



# Idaho Cleanup Project Overview

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Idaho Cleanup Project

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Waste Disposition Project

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Facility and Materials Disposition

April 29, 2021



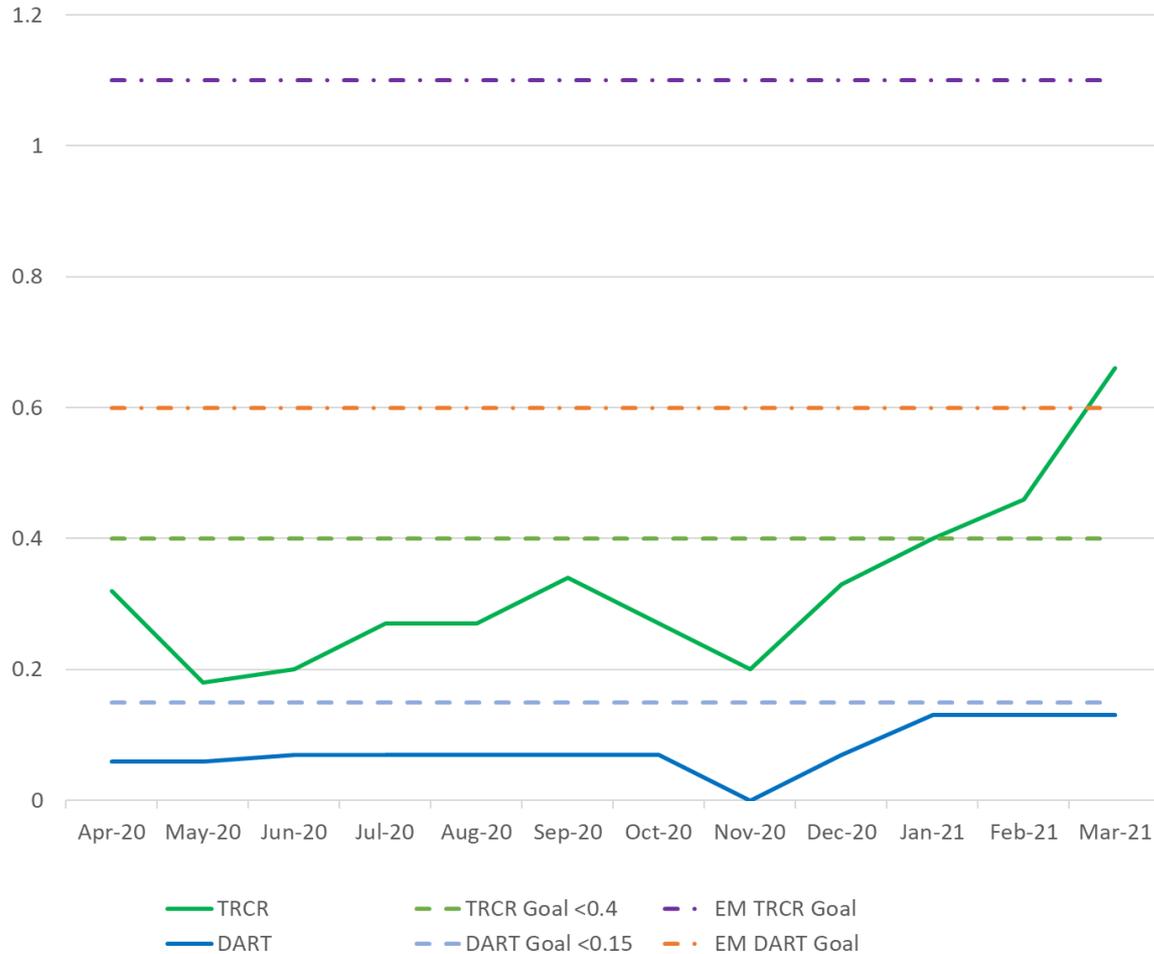
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# Fluor Idaho Safety Performance

ICP Core Injury Rates



## January 2021

- Eight First Aid Cases, Two Recordable Injuries
- One ORPS Reportable Event

## February 2021

- Five First Aid Cases, One Recordable Injury
- Three ORPS Reportable Events

## March 2021

- Five First Aid Cases, Three Recordable Injuries
- Two ORPS Reportable Events

- **Fluor Idaho COVID-19 Safety Pause 3/10**
- **Fluor Idaho Safety Stand-down 3/22-23**



Waste Type	Origin	Volume Remaining	Amount Shipped	Ultimate Destination	Applicable Agreements
Buried Waste 	Site operations, Rocky Flats Plant, other DOE facilities	• 3,444.9 m <sup>3</sup> awaiting shipment	6,496.7 m <sup>3</sup>	Waste Isolation Pilot Plant	FFA/CO (CERCLA), Agreement to Implement

## Accomplishments

- ARP IX: 0.48 of 0.69 acres (69.7%) have been exhumed (as of April 2, 2021)

## Status

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



ARP IX Exhumation



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# Balance of CERCLA Cleanup Activities

## Accomplishments

- **WAG 1: Test Area North (TAN) Groundwater**
  - Preparations are underway to drill new ISB treatment well in spring 2021 as required by 5 year review
- **WAG 3: INTEC /Idaho CERCLA Disposal Facility (ICDF)**
  - Initiated Explanation of Significant Differences (ESD) to Record of Decision to allow ICDF expansion
  - Initiated site characterization studies for new ICDF cell location
- **WAG 10: Site-wide Activities**
  - CERCLA Five Year Review approved by EPA Feb, 2021
  - Continue working with Shoshone-Bannock Tribes to develop environmental monitoring program
- **Deactivation and Decommissioning (D&D)**
  - Working with NRF in preparation to begin D&D work under CERCLA Non Time Critical Removal Action

## Status

- **WAG 1: TAN Groundwater**
  - ISB, New Pump and Treat Facility (NPTF) treatment continues on track to meet Remedial Action Objectives by 2095
- **WAG 3: INTEC/ICDF**
  - Continue to receive CERCLA waste from D&D projects including NRF, INTEC and AMWTP
- **WAG 10: Site-wide Activities**
  - Continue routine groundwater monitoring, institutional controls and operations and maintenance



Shoshone-Bannock Tribes environmental monitoring technicians observe groundwater sample collection



Collecting water samples from well USGS 109 near the southern boundary of the INL



Waste Type	Origin	Volume Remaining	Amount Shipped	Destination	Applicable Agreements
Transuranic and Mixed Low-Level Waste 	Site operations, Rocky Flats Plant, other DOE facilities	5,171 (CH-TRU) 257 (M/LLW)	45,630 (CH-TRU) 14,700 (M/LLW)	WIPP Licensed off-site disposal site	Idaho Settlement Agreement, Site Treatment Plan

## Accomplishments

- 176m<sup>3</sup> sludge treated
- 29 shipments to WIPP
- 47m<sup>3</sup> M/LLW shipped offsite

## Status

- Continue processing sludge waste
- Certify and ship CH TRU waste to WIPP
- Continue RCRA closure of retrieval enclosure
- Continue M/LLW shipments
- Continue RH processing and certification

Year	Planned WIPP Shipments
FY21	150
FY22	257
FY23	390
FY24	469
FY25	477
FY26	466
FY27	403
FY28	330
Totals	2942



AMWTP Pad 1 RCRA Closure Core Sampling



Bulk sodium found inside a pipe during treatment of RH waste



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

## Accomplishments

- Received and responded to comments on the Performance Assessment of calcine bin sets and other regulatory closure documentation from the DOE Low-Level Waste Federal Review Group (LFRG)

## Status

- Continuing engineering and design of calcine retrieval system components, including the vacuum crawler and remote cleaning arm.
- Planning to demonstrate retrieval in Bin A in mockup
- Updating Analysis of Alternatives (AoA)
- Initiated technology development study of cold crucible induction melter (CCIM) vitrification technology



Articulating Arm



Articulating Arm in Bin set

Waste Type	Origin	Mass Remaining	Amount Shipped	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)	Disposition out of state	Idaho Settlement Agreement

## Fiscal Year 2021 Plans

Transferred/Planned	SNF Type	From	To
6/12	EBR-II/T1	CPP-666	FCF/MFC
13/38	EBR-II/T2	CPP-666	RSWF/MFC
4/22	ATR	CPP-666	CPP-603
0/5	PB	CPP-749 1 <sup>st</sup>	CPP-749 2 <sup>nd</sup>

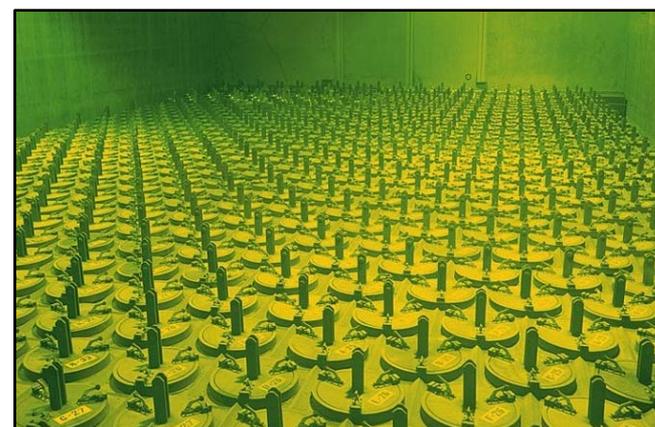
Inspections	SNF Type	Where
5/5	Peach Bottom	CPP-749 1 <sup>st</sup>



Working over a well at the outdoor fuel storage facility

## Status

- Primary focus on remainder of EBR II spent fuel transfers
- Equipment problems have delayed ATR transfers to CPP-603
- Peach Bottom fuel at CPP-749 Gen-1 Vaults to Gen-2 Vaults to begin this fiscal year
- Delivery of additional cask expected June 2021



CPP-603 IFSF Fuel storage array



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



**Integrated Waste Treatment Unit**

See separate IWTU Update



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