

**Hanford
Office of River Protection
EFCOG WMWG Update**

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WRPS
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Office of River Protection (ORP)

ORP is responsible for planning, integrating, and managing the River Protection Program executed by contractors performing work under ORP overall management. ORP has 188 employees, both Federal and contractor.

Washington River Protection Solutions (WRPS)

WRPS is the prime contractor responsible for safely managing and operating the Tank Farms. WRPS has ~1,500 employees.

Bechtel National, Inc. (BNI)

BNI is responsible for the engineering and construction of the Waste Treatment Plant. BNI has ~2,300 employees.

Advanced Technology and Laboratories International (ATL)

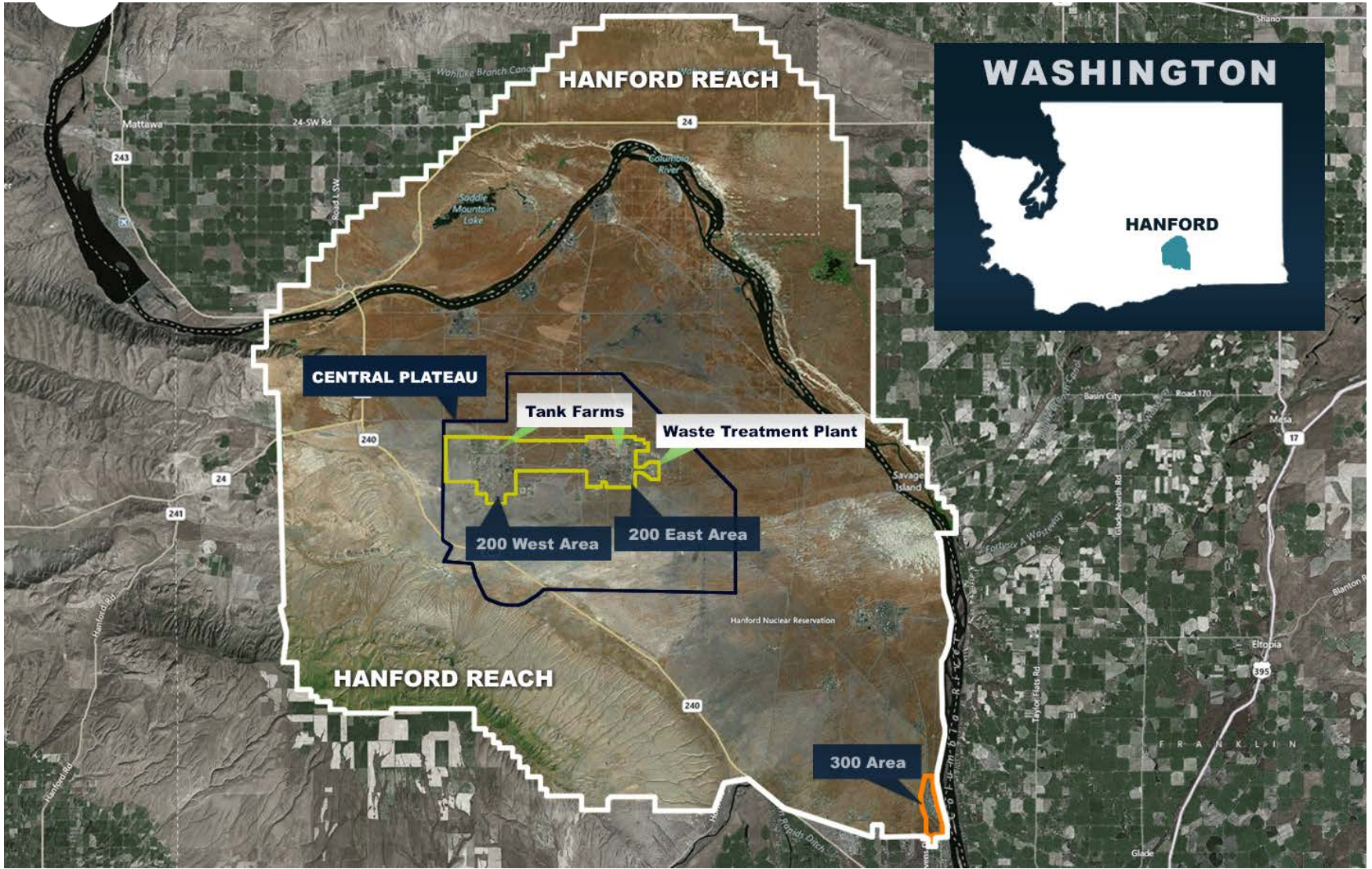
ATL is the prime contractor responsible for managing the 222-S Laboratory. ATL has 75 employees.

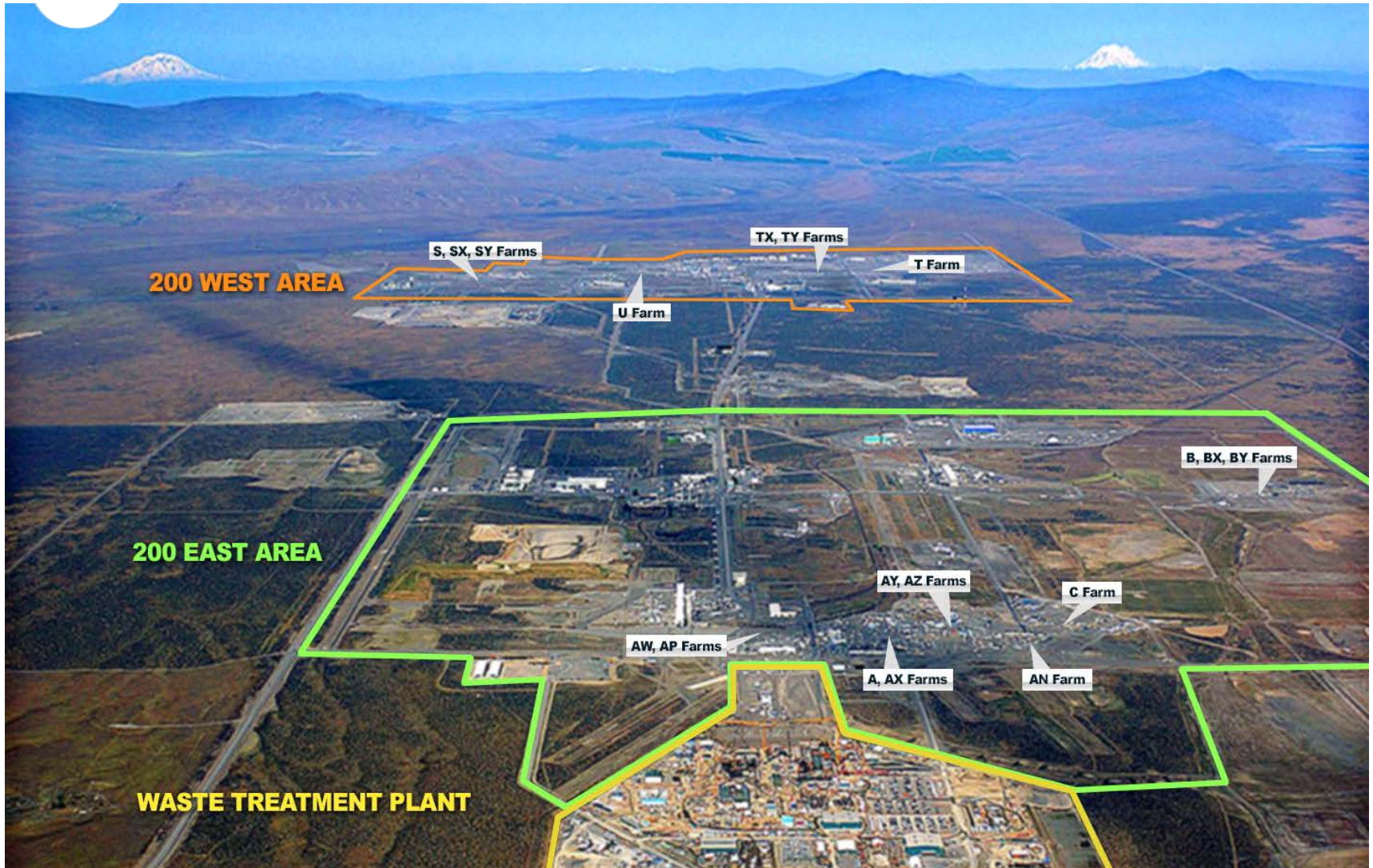




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DOE Office of River Protection





Mission

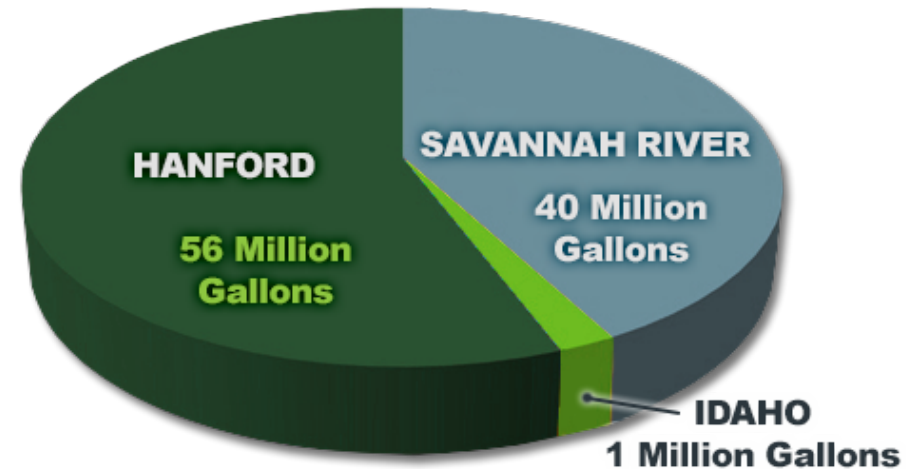
Safely retrieve and treat Hanford's tank waste and close the Tank Farms to protect the Columbia River

Tank Farms

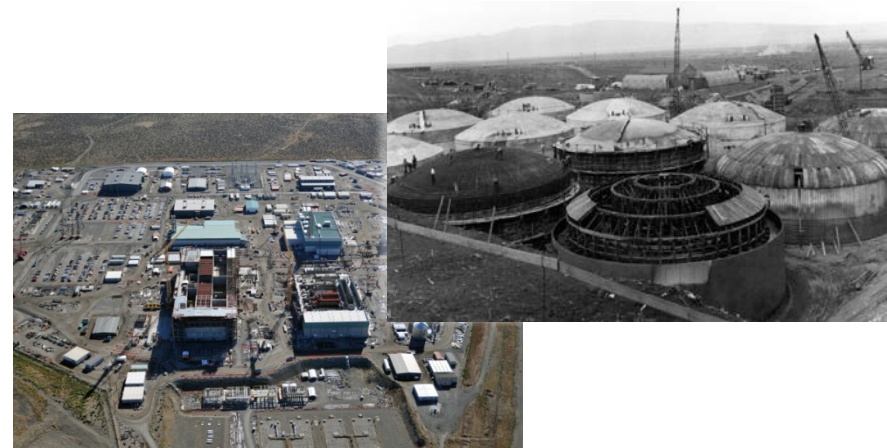
- 177 total underground storage tanks
 - 149 single-shell tanks, 28 double-shell tanks
 - 56 million gallons of radioactive/chemical waste
- 176 million curies of radioactivity
- 240,000 tons of complex chemicals

Waste Treatment Plant

- Four processing facilities designed to turn radioactive waste into glass
 - Pretreatment Facility, High-Level Waste Facility, Low-Activity Waste Facility, Analytical Laboratory
- Twenty support structures
 - Balance of Facilities
- Will treat all of Hanford's high-level waste and 40-60% of its low-activity waste



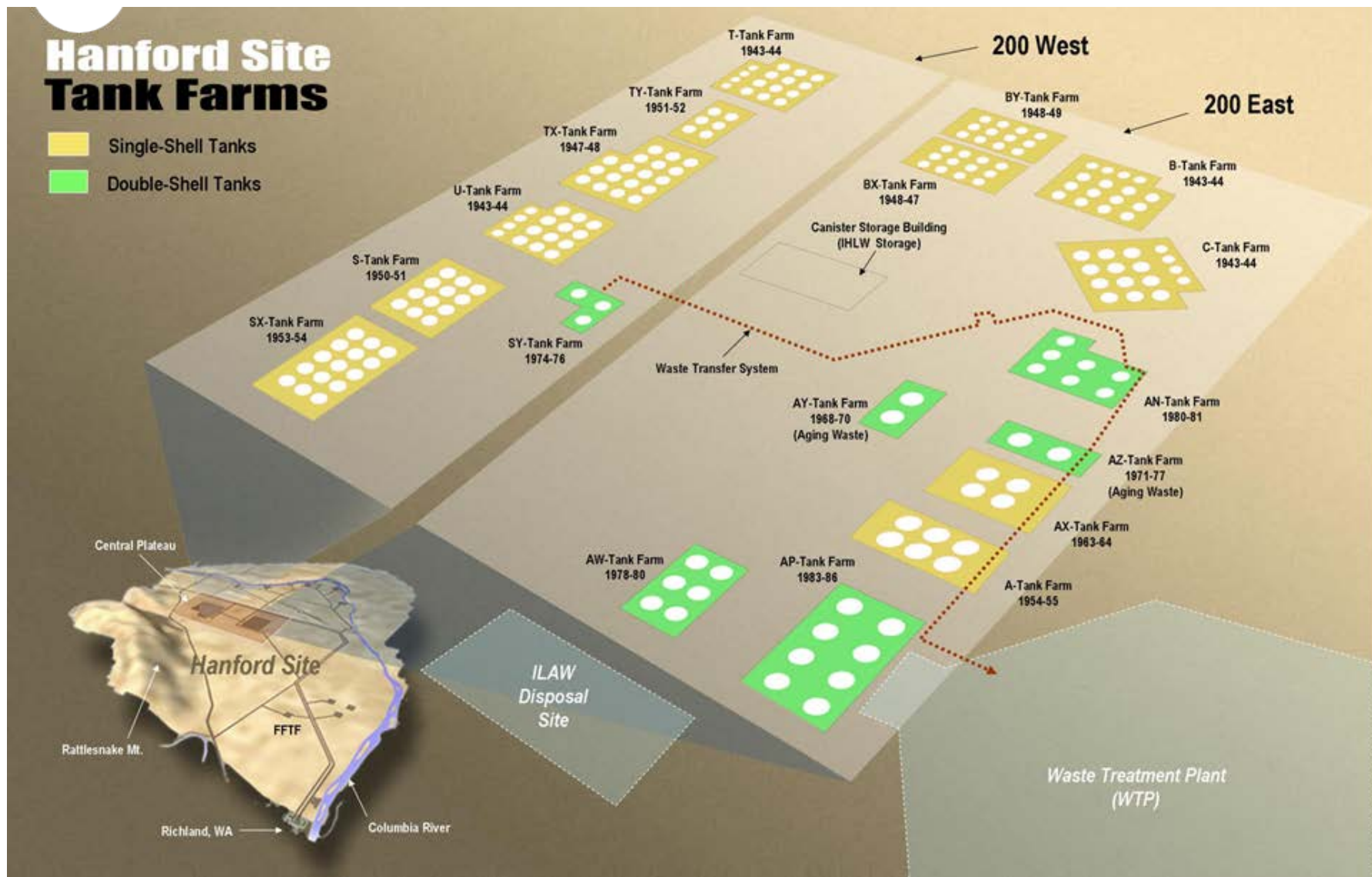
Total number of gallons contained within tanks at various DOE sites





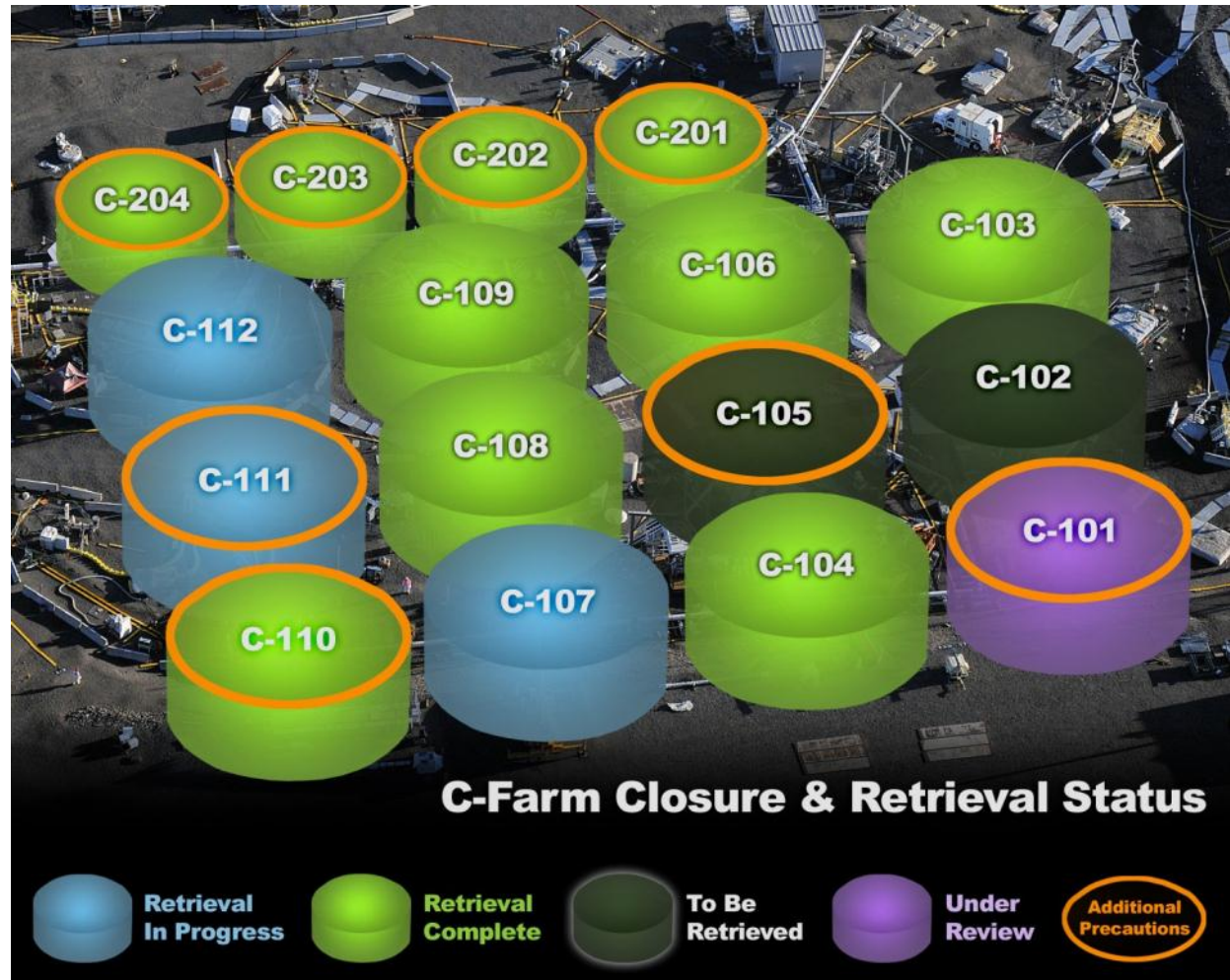
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Hanford Tank Farms



Single-Shell Tank Waste Retrieval Status

- Single-Shell Tank retrievals are covered by both a Consent Decree and the Tri-Party Agreement (TPA)
- Consent Decree milestone requires DOE to retrieve 10 C-Farm tanks by Fiscal Year (FY) 2014
- To date, 10 of the 16 tanks in C-Farm have been retrieved to regulatory standards
 - One S-Farm tank and six C-Farm tanks have been retrieved under the TPA
 - Four Consent Decree tanks have been retrieved



Note: Simultaneous retrievals performed from three different tanks for the first time ever in 2012



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Single-Shell Tank Waste Retrieval





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WTP Construction Site

High-Level
Waste Facility

Pretreatment
Facility

Analytical
Laboratory

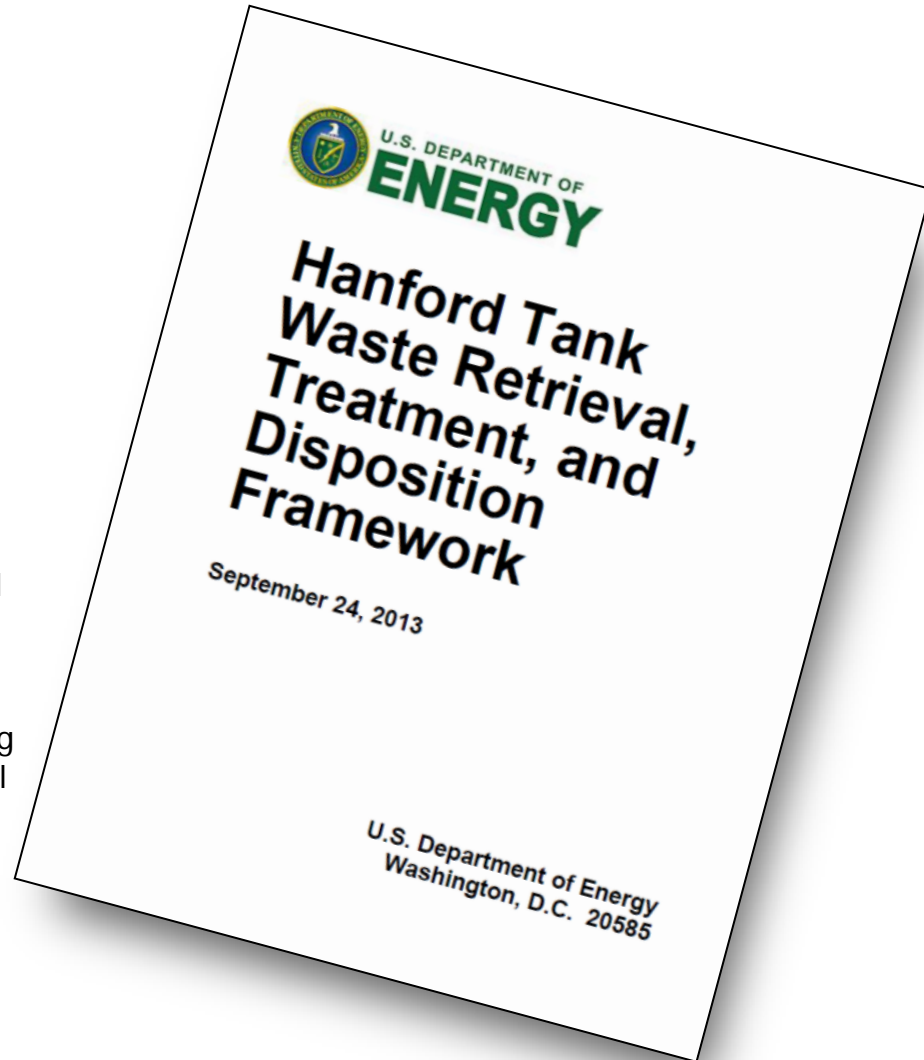
Balance of Facilities
(20 support buildings)

Low-Activity
Waste Facility



The Secretary of Energy's "Framework" calls for Hanford's cleanup mission to be completed in three phases. Initial phase key activities include:

- Completion, commissioning, and startup of Low-Activity Waste Facility, Balance of Facilities and the Lab (LBL), the ongoing C-Farm retrievals, and the tank farm infrastructure and an interim pretreatment capability needed to directly feed the LAW Facility
- Final permitting of the onsite Integrated Disposal Facility (IDF) for low-activity waste
- Retrieval and shipment of any properly classified and permitted contact handled transuranic (CH-TRU) waste from the single-shell tanks to WIPP
- Initiation of a tank waste characterization and staging capability in the tank farms to support HLW Technical Issue Resolution, and completion of full-scale vessel testing and resolution of technical issues in the PT and HLW Facilities.



- FY14 & FY15 ORP Funding – Budget increased from \$409M to \$520M
- Priorities
 - Issue TC&WM EIS ROD
 - Progress Framework Initiatives:
 - Obtain CD-0 for Tank Waste Characterization and Staging capability
 - Obtain CD-1 for the Interim Pretreatment System Project
 - Submit a plan to HQ aligning the WTP LAW/BOF/Lab baseline with the framework

- ORP Priorities (cont.)
 - Optimize, Consolidate, Store, and Stage Tank Waste Feed
 - Complete hard-heel removal from four Single-Shell Tanks in C-Farm
 - Complete three evaporator campaigns gaining at total of 750k gallons of additional Double-Shell Tank space
 - Complete Tank Integrity Program commitments
 - Initiate design for retrieval of next nine tanks
 - Deliver the WTP
 - Implement 2014 WTP Safety Culture Improvements
 - Complete the HLW Tech Issue Plan to support a decision on resuming HLW facility Construction
 - Complete the PT Tech Issue Plan
 - Complete first phase of full-scale vessel testing



Waste Management Focused Tasks

- Evaluate current waste management/storage capabilities for the increased WTP and TOC waste volumes - Consideration for a consolidated waste management facility
- Initiate developing the WIR determinations for the WTP secondary solid waste and the LAW glass product
- Support the Integrated Disposal Facility Performance Assessment