Legacy CH-TRU Waste		9/30/2015

## Upcoming Activities:

- Anticipated awarding of AMWTP contract scheduled for late May - early June 2011
- Expect to increase shipping rate to WIPP in June (19-23 shipments per week)



Containment Enclosure construction



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## *Waste Area Group (WAG) 7 Project Objectives*

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- Complete remediation work in accordance with the Record of Decision (ROD) for OU 7-13/14
- Conduct Targeted Waste Retrieval at the Accelerated Retrieval Projects (ARP) I, II, III and IV and disposition waste
- Complete in situ grouting of 21 locations (completed)
- Continue subsurface solvent vapor extraction (OCVZ)
- Continue environmental monitoring and institutional controls



# WAG 7 Project

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## Key Activities/Actions:

- DOE small business contract to construct ARP VII is progressing well and is 80% complete
- Began ARP VI exhumations
- Started ARP VIII design and geophysical surveys



## Upcoming Activities:

- Start ARP IV demolition
- Complete ARP VII construction



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# *WAG 7 Project (cont'd)*

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# *D&D Objectives : ARRA & Base Project Objectives*

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<b>Metric</b>	<b>Planned (CTD)</b>	<b>Actual (CTD)</b>	<b>Goal</b>
Total Facilities Demolished	178	203	220
Facilities D&D Base	142	164	171
Facilities D&D ARRA	36	39	49



# ARRA D&D – RTC/PBF/RWMC Project



## Key Activities/Actions:

- MTR reactor successfully removed and disposed at the ICDF (the last of the three reactors to be D&D by CWI)

## Upcoming Activities:

- Demolition of TRA-603, MTR reactor building
- Demolition of TRA-632, TRA Hot Cell building

Remaining Milestone(s)	Completed	Target Date
Demo MTR main structure (started)		11/2011
Complete D&D of 27 RTC/PBF excess facilities and 4 high-risk facilities (Started)		8/2011

Metric	Planned (CTD)	Actual (CTD)	Goal
Facilities D&D	27	36	42



# D&D – INTEC Project

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## Key Activities/Actions:

- Began exterior demolition of CPP-602

Remaining Milestone(s)	Completed	Target Date
Complete 601/640 Demolition (640 - Completed)		9/2011
Demo 36 excess buildings (Started)		9/2011
Contract demolition complete		9/2012

Metric	Planned (CTD)	Actual (CTD)	Goal
Facilities D&D	106	117	123



## Upcoming Activities:

- Complete demolition of the Fuel Reprocessing Building (CPP-601)
- Complete CPP-1638 demolition
- Complete CPP-602 D&D



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# ARRA D&D – Materials and Fuels Complex (MFC) Project

## Key Activities/Actions:

- Passivated sodium successfully treated in 1<sup>st</sup> run using a citric acid solution developed by the D&D project

## Upcoming Activities:

- Continue “Melt and Drain” operations
  - solidified sodium in piping components, heated to 400-500 deg., to liquefy, drain and treat

Metric	Planned (CTD)	Actual (CTD)	Goal
Facilities D&D	5	4	9

Remaining Milestone(s)	Completed	Target Date
Demo 5 Facilities (Started)		9/2011
Complete MFC 767* (Started)		4/2012

MFC-S11 Reactor Floor



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# *Integrated Waste Treatment Unit (Sodium-Bearing Waste) Project Objectives*

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- Design, construct, test and operate the Sodium Bearing Waste Treatment Facility
- Process all sodium-bearing waste material no later than December 31, 2012



# Integrated Waste Treatment Unit (Sodium-Bearing Waste) Project

## Key Activities/Actions:

- Construction 96% complete
- Systems turned over to testing program

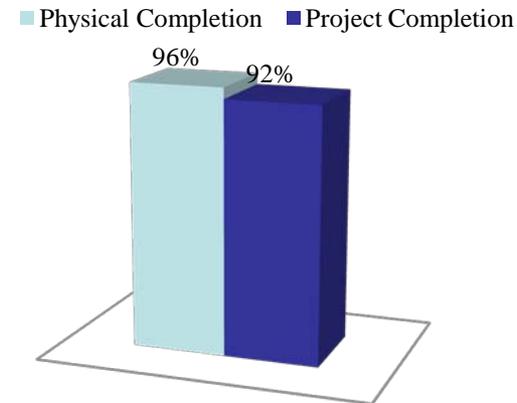
## Upcoming Activities:

- Complete remaining construction items
- Systems testing



Remaining Completed	Milestone(s)	Target Date
	Construction Turnover Complete (Started)	12/01/2011
	Commence Operations of treatment facility	12/01/2011
	Complete SBW Treatment	10/31/2012

## IWTU Project Completion



# *Spent Nuclear Fuel Disposition Project Objectives*

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- Transfer legacy, EM-owned spent nuclear fuel (SNF) from wet storage to appropriate dry storage (completed)
- Receive and store SNF from the Advanced Test Reactor
- Receive Domestic and Foreign Research Reactor SNF for storage
- Prepare the SNM facilities for transition to another government entity by installing a segregation fence (completed)
- Provide safe, regulatory-compliant, routine operations for INTEC SNF handling and storage facilities



# Spent Nuclear Fuel Disposition Project

## Key Activities/Actions:

- One remaining planned Domestic Reactor Receipt (DRR) expected for FY11

## Upcoming Activities:

- Inspection of DRR Facility Mexico City
- Preparatory work for EBR-II fuel moves

Remaining Milestone(s)	Completed	Target Date
Complete receipt of ATR fuel to CPP-666		(9/30/12)

Metric	Planned (FYTD)	Actual (FYTD)	Goal
FRR/DRR Receipts	2	1	2



FAAST Basin



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PBS/Project Name	Completion Date	Highlight Concern
ID-0013.R1 TRU Waste	Sep-11	Completed
ID-0013.NEW.R1 TRU Waste	Sep-11	CTD Ahead of Schedule
ID-0030B.R1.1 Buried Waste	Sep-11	On Schedule (No Performance Metrics in IPABS)
ID-0030B.R1.2 In-situ Grouting	11-Feb	Completed
ID-0030B.R1.3 Soil and Ground Water Operations	Sep-11	CTD Ahead of Schedule
ID-0040B.R1.1 D&D (NTB)	Sep-11	CTD Ahead of Schedule
ID-0040B.R1.2 D&D (OPER)	Sep-11	CTD Ahead of Schedule
ID-0040B.NEW.R1.3 D&D NE Facilities (NEW)	Sep-12	CTD Ahead of Schedule (EBR-II D&D extended to 2012)



# Idaho Project Milestones

## Idaho Cleanup Project Major Milestones

✓ Indicates completed milestone



INTEC tank farm interim cap complete



MTR demolished

Temporary Tank Farm cover installed (east side)



Complete CH-TRU disposition



OU 7-13/14 targeted waste retrievals complete



SDA cap installed



IWTU operational SBW treatment begins (12/2011)

PBF demolition complete ✓

CPP-601, CPP-640 disposition complete

ICP Tank Farm Closure Complete

FY11	FY12	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27
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ARRA Milestone 2011

All excess facilities demolished

100% HLW tanks closed

Complete RH-TRU disposition

Calcline construction complete



TAN ready for legacy mgmt. ✓

100% SBW treatment complete



UXO remediation complete



EBR-II D&D Complete



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## *Items of Potential Interest*

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- Human Capital Reports
- Projected Budget

