



Idaho Cleanup Project FY 2020 Budget Request

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EM *Environmental Management*

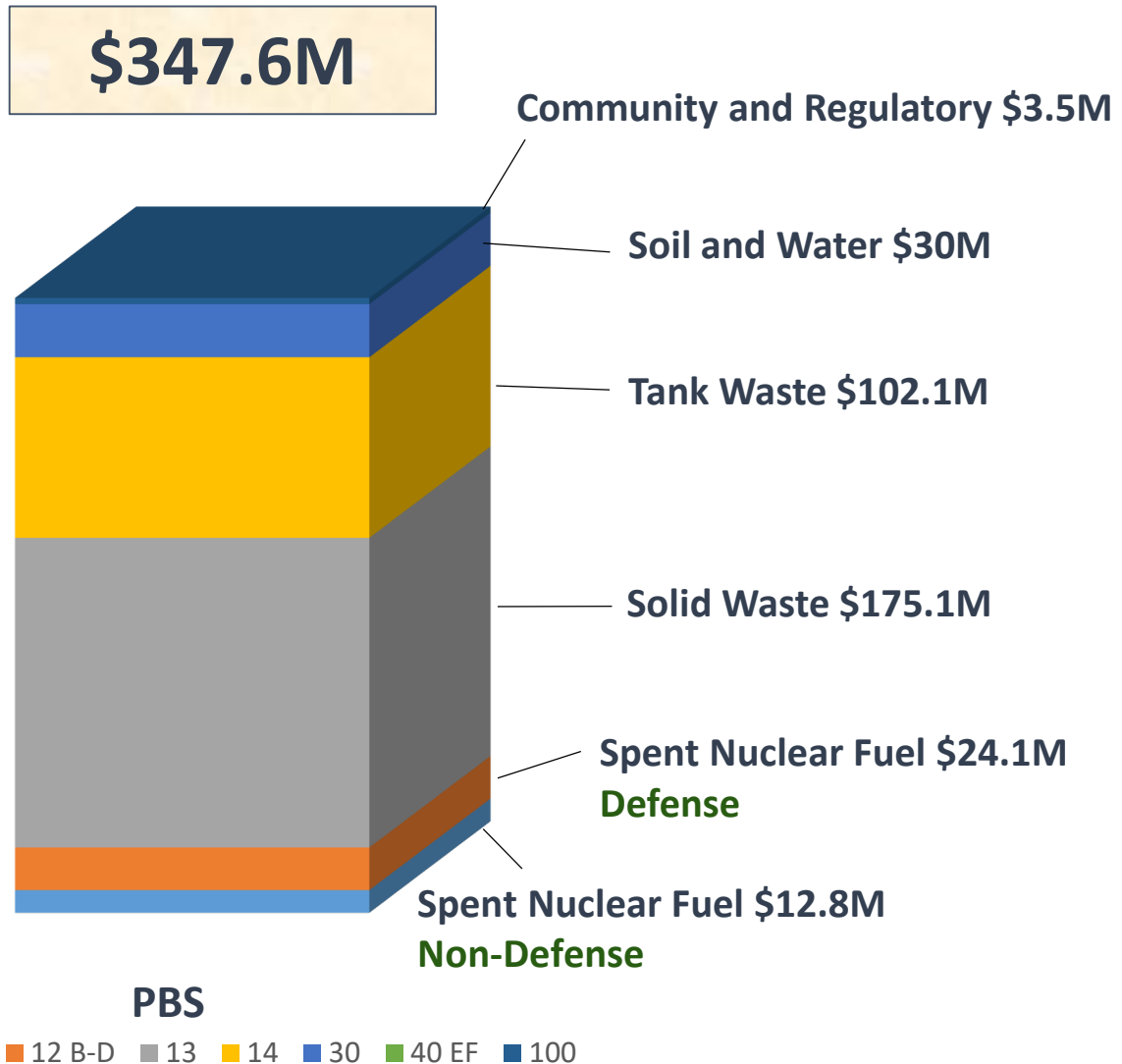
safety ❖ performance ❖ cleanup ❖ closure

Idaho Cleanup Project

FY 2020 Budget Request by Activity

DOE Idaho's Overarching Priority: Protect Snake River Plain Aquifer

- Solidify liquid waste stored over the aquifer
- Remove all stored transuranic waste from above the aquifer
- Remove targeted buried waste and cap Subsurface Disposal Area
- Remove all stored spent nuclear fuel from wet to dry storage
- Manage high-level waste and spent nuclear fuel for eventual disposal



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Idaho Cleanup Project

Idaho Cleanup Project Funding

| Idaho | FY 2018 Enacted | FY 2019 Enacted | Delta (FY19 vs FY20) | FY 2020 Request |
|--|----------------------------|----------------------------|---------------------------------|----------------------------|
| ID-0012B-D - SNF | 19,975 | 16,974 | 7,126 | 24,100 |
| ID-0012B-N - SNF | 11,972 | 10,000 | 2,800 | 12,800 |
| ID-0013 - Solid Waste | 222,798 | 215,387 | (40,287) | 175,100 |
| ID-0014B - Tank Waste | 132,500 | 162,739 | (60,605) | 102,134 |
| ID-0030B - Soil & Water | 44,727 | 24,900 | 5,120 | 30,020 |
| ID-0040-EF - Idaho Excess Facilities D&D | 10,000 | 10,000 | (10,000) | - |
| ID-0100 - Community & Regulatory Spt | 4,071 | 3,200 | 300 | 3,500 |
| Total, Idaho | 446,043 | 443,200 | (95,546) | 347,654 |



Completion Focus

- Complete exhumation of all targeted buried waste and Phase 1 report. Complete associated treatment and associated certification of this waste.
 - ✓ FY 20 Request completes exhumations at Accelerated Retrieval Project IX retrieval area, which is the final retrieval area at RWMC
- Complete Integrated Waste Treatment Unit system recovery and begin treatment of 900,000 gallons of sodium bearing waste.
 - ✓ FY 20 Request initiates hot operations of Integrated Waste Treatment Unit, pending successful demonstrations of the phase 2 simulant run 3 and phase 3 performance run, to begin processing liquid sodium-bearing waste leading to closure of the final 3 liquid waste tanks
- Complete certification of all Idaho Settlement Agreement transuranic waste, and ship to WIPP according to WIPP shipping schedule.
 - ✓ FY 20 Request completes processing of legacy transuranic waste such that waste is packaged and ready for certification and shipment; and continues disposition of low-level and mixed waste in support of Site Treatment Plan milestones



Completion Focus – cont'd

- Complete RCRA closure and D&D of the Advanced Mixed Waste Treatment Facility.
 - ✓ FY 20 Request transitions the Advanced Mixed Waste Treatment Plant to Resource Conservation and Recovery Act closure
- Complete placement of 1,000 Advanced Test Reactor spent nuclear fuel elements from wet to dry storage.
 - ✓ FY 20 Request retrieves and transfers Advanced Test Reactor fuel to the Material and Fuels Complex to support completion of wet-to-dry storage by 2023 per the Idaho Settlement Agreement
- Complete the transfer of Experimental Breeder Reactor-II spent nuclear fuel bottles to either MFC for treatment by INL contractor, or placement in dry storage.
 - ✓ FY 20 Request retrieves and transfers Experimental Breeder Reactor II Reactor fuel to the Material and Fuels Complex to support completion of wet-to-dry storage by 2023 per the Idaho Settlement Agreement
- Complete D&D of the ARPs and construct the Subsurface Disposal Area cap.
 - ✓ In FY 20, we expect approval of the design for the final cap



Idaho Cleanup Project Funding

(Dollars in thousands)

| Appropriation | FY 2018 Omnibus | FY 2019 Enacted | FY 2020 Request | FY 2020 vs FY 2019 |
|---------------|-----------------|-----------------|-----------------|--------------------|
| Defense | 434,071 | 433,200 | 334,854 | -98,346 |
| Non-Defense | 11,972 | 10,000 | 12,800 | 2,800 |
| Total | 446,043 | 443,200 | 347,654 | -95,546 |

Transuranic and Mixed / Low-Level Waste Disposition

\$175,100 (-\$40,287)

ID-0013

- Complete processing of legacy transuranic waste such that waste is packaged and ready for certification and shipment
- Continue disposition of low-level and mixed waste in support of Site Treatment Plan milestones
- Maintain and operate Radioactive Waste Management Complex (RWMC) infrastructure outside the Subsurface Disposal Area
- Transition Advanced Mixed Waste Treatment Plant to Resource Conservation and Recovery Act closure

Radioactive Tank Waste Stabilization and Disposition

\$102,134 (-\$60,605)

ID-0014B

- Initiate hot operations of Integrated Waste Treatment Unit, pending successful demonstrations of the phase 2 simulant run 3 and phase 3 performance run, to begin processing liquid sodium-bearing waste leading to closure of the final 3 liquid waste tanks
 - Develop and further the regulatory path forward for disposal of sodium bearing waste treatment
 - Maintain tank farm and systems necessary for safe delivery of sodium bearing waste until treatment is complete
- Manage and safely store calcine, including significant progress toward completing proof of retrieval capabilities

Spent (Used) Nuclear Fuel

\$36,900 (+\$9,926)

ID-0012B-D
ID-0012B-N

- Retrieve and transfer Experimental Breeder Reactor II and Advanced Test Reactor fuel to the Material and Fuels Complex to support completion of wet-to-dry storage by 2023 per the Idaho Settlement Agreement
- Operate Fort St. Vrain and Three Mile Island 2 NRC licensed facilities, including new security systems at Fort St. Vrain
- Implement license renewal for Three Mile Island 2 facility

Soil and Groundwater Remediation

\$30,020 (+\$5,120)

ID-0030B

- Retrieve, process, and dispose of targeted buried waste to support completion
 - FY 20 request completes exhumations at Accelerated Retrieval Project IX retrieval area, which is the final retrieval area at RWMC
- Continue monitoring and remediation for soils and groundwater

Site Infrastructure / Program Support (Community and Regulatory activities)

\$3,500 (+\$300)

ID-0100

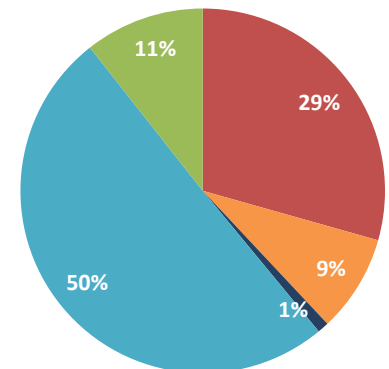
- Support State of Idaho Department of Environmental Quality
- Support site-wide environmental compliance and oversight
- Support Citizens Advisory Board requirements

Excess Facilities Deactivation and Decommissioning

\$0 (-\$10,000)

ID-004-EF

- (no funding and no planned activities)



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