



Idaho Cleanup Project Overview

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August 27, 2020

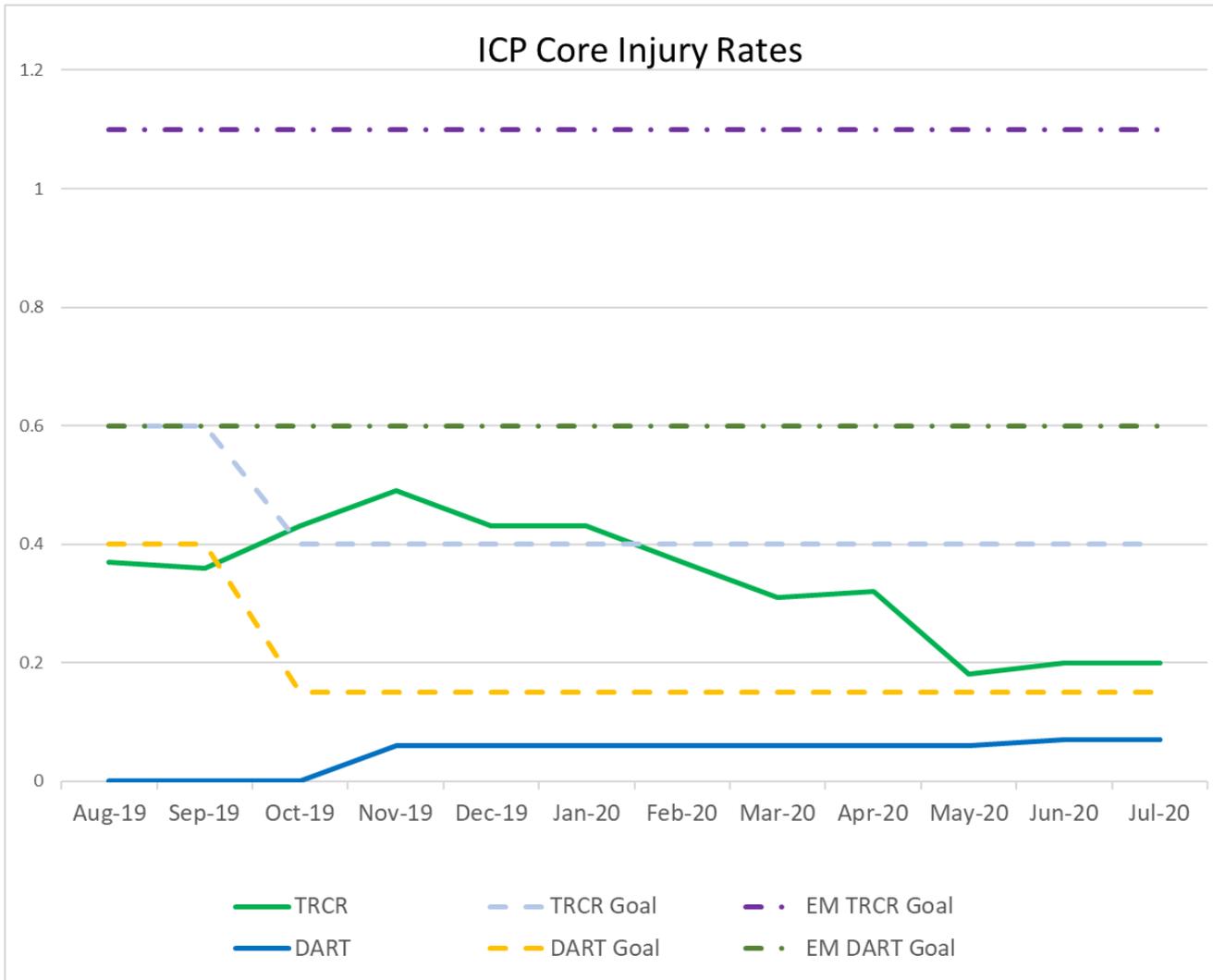


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safety ❖ performance ❖ cleanup ❖ closure

Idaho Cleanup Project

Fluor Safety Performance



Company Injury Goals

- DART Goal < 0.15
- TRCR Goal < 0.40

July 2020

- Six First Aid Cases, One Recordable Injury, and No Restricted Cases
- Three ORPS Reportable Events

June 2020

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

May 2020

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

November 2019 – April 2020

- Eighteen First Aid Cases, Two Recordable Injuries, and one Restricted Case
- Nine 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	<ul style="list-style-type: none"> • 3,222.9 m³ awaiting shipment • Estimated over 430 m³ left to exhume 	6,337.8 m ³	Waste Isolation Pilot Plant	FFA/CO (CERCLA), Agreement to Implement

WAG-7 Accomplishments:

- Since exhumation started in ARP IX on April 25, 2019, .30 of .69 acres (43.3%) have been exhumed, as of July 31, 2020
- As of July 19, 2020, 257,613 lbs. of organic vapors removed by the Organic Contamination in the Vadose Zone (OCVZ) system since operation began in 1996



Status:

- ARP IX exhumation is ongoing
- Cap design is final and posted at <https://ar.icp.doe.gov>
- OCVZ Rebound Test began August 3 with 4 weeks of baseline sampling. This will be followed by shutdown of OCVZ units for at least one year
- Well abandonment of 52 select wells and instrument borings has begun in preparation for SDA Cap construction



Left: Work continues in Drum Packaging Station (DPS) units utilizing masks and plastic curtains to maintain social distancing

COVID-19 Impacts:

- Exhumation operations paused on March 25 and resumed June 16



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Balance of CERCLA Cleanup Activities

Accomplishments:

- WAG 1 – Test Area North (TAN) Groundwater
 - Continued In Situ Bioremediation (ISB) treatment injections to treat residual TCE source
 - New ISB treatment well will be drilled in FY21
 - Next ISB treatment will occur in September, 2020
- WAG 3 – INTEC /Idaho CERCLA Disposal Facility (ICDF)
 - Completed waste volume projection estimate indicating a new ICDF landfill cell will be required to meet future capacity requirements
 - Cost estimate is underway for siting and design of new ICDF landfill cell
- WAG 10 – Site-wide Activities
 - Completed first internal draft of the CERCLA 5-Year Review to evaluate the effectiveness of CERCLA remedial actions

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 (IC) and Operations and Maintenance



Routine CERCLA field inspections at CFA landfill. Inspections include evaluation of vegetative cover and looking for signs of erosion, subsidence or animal intrusion.

COVID-19 Impacts:

- CERCLA field work continues with minimal COVID-19 impacts: routine groundwater sampling and analysis; groundwater remediation at TAN; Institutional Controls inspections; and administrative document preparation



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	5,313 (CH-TRU) 296 (MLW)	45,525 (CH-TRU) 14,638 (MLW)	WIPP Licensed off-site disposal site	Idaho Settlement Agreement, Site Treatment Plan

Accomplishments:

- Completed treatment of ISA debris waste in Treatment Facility

Status:

- Sludge treatment/repackaging in ARP VII continues
- AMWTP sludge treatment capability will be added
- RCRA closure underway for Retrieval Enclosure
- Disposal of waste including MLLW and CH-TRU
- CH TRU waste shipments to WIPP ongoing



Sludge waste in the ARP VII sorting table awaiting treatment



Left: Workers at the RH-TRU hot cell utilizing masks and plastic sheet barriers

COVID-19 Impacts:

- Resumed operations for sludge and RH by June 29 using social distancing, barriers, and cleaning
 - Slower than normal operations
 - Treatment Facility added to sludge operations
- CH shipments to WIPP slowed to 3/week
- Certification efforts minimally impacted
- RCRA closure slowed for ARP V



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:

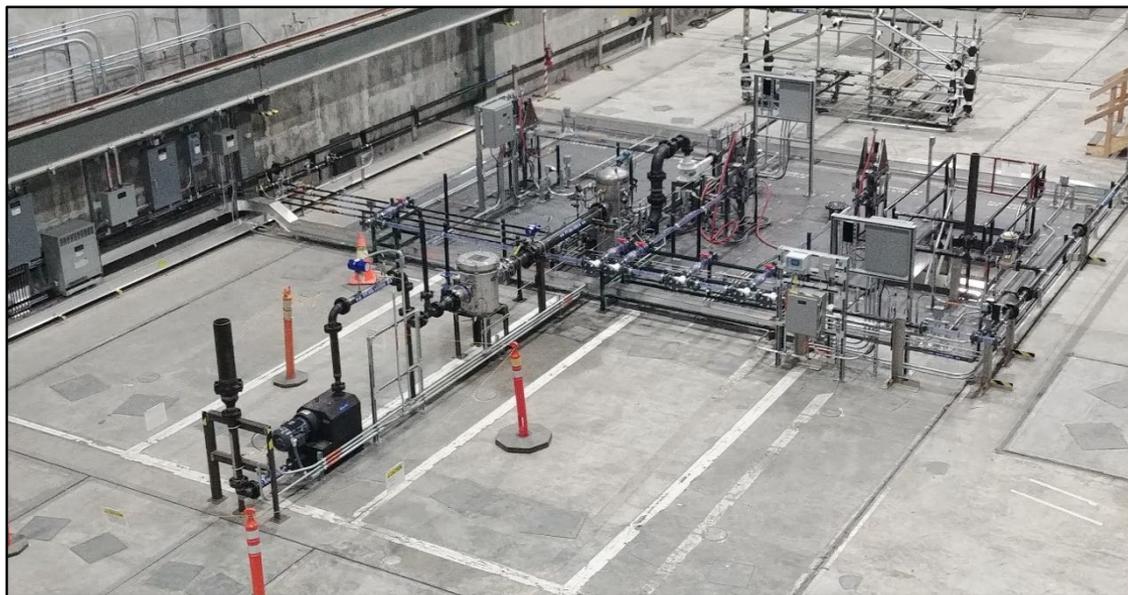
- Submitted the Performance Assessment of calcine bin sets and other regulatory closure documentation to the DOE Low-Level Waste Federal Review Group (LFRG) for review

Status:

- Continuing testing of calcine retrieval system
- Testing various canister filling systems

COVID-19 Impacts:

- Construction and testing at the full-scale mockup has resumed
- Other work (Performance Assessment Analysis, 3116 Determination, Engineering Design) continued via telework



The full-scale calcine retrieval mock-up



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
10/33	EBR-II/T2	CPP-666	RSWF/MFC
20/32	ATR	CPP-666	CPP-603

Receipts Planned	SNF Type	From	To
16/16	ATR	ATRC	CPP-603

Status:

- Primary focus remainder of contract is transfer of EBR II spent fuel from underwater storage to dry storage at the Materials and Fuels Complex
- Continue planning to remove Peach Bottom fuel at CPP-749 Gen-1 Vaults to Gen-2 Vaults to address risk associated with water intrusion

COVID-19 Impacts:

- Fluor Idaho reduced SNF operations activities March 25 through June 15 resulting in SNF Operation decrease to 1 operating shift per week
- COVID-19 ongoing impacts to SNF transfers



SNF dry storage at CPP-749



TMI-2 ISFSI, CPP-1774

Waste Type	Origin	Volume Remaining	Amount Shipped	Ultimate Destination	Applicable Agreements
Sodium-Bearing waste	De-Con of reprocessing facilities	~850,000 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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