



Idaho Cleanup Project Overview

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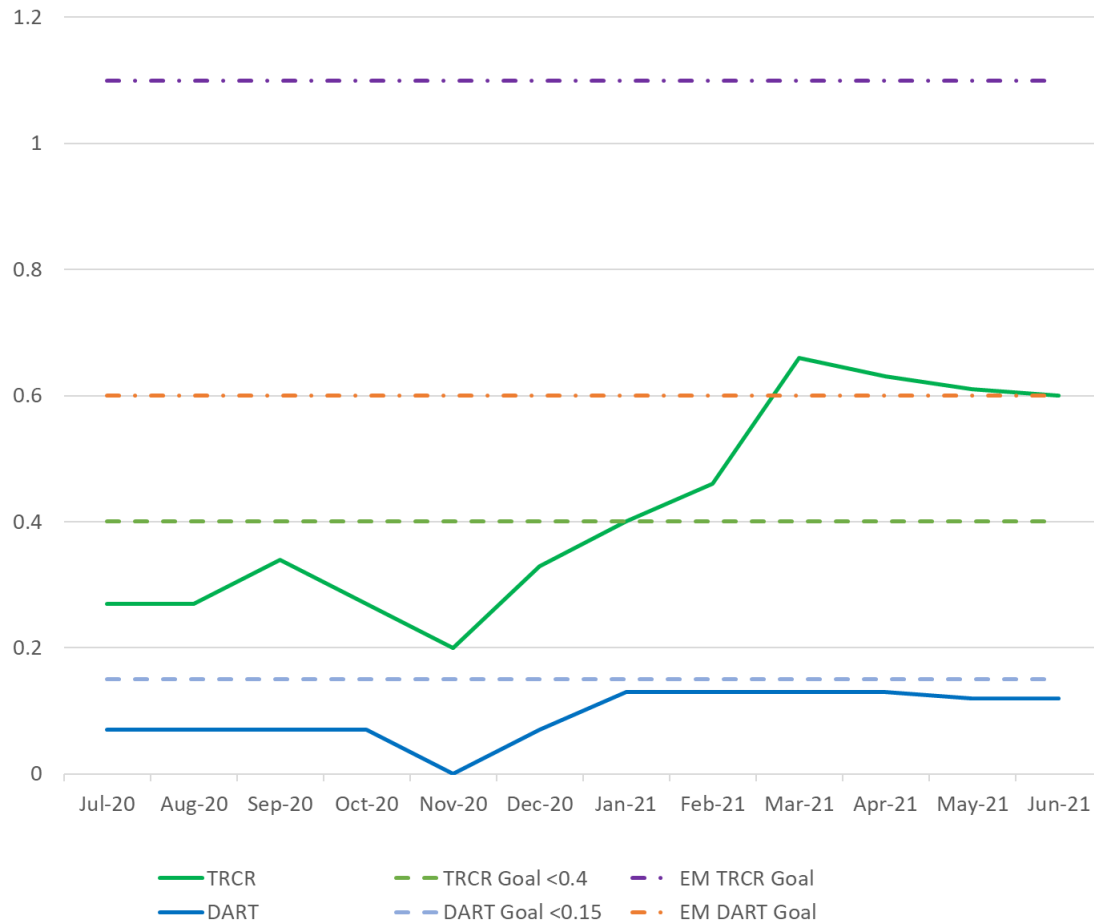
EM Environmental Management

safety ❖ performance ❖ cleanup ❖ closure

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Fluor Idaho Safety Performance

ICP Core Injury Rates



April 2021

- Two First Aid Cases
- No Recordable Injuries
- No ORPS Reportable Events

May 2021

- Three First Aid Cases
- No Recordable Injuries
- Two ORPS Reportable Events

June 2021


- Three First Aid Cases
- No Recordable Injuries
- Four ORPS Reportable Events



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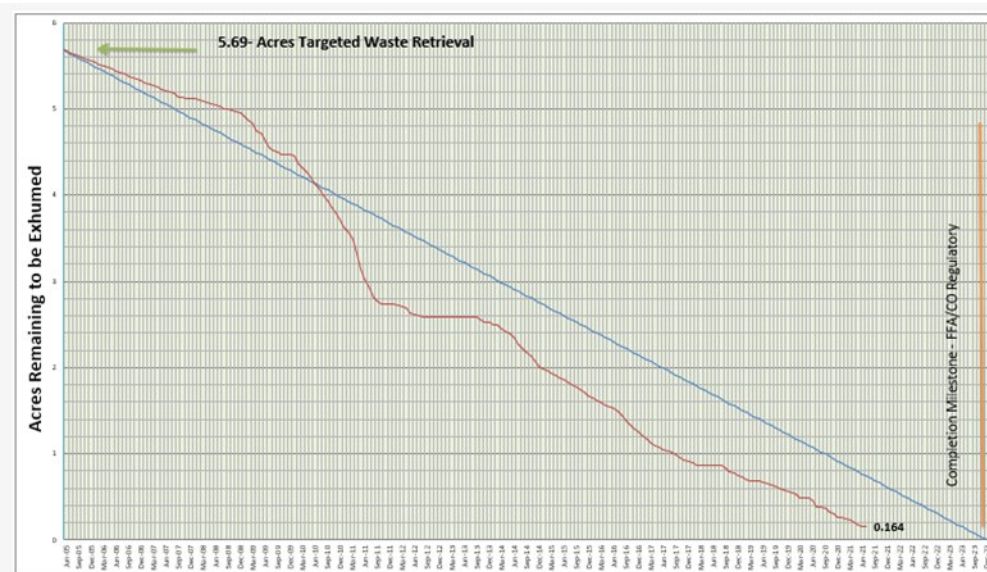
Waste Type	Origin	Volume Remaining	Amount Shipped	Ultimate Destination	Applicable Agreements
Buried Waste 	Site operations, Rocky Flats Plant, other DOE facilities	• 3,548.9 m ³ awaiting shipment	6,542.0 m ³	Waste Isolation Pilot Plant	FFA/CO (CERCLA), Agreement to Implement

WAG-7 Accomplishments

- ARP IX: 0.526 of 0.69 acres (76 %) have been exhumed (as of July 31, 2021)

Status

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



Burial of DPSs – Grouting to fill voids



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Balance of CERCLA Cleanup Activities

Accomplishments

- **WAG 1: Test Area North (TAN) Groundwater**
 - A new ISB treatment well was drilled and completed on July 8, 2021 as required by 5 year review
- **WAG 3: INTEC /Idaho CERCLA Disposal Facility (ICDF)**
 - Explanation of Significant Differences (ESD) to Record of Decision to allow ICDF expansion is drafted
 - Initiated site characterization studies for new ICDF cell location
 - Invitation of formal Tribal consultation sent to Shoshone-Bannock Tribe on OU 3-13 ESD for the ICDF complex
- **WAG 10: Site-wide Activities**
 - Completed the OU 10-08 2-year groundwater monitoring sampling
 - Completed inspections for operations and maintenance and institutional controls
- **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 and 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



USGS drilling the new ISB treatment well, TAN-2336, and core samples collected from the well



Collecting water samples from well USGS-104 for the WAG 10 2-year sampling event



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Waste Type	Origin	Volume Remaining	Amount Shipped	Destination	Applicable Agreements
Transuranic and Mixed Low-Level Waste 	Site operations, Rocky Flats Plant, other DOE facilities	4,929 (CH-TRU) 257 (M/LLW)	45,842 (CH-TRU) 14,700 (M/LLW)	WIPP Licensed off-site disposal site	Idaho Settlement Agreement, Site Treatment Plan

FY 2021 Accomplishments

- 208m³ sludge treated
- 76 shipments to WIPP
- 47m³ 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



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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
- Finalizing Analysis of Alternatives (AoA)
- Initiated technology development study of cold crucible induction melter (CCIM) vitrification technology



Articulating Arm




Articulating Arm in Bin set



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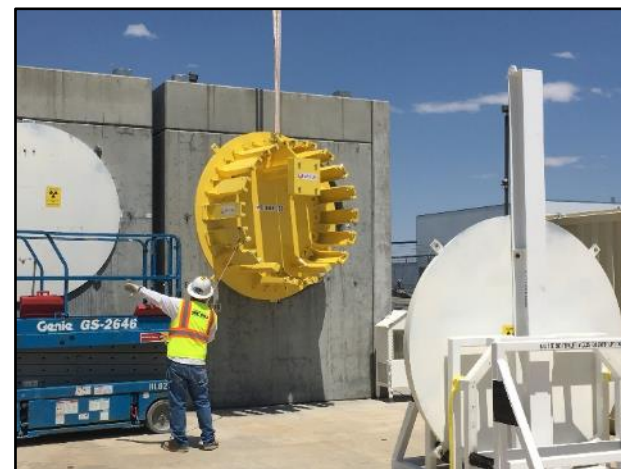
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Waste Type	Origin	Mass Remaining	Amount Shipped	Destination	Applicable Agreements
Spent Nuclear Fuel 	DOE, research and commercial reactors	243.57 Metric Tons Heavy Metal (EM-only)	153 TRIGA elements 0.03 MTHM (for reuse)	Disposition out of state	Idaho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

Fiscal Year 2021 Accomplishments

Transferred/Planned	SNF Type	From	To
10/12	EBR-II/T1	CPP-666	FCF/MFC
23/37	EBR-II/T2	CPP-666	RSWF/MFC
12/22	ATR	CPP-666	CPP-603
0/5	PB	CPP-749 1st	CPP-749 2nd

Inspections	SNF Type	Where
5/5	PB	CPP-749 1st



TMI-2 ISFSI Inspection Lid

Status

- Continue EBR II spent fuel transfers to MFC
- 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
- Aging management inspection of TMI-2 DSCs and HSMs was completed



TMI-2 DSC bottom with shielding lid removed



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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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