



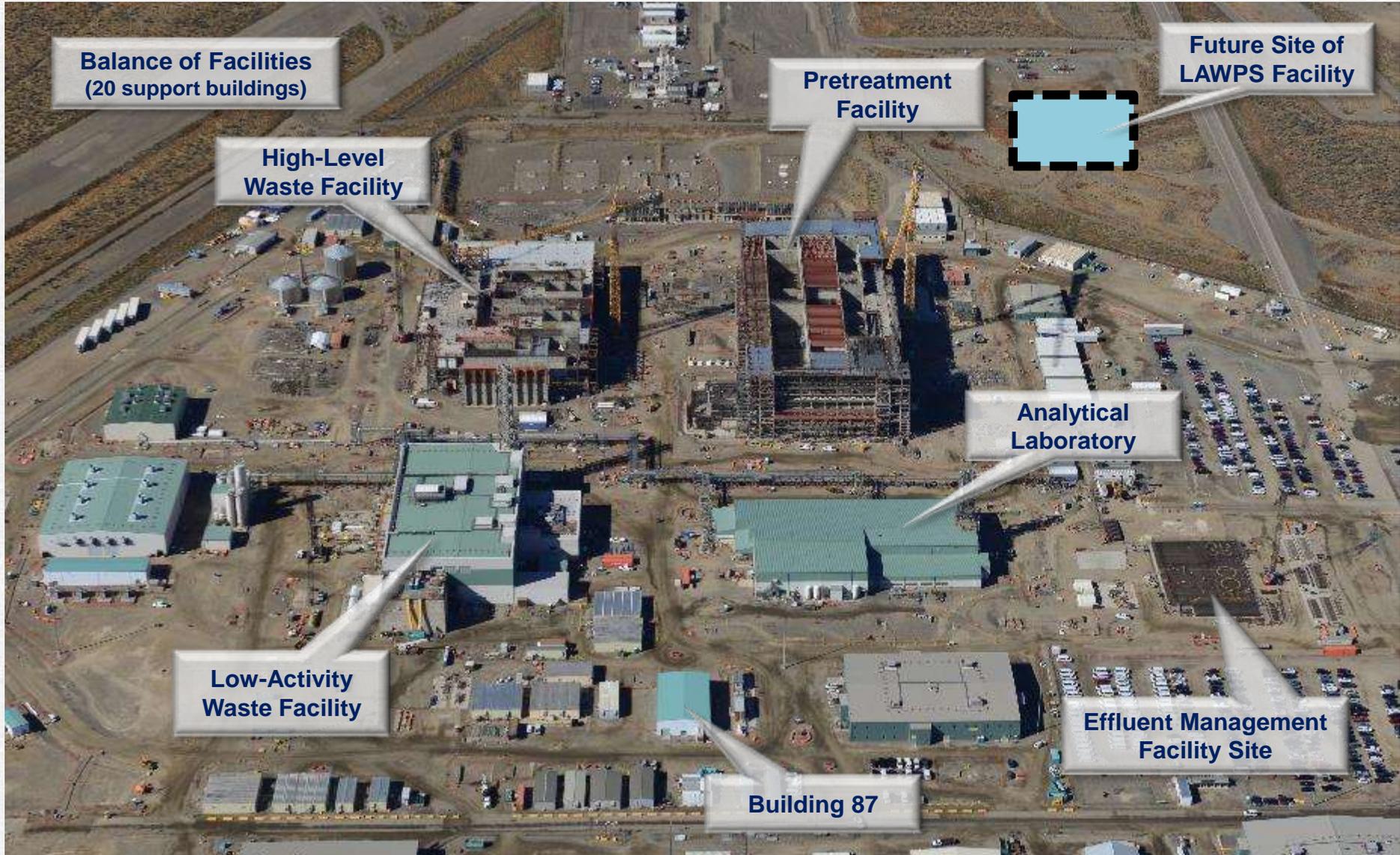
OFFICE OF
RIVER PROTECTION
United States Department of Energy

Waste Treatment and Immobilization Plant Update

Presented by: **Joni Grindstaff, WTP Deputy Assistant Manager**

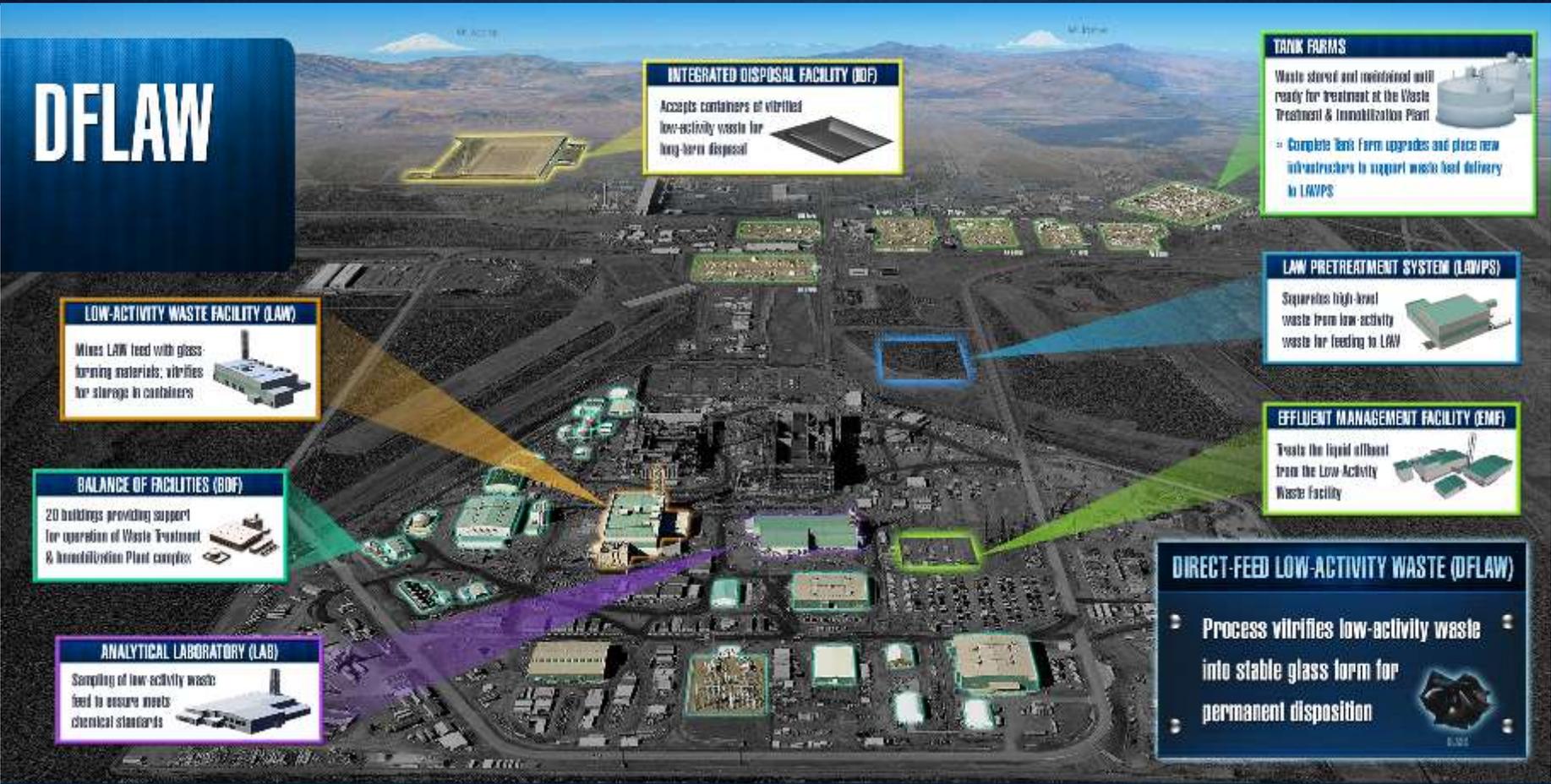
August 9, 2017





Direct-Feed Low-Activity Waste Facility Overview

DFLAW



LOW-ACTIVITY WASTE FACILITY



BALANCE OF FACILITIES



ANALYTICAL LABORATORY



INTEGRATED DISPOSAL FACILITY



LOW-ACTIVITY WASTE PRETREATMENT SYSTEM



EFFLUENT MANAGEMENT FACILITY



DFLAW



LAW CONTAINERS



This graphic depicts aerial view of waste.







Dangerous Waste Permit requirements

EMF Secondary Containment (Class 3 modification)

- Permit will authorize construction of basemat, stem walls, low point drain, process walls
- Comment period 1 of 2: Completed January 2017

EMF Transfer Lines (Class 2 modification)

- Permit will authorize installation of piping to transfer waste
- Comment period: Completed June 2017

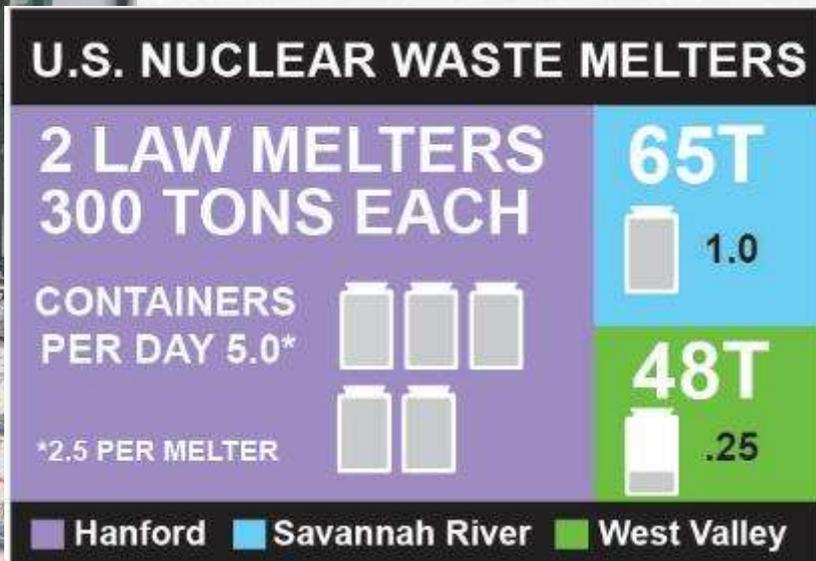
EMF Processing Equipment

- Permit will authorize installation of the tanks and evaporator
- Comment period: TBD summer/fall 2017

WTP Analytical Laboratory (Class 3 modification)

- Permit will add operating conditions
- Comment period 1 of 2: Open through September 1, 2017





Video:
[Assembly of
300-ton melter
complete](#)

The assembly of Melter No. 1 for the LAW Facility was completed in June. Construction crews are now focused on safely assembling the second LAW melter.

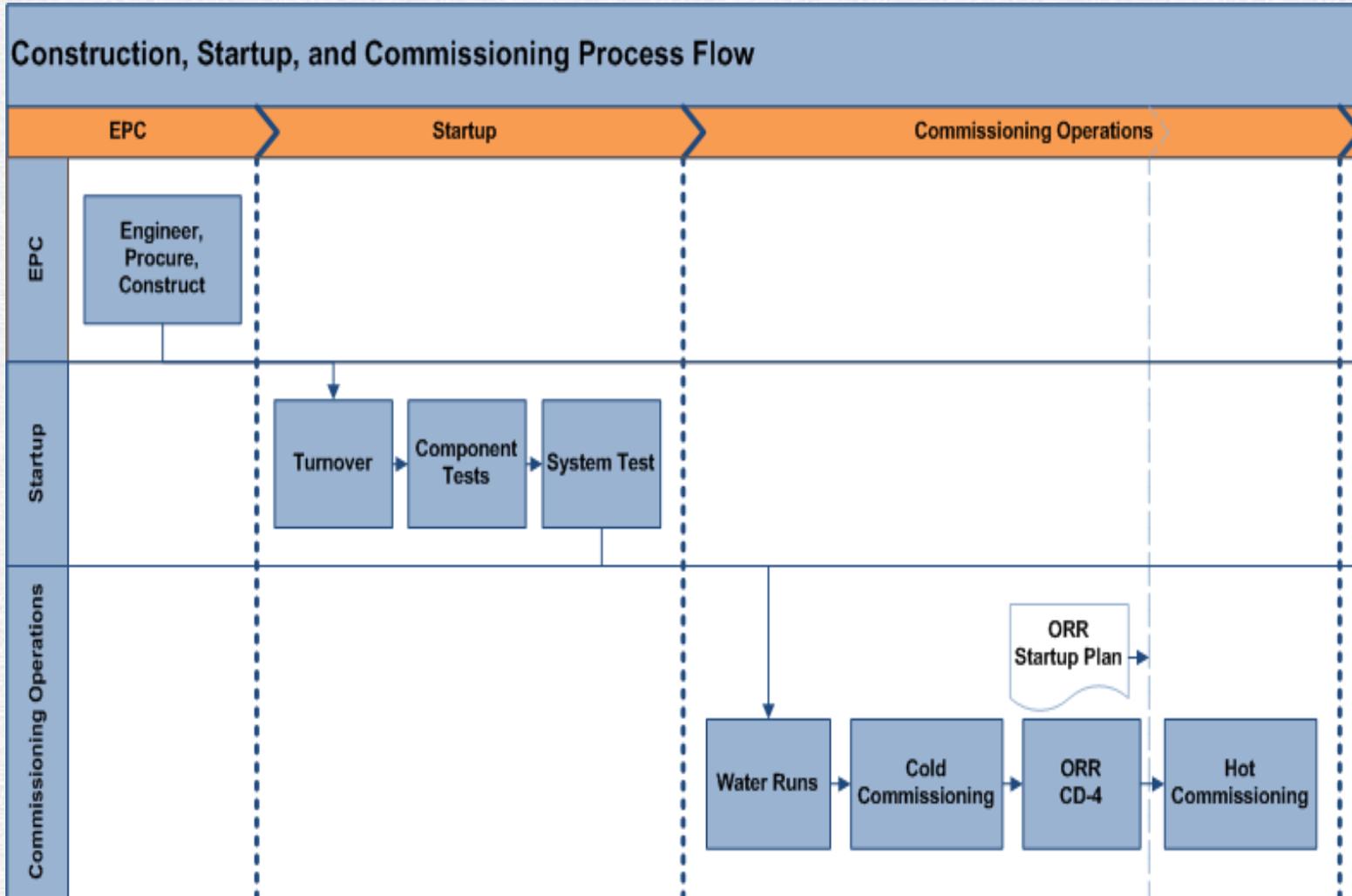


	Project Schedule	Contract	BCP	Amended Consent Decree
LAW Construction Complete	March 2018	Jun 2018	*	Dec 2020
Start LAW Cold Commissioning	Feb 2021	*	*	Dec 2022
Complete LAW Cold Commissioning	June 2021	*	*	*
CD-4a ¹	Oct 2021	*	Aug 2023	*
Complete LAW Hot Commissioning	Jan 2022	Jan 2022	*	Dec 2023

* Dates not specified in referenced document.

¹ The WTP Project defines CD-4a, “Approve Start of Initial Waste Treatment,” as the successful completion of cold commissioning, an operational readiness review, and approval to startup the LAW Facility consistent with DOE O 425.1D, *Verification of Readiness to Start Up or Restart Nuclear Facilities*.







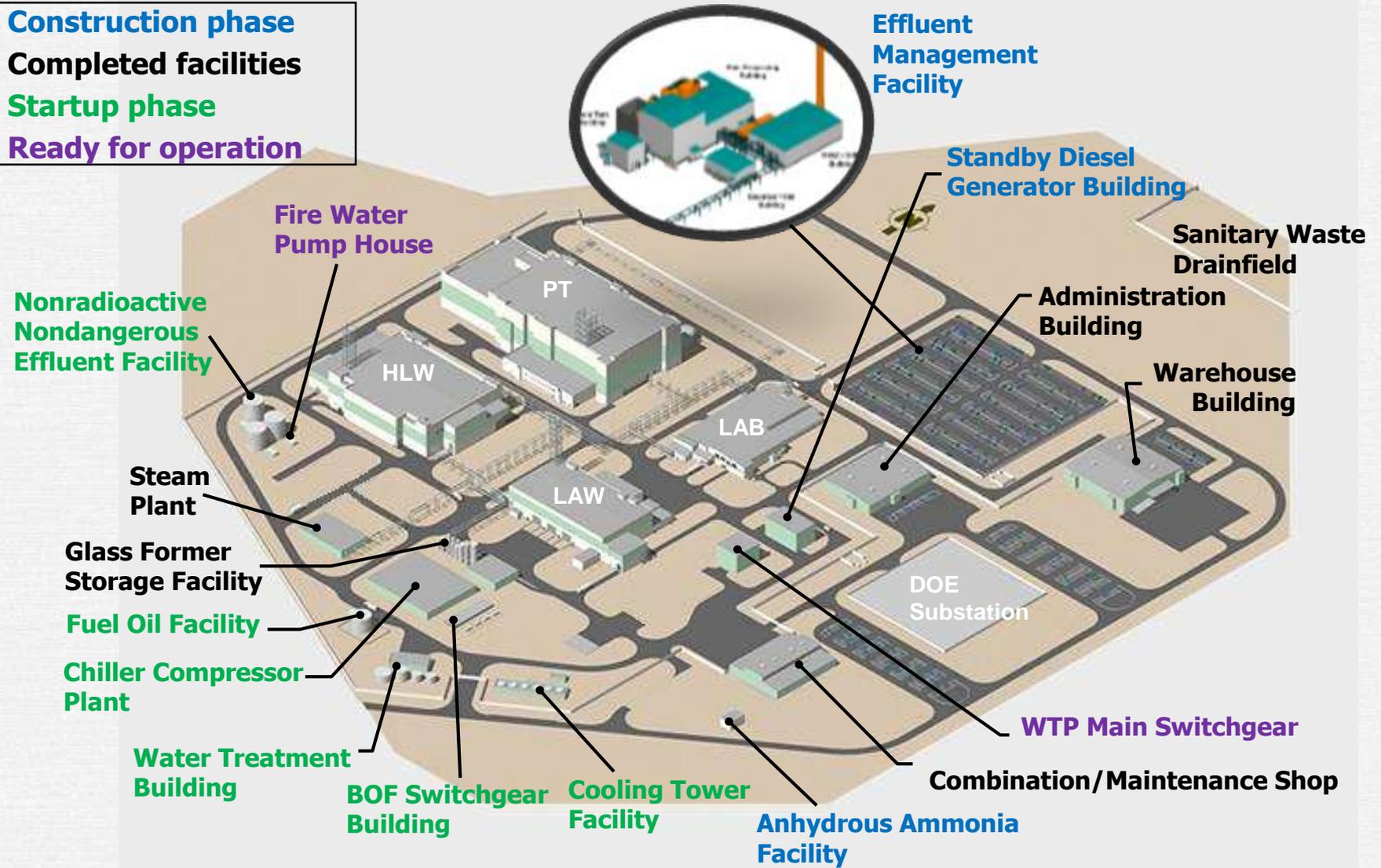
Construction Turnover Progress

Construction phase

Completed facilities

Startup phase

Ready for operation





Direct-Feed Low-Activity Waste Completion Metric

	Total	Actual
Construction System Turnover to Startup	194	35
• Balance of Facilities	50	27
• Analytical Laboratory	33	5
• Low-Activity Waste Facility	84	3
• Effluent Management Facility	27	0
Startup System Tests	194	16
Startup System Handover to Operations	194	7

June 2017





Commissioning Program Development

- Denotes kick-off meeting complete & review initiated
- Denotes surveillance report complete and CR initiated
- Denotes Plant Manager review initiated
- Denotes Plant Manager review complete
- Denotes DOE review initiated
- Denotes DOE review complete and report received
- Denotes date for a scheduled review or follow-up meeting
- Ready for DOE Review

18 programs supporting the commissioning work control program

	Program	Readiness Assurance Group Review			Plant Manager Review			Expected availability for DOE Review	
1.	WTCC Training		Complete			Complete		Complete	
2.	Requirements Management		Complete			Complete		Complete	
3.	Project Training		Complete			Complete		Complete	
4.	Environmental Management		Complete			Complete		7/12/17 Ready	
5.	Document Administration/Procedures		Complete			Complete		Complete	
6.	Worker Safety and Health		Complete			In progress	7/11/17	July	
7.	Chemical Management		Complete			Complete		Complete	
8.	Document Control/Records Mgt		Complete			Complete		Ready	
9.	Configuration Management		Complete			TBD		TBD	
10.	Fire Protection		Complete			July	7/26/17	August	
11.	Conduct of Operations		Complete			Complete		Complete	
12.	Waste Management		Complete			Complete		Ready	
13.	Plant Engineering		Complete			Complete		Ready	
14.	Software Quality		Complete			Complete		Complete *	
15.	Maintenance		Complete			Complete		Complete	
16.	Work Control		Complete			Complete		Complete	
17.	Quality Assurance (EPC QAM)		Complete			Complete		Complete *	
18.	ISMS		Complete			Complete		7/13/17 Ready	
19.	Hoisting and Rigging (not a work control program)		Complete			Complete		July	
20.	Plant Management (not a work control program)		June			N/A **		July	
21.	Readiness Assurance (not a work control program)		Complete			Complete		Complete	

** The plant manager is the RAM for this program.



20 of 21 reviews complete

17 of 20 reviews complete

11 of 21 reviews complete





"Protecting our workers, the public, and the environment"

The Hanford Reach
White Bluffs Overlooking the Columbia River

