



# Idaho Cleanup Project Overview

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**Connie Flohr, Manager**  
Idaho Cleanup Project

**Mark Brown, Deputy Manager**  
Idaho Cleanup Project

**Jonnie Zobell, Assistant Manager**  
Operational Oversight

**Doug Pruitt, Assistant Manager**  
Environmental and Waste Programs

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**EM Environmental Management**

safety ❖ performance ❖ cleanup ❖ closure

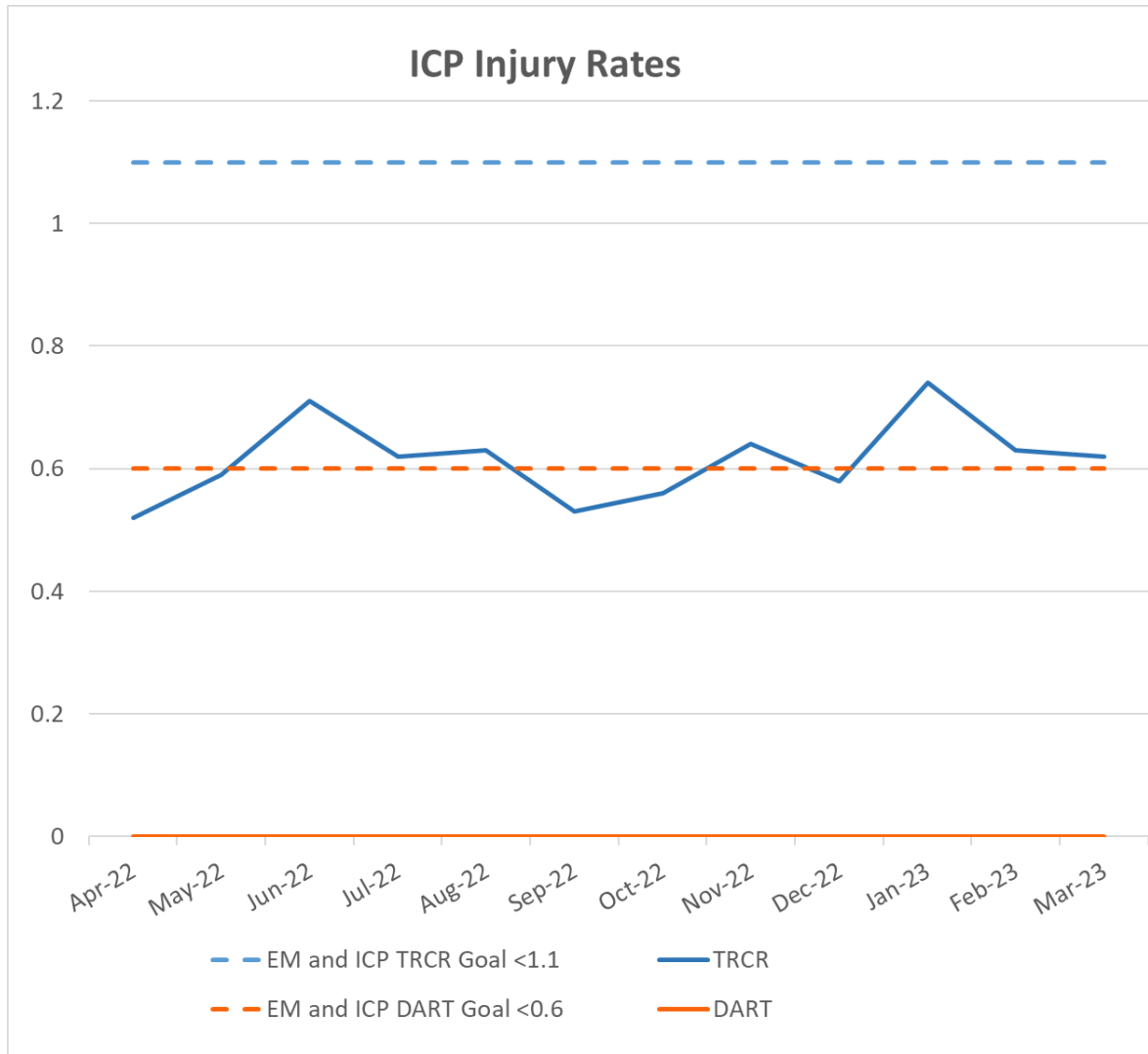
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# Site Priorities and Hot Topics

- Commence IWTU radiological operations
- D&D of ARP V, II and III
- Complete spent nuclear fuel wet-to-dry campaign
- Finalize Idaho spent nuclear fuel management plan
- Negotiate additional task orders
- Increase pace of TRU certification and shipments
- Update Naval Reactors D&D plan to reflect accelerated pace



# ICP Safety Performance



## January 2023

- 3 First Aid Cases
- 3 Recordable Injuries
- 2 ORPS Reportable Events

## February 2023

- 5 First Aid Cases
- 0 Recordable Injuries
- 4 ORPS Reportable Events

## March 2023

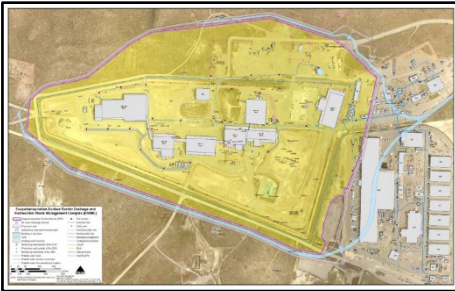
- 7 First Aid Cases
- 1 Recordable Injury
- 4 ORPS Reportable Events



# ICP Vision



IWTU



SDA Cap



Calcine Bin Sets

## Near-Term (Next 5 Years) 2028

- Continue D&D of NR and RWMC facilities
- Start up and operate IWTU
- Complete sludge treatment
- Complete wet to dry transfers of SNF
- Complete SDA cap
- Complete TRU waste certification and WIPP shipments
- Construct ICDF expansion
- Continue execution of INTEC long-term infrastructure plan

## Intermediate (Next 10 Years) 2033

- Continue Naval Reactors D&D work
- Complete RWMC D&D
- Complete SBW treatment and close tank farm

## Long-Term (Next 15 Years) 2038

- Package and store SNF
- Treat calcine to be “road ready”



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# FY 2024 Budget Request and Objectives


		2023 Enacted	2024 Request
ID-0012B	Spent Nuclear Fuel	\$ 40,245	\$ 32,159
ID-0012B-N	SNF Non Defense	\$ 13,500	\$ 11,500
ID-0013B	Solid Waste Disposition	\$ 138,005	\$ 121,890
ID-0014B	Tank Waste Disposition	\$ 204,492	\$ 182,933
ID-0030B	Soil and Groundwater	\$ 23,114	\$ 67,300
ID-0040	D&D	\$ 49,439	\$ 40,000
ID-0100	Comm. and Reg. Support	\$ 2,705	\$ 2,759
TOTAL		\$ 471,500	\$ 458,541

## FY 2024 Objectives

- ✓ **Spent Nuclear Fuel:** Continue maintenance and risk reduction activities for SNF inventory.
- ✓ **SNF Staging Facility:** Progress on design of the SNF Staging Facility.
- ✓ **Non-Defense SNF:** Continue monitoring NRC regulated facilities.
- ✓ **Solid Waste:** Continue certification and shipping of waste to WIPP. Transition additional closure activities to D&D.
- ✓ **Liquid Waste:** Continue operations of IWTU, infrastructure support at INTEC, and continue construction of the Product Storage Building.
- ✓ **Calcine Disposition:** Continue engineering and design documentation for the Calcine Disposition Project
- ✓ **Soil and Groundwater:** Continue CERCLA activities and begin movement of materials for SDA Cap construction at RWMC.
- ✓ **ICDF Cell Expansion:** Continue construction the cell expansion.
- ✓ **Idaho D&D:** Continue performance activities and dismantlement of ARPs. Completion of ARP dismantlement possible in FY 2024.
- ✓ **Community and Regulatory:** Advisory Board, DEQ, environmental compliance





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

## Accomplishments

- Completed wet to dry transfers

## Status

- Finalizing Idaho SNF management plan
- Resuming Peach Bottom fuel Gen-1 to Gen-2 vault transfers



Last wet to dry transfer on March 16, 2023



Fort Hall Business Council and ICP CAB member Ladd Edmo, Governor Brad Little and Ike White at the SNF fuel wet to dry completion celebration on March 28, 2023



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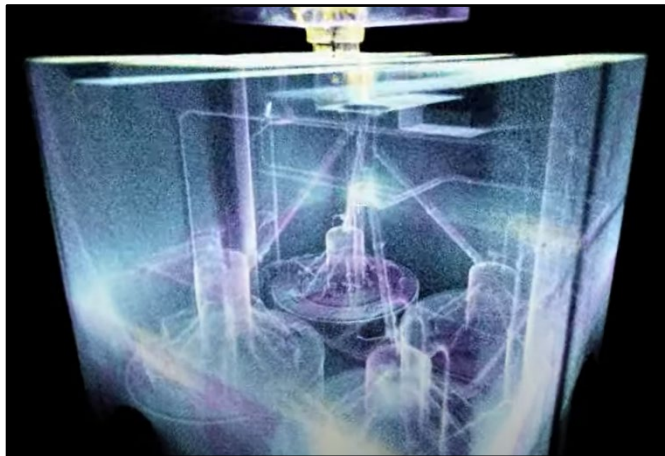
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Waste Type	Origin	Volume Remaining	Amount Shipped	Destination	Applicable Agreements
High-Level Waste 	Reprocessing of spent nuclear fuel	4,400 cubic meters	None	Disposition out of state	Idaho Settlement Agreement, Site Treatment Plan

## Status

- Preparing calcine solids storage facility (CSSF) draft 3116 Basis Document for public comment
- Continued erosion testing at the full-scale mockup
- Notified DEQ of STP P-4 milestone, Conduct System Testing missed (03/31/2023)
- Developing calcine strategy document



LiDAR generated 3D map of bin set interior



Calcine Solids Storage Facility



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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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Waste Type	Origin	Volume Remaining	Amount Shipped	Destination	Applicable Agreements
Transuranic and Mixed Low-Level Waste 	Site operations, Rocky Flats Plant, other DOE facilities	5,030 (CH-TRU)  393 (M/LLW)	47,144 (CH-TRU)  14,750 (M/LLW)	WIPP  Licensed off-site disposal site	Idaho Settlement Agreement, Site Treatment Plan

## FY 2022 Accomplishments

- 126 shipments completed to WIPP
- Completed Sludge Treatment STP milestone
- Met TRU waste certification and shipping requirements

## Scope for FY 2023

- Complete sludge waste treatment in ARP VII
- Continue certification and shipping

## Challenges impacting progress

- Overpacks

WIPP Shipments	
Year	Completed/Planned
FY 2022	126/257
FY 2023	131/390



Shipment to WIPP



# CERCLA Cleanup Activities

## FY 2022 Accomplishments

- ICDF expansion project preparations
- Completed abandonments for 12 SDA wells

## Scope for FY 2023

- Complete D&D of ARP IV (completed) and ARP V
- Prepare ARP II and III for D&D
- Complete SDA cap redesign
- Begin ICDF landfill and evaporation ponds expansion (separate presentation)
- Shoshone-Bannock Tribal long term stewardship program development
- Continue SDA well abandonments (10 wells completed)
- Finalize CERCLA remedial action report for buried waste exhumation (completed)



Aerial photo of existing ICDF Complex



ARP IV D&D -  
before (above)  
and after (right)



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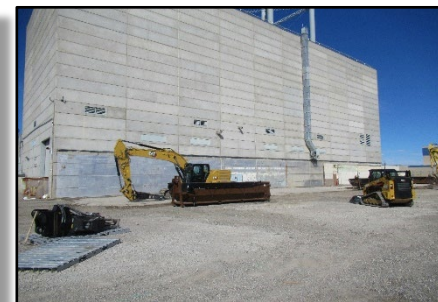
# Naval Reactors D&D Progress

## FY 2022 Highlights

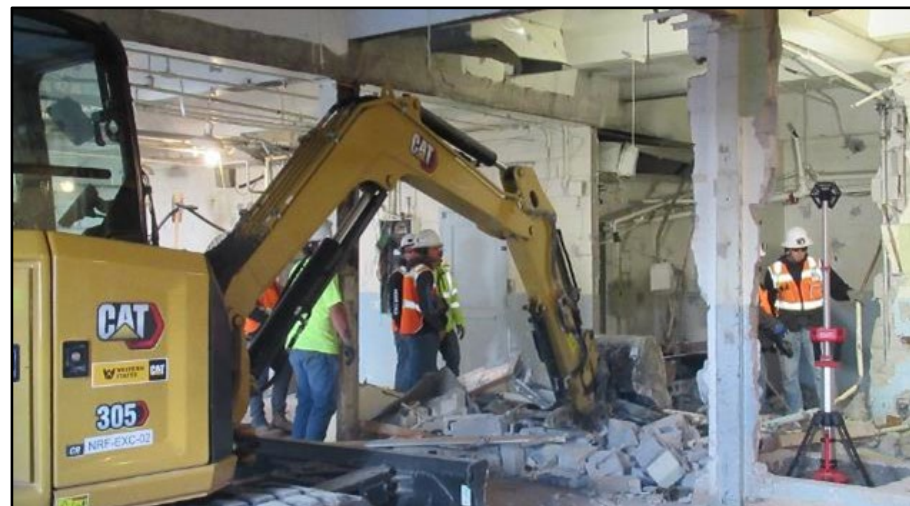
- Completed Engineering Evaluation and Cost Analysis (EE/CA) for S1W & A1W D&D
- Completed consultation with Shoshone-Bannock Tribes for EE/CA
- Initiated characterization and D&D prep activities for S1W prototype building

## Scope for FY 2023

- Finalize end-state decision for S1W removal action
- Continue D&D activities for S1W main prototype building, working toward demolition in FY24
- Begin deactivation of A1W support structures
- Initiate evaluation of end-state alternatives for S5G



Completed D&D of NRF-608 and -625 (before and after)



Support area deactivation

S1W = Submarine 1<sup>st</sup> generation Westinghouse  
A1W = Aircraft Carrier 1<sup>st</sup> generation Westinghouse  
S5G = Submarine 5<sup>th</sup> generation General Electric



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