



# Idaho Cleanup Project Overview

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Manager

Idaho Cleanup Project

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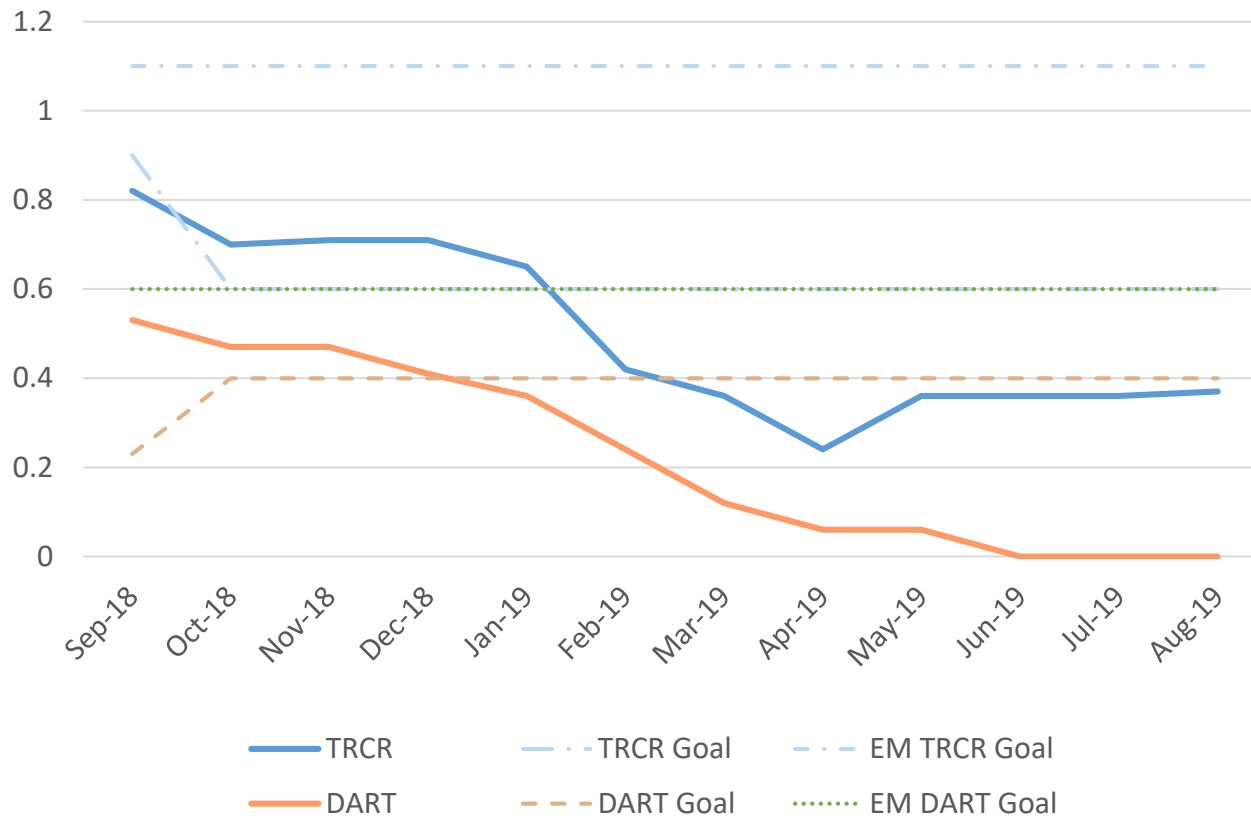
**EM** *Environmental Management*

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# Fluor Safety Performance

ICP Core Injury Rates



## Company Injury Goals Changed in December 2018

- DART Goal increased to 0.40;
- TRCR Goal decreased to 0.60

## June 2019

- Two First Aid Cases, No Recordable Injury, and No Restricted Cases
- 2 ORPS Reportable Events

## July 2019

- Three First Aid Cases, No Recordable Injuries, and No Restricted Cases
- 1 ORPS Reportable Event

## August 2019

- One First Aid Case, no Recordable Injuries, and No Restricted Cases
- No ORPS Reportable Events



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Waste Type	Origin	Volume Remaining	Amount Shipped	Ultimate Destination	Applicable Agreements
High-Level Waste 	Reprocessing of spent nuclear fuel	4,400 cubic meters	None	Geologic repository	Idaho Settlement Agreement, Site Treatment Plan

## Accomplishments:

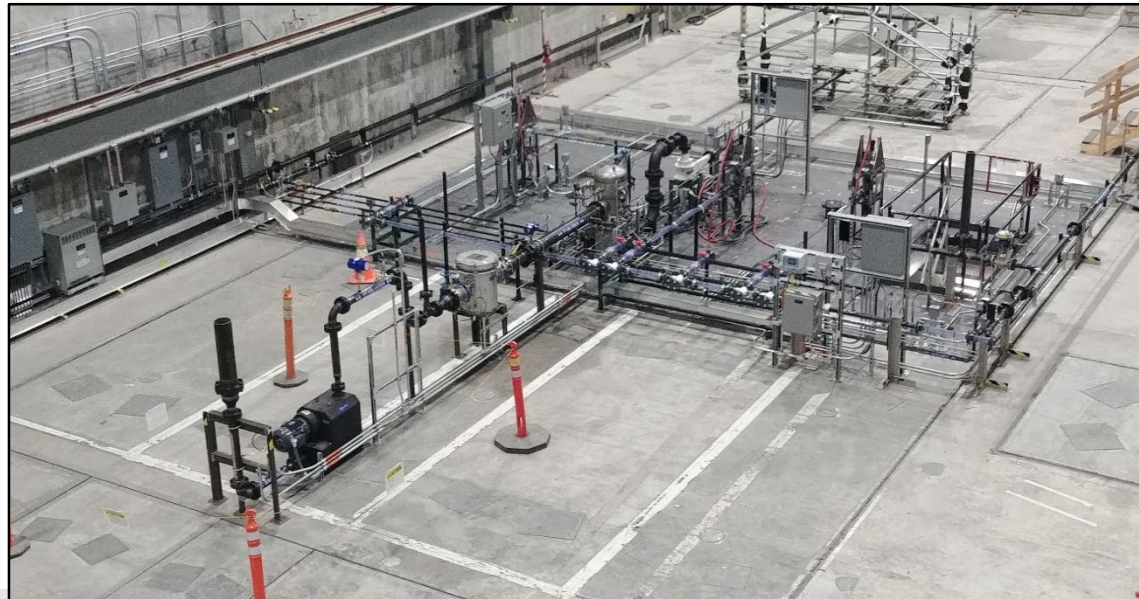
- Continued work on the Performance Assessment of calcine bin sets and other regulatory closure documentation.

## Status:

- Continuing testing of calcine retrieval system.

## Issues:

- Calcine disposition currently requires a geologic repository.
- HLW interpretation may allow for other disposition options.



Full-scale retrieval mock-up

## Path Forward:


- Continue testing and developing calcine retrieval and transfer system.



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Waste Type	Origin	Mass Remaining	Amount Shipped	Ultimate Destination	Applicable Agreements
Spent Nuclear Fuel 	DOE, research and commercial reactors	243.57 Metric Tons Heavy Metal (EM-only)	153 TRIGA elements 0.03 MTHM (for reuse)	Geologic repository	Idaho Settlement Agreement

## Accomplishments:

Transferred/Planned	SNF Type	From	To
9/9	EBR-II/T1	CPP-666	FCF/MFC
0/5	EBR-II/T2	CPP-666	RSWF/MFC
32/28	ATR	CPP-666	CPP-603
2/2	NR	CPP-666	NRF
Receipts Planned	SNF Type	From	To
14/15	ATR	ATRC	CPP-603

## Status:

EBR-II Type 2 SNF Transfers. Contractor and Federal readiness reviews for Type 2 transfers of EBR-II SNF to RSWF planned in 1<sup>st</sup> Qt. FY20.

CPP-749 Remediation. Negotiating contract language to implement Phase 2 mitigation activities to address water seepage/condensation at CPP-749.

Activities to begin in 1<sup>st</sup> Qt. FY20.

TMI-2 ISFSI. Commence TMI-2 Aging Management Program Plan Development and Implementation (subject to the conditions of license renewal as approved by the NRC). Activities to begin in 1<sup>st</sup> Qt. FY20.

## Issues:

- None.



EBR-II fuel elements arrayed in a diver fuel assembly



Waste package loading at RSWF, MFC-771 4




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Waste Type	Origin	Volume Remaining	Amount Shipped	Ultimate Destination	Applicable Agreements
Transuranic and Mixed Low-Level Waste 	Site operations, Rocky Flats Plant, other DOE facilities	5,666* (CH-TRU) 597* (MLW)	45,396 (CH-TRU) 14,451 (MLLW)	WIPP Licensed off-site disposal site	Idaho Settlement Agreement, Site Treatment Plan


See Separate Waste Disposition Presentation



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Waste Type	Origin	Volume Remaining	Amount Shipped	Ultimate Destination	Applicable Agreements
Buried Waste 	Site operations, Rocky Flats Plant, other DOE facilities	<ul style="list-style-type: none"> <li>• 3,241 m<sup>3</sup> awaiting shipment</li> <li>• Estimated 728 m<sup>3</sup> left to exhume</li> </ul>	6,057 cubic meters	Waste Isolation Pilot Plant	FFA/CO (CERCLA), Agreement to Implement

## Accomplishments:

- Since exhumation started in ARP IX on April 25, 2019, .063 of .69 acres have been exhumed, as of October 1, 2019.
- Since 1996, 256,371 lbs. organic vapors removed, as of 8/25/2019

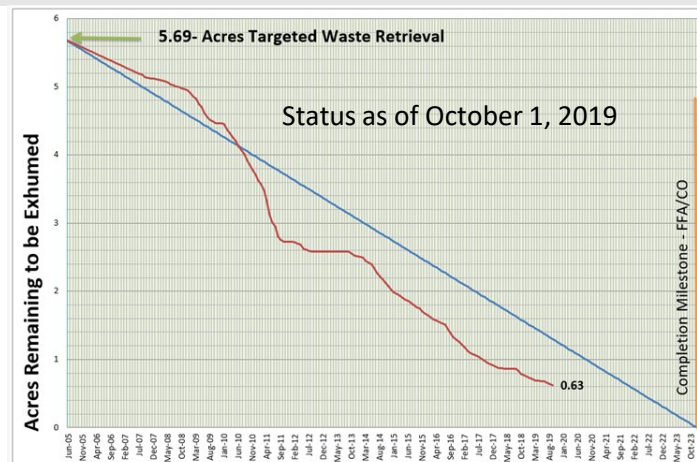
## Status:

- ARP IX exhumation ongoing
- Cap design is final and posted at <https://ar.icp.doe.gov>
- Organic vapor vacuum extraction continues



Exhuming targeted buried waste at ARP IX

Status as of September 30, 2019



## Path Forward:

- ARP IX exhumation will continue

## Issues:

- Degraded drums as well as encountering concrete and steel remnants of previous ARPs continue to challenge the efficiency of ARP IX exhumation.



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# Balance of CERCLA Cleanup Activities

## Accomplishments:

- WAG 1 – TAN Groundwater
  - Next In Situ Bioremediation (ISB) Injection planned for October, 2019 to treat residual TCE source.
  - Treated approx. 31,169,496 gallons of TCE contaminated water through Pump and Treat Facility (Oct 2018 –Sept 2019).
  - Completed work during September 2019 to re-seal portions of the Tank Farm Recharge Control Zone. This work repaired portions of the seal-coat that peeled up after application in 2017.
  - Completed closure and characterization of CPP-142 (a shallow injection well at INTEC) .

## Status:

- WAG 1 – TAN Groundwater
  - ISB, NPTF treatment continues on track to meet Remedial Action Objectives by 2095.
- ICDF
  - Continue to receive CERCLA waste from D&D projects including NRF, MFC and AMWTP.
- WAG 10 – Site-wide Activities
  - Continue routine groundwater monitoring, Institutional Controls and Operations and Maintenance.



Excavation of CPP-142 Shallow Injection Well

## Path Forward:

- WAG 10
  - Ongoing field activities include:
    - Continue WestBay Well rehabilitation.
    - New Site Identifications at MFC.



Waste Type	Origin	Volume Remaining	Amount Shipped	Ultimate Destination	Applicable Agreements
Sodium-Bearing waste	De-Con of reprocessing facilities	900,000 gallons	None	Geologic repository	Idaho Settlement Agreement, Site Treatment Plan, Notice of Non-Compliance/Consent Order



**Integrated Waste Treatment Unit**

**See Separate IWTU Presentation**



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