



OFFICE OF
RIVER PROTECTION
United States Department of Energy

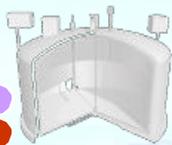
Hanford Tank Farms Update

October 5, 2016

Chris Kemp, Deputy Federal Project Director, Tank Retrieval & Closure
U.S. Department of Energy, Office of River Protection

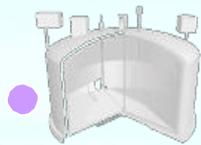
Presented by:

16 TANKS RETRIEVED



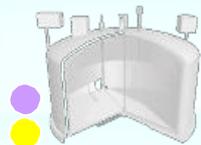
C-106

- Capacity of tank: 530 Kgals
- Completion date: Dec. 31, 2003
- Volume removed: 189 Kgals



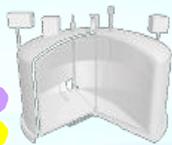
C-103

- Capacity of tank: 530 Kgals
- Completion date: Aug. 26, 2006
- Volume removed: 75 Kgals



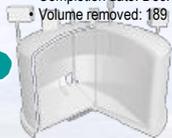
C-104

- Capacity of tank: 530 Kgals
- Completion date: Aug. 17, 2012
- Volume removed: 267.3 Kgals



C-107

- Capacity of tank: 530 Kgals
- Completion date: Aug. 9, 2014
- Volume removed: 210.4 Kgals



C-203

- Capacity of tank: 55 Kgals
- Completion date: March 24, 2005
- Volume removed: 2,501 gallons



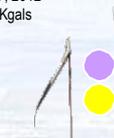
C-204

- Capacity of tank: 55 Kgals
- Completion date: Dec. 11, 2006
- Volume removed: 1,349 gallons



C-109

- Capacity of tank: 530 Kgals
- Completion date: Sept. 13, 2012
- Volume removed: 62.2 Kgals



C-112

- Capacity of tank: 530 Kgals
- Completion date: Apr. 18, 2012
- Volume removed: 91.3 Kgals



C-202

- Capacity of tank: 55 Kgals
- Completion date: Aug. 11, 2005
- Volume removed: 1,253 gallons



S-112

- Capacity of tank: 758 Kgals
- Completion date: March 2, 2007
- Volume removed: 612 Kgals



C-110

- Capacity of tank: 530 Kgals
- Completion date: Oct. 15, 2013
- Volume removed: 176.3 Kgals



C-102

- Capacity of tank: 530 Kgals
- Completion date: Apr. 9, 2015
- Volume removed: 300.5 Kgals



C-201

- Capacity of tank: 55 Kgals
- Completion date: March 23, 2006
- Volume removed: 718 gallons



C-108

- Capacity of tank: 530 Kgals
- Completion date: March 22, 2012
- Volume removed: 63.0 Kgals



C-101

- Capacity of tank: 530 Kgals
- Completion date: Sept. 12, 2013
- Volume removed: 72.5 Kgals

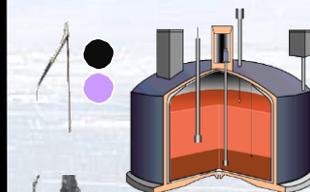


C-111

- Capacity of tank: 530 Kgals
- Completion date: March 20, 2016
- Volume removed: 27.6 Kgals

0 TANKS UNDER REVIEW

2 TANKS IN RETRIEVAL



AY-102

- Capacity of tank: 1,000 Kgals
- Volume of waste to be removed: 744 Kgals
- Retrieval began March 2016
- Volume of Waste removed to date: 595K gals



C-105

- Capacity of tank: 530 Kgals
- Volume of waste to be removed: 122 Kgals
- Retrieval began June 2014
- Volume of Waste removed to date: 54.9 Kgals

4 TANKS IN CONSTRUCTION

AX-101 / AX-102 / AX-103 / AX-104



Acid Dissolution

Modified Sluicing

Vacuum Retrieval

Saltcake Dissolution/
Chemical Dissolution

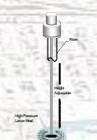
High-Pressure
Water



Remote
Water Lance
(Salt Mantis)



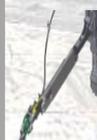
Mobile
Retrieval Tool
(Foldtrack)



High-Pressure
Mixer
(Rotary Viper)



Mobile Arm
Retrieval System
(MARS)
Sluicing

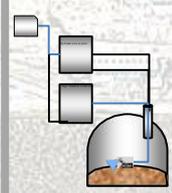
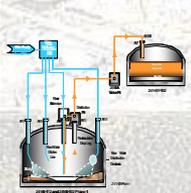
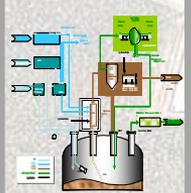
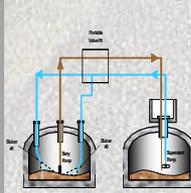
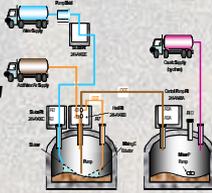


Mobile Arm
Retrieval System
(MARS)
Vacuum



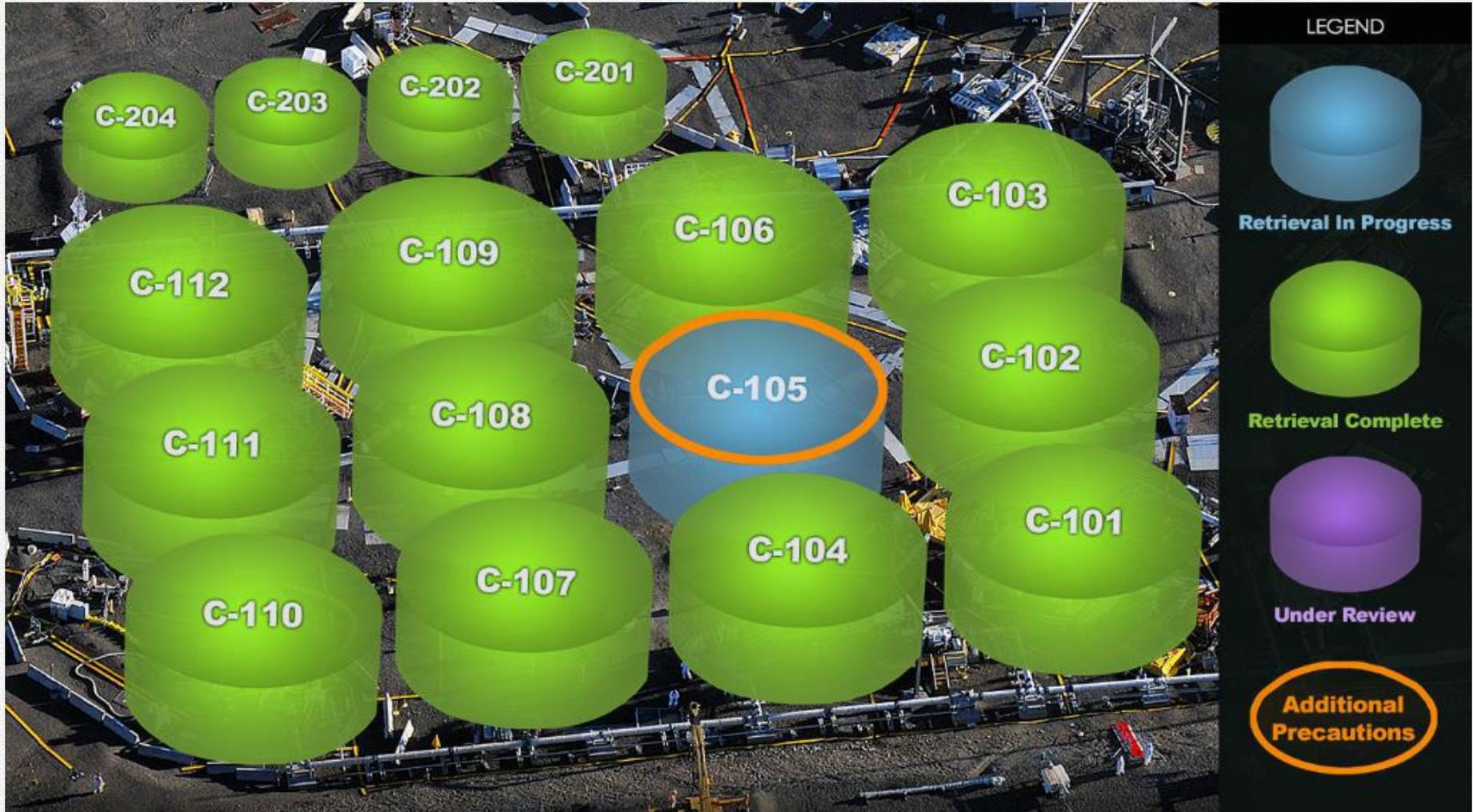
Enhanced Reach
Sluicing System
(ERSS)
+ High-Pressure Water

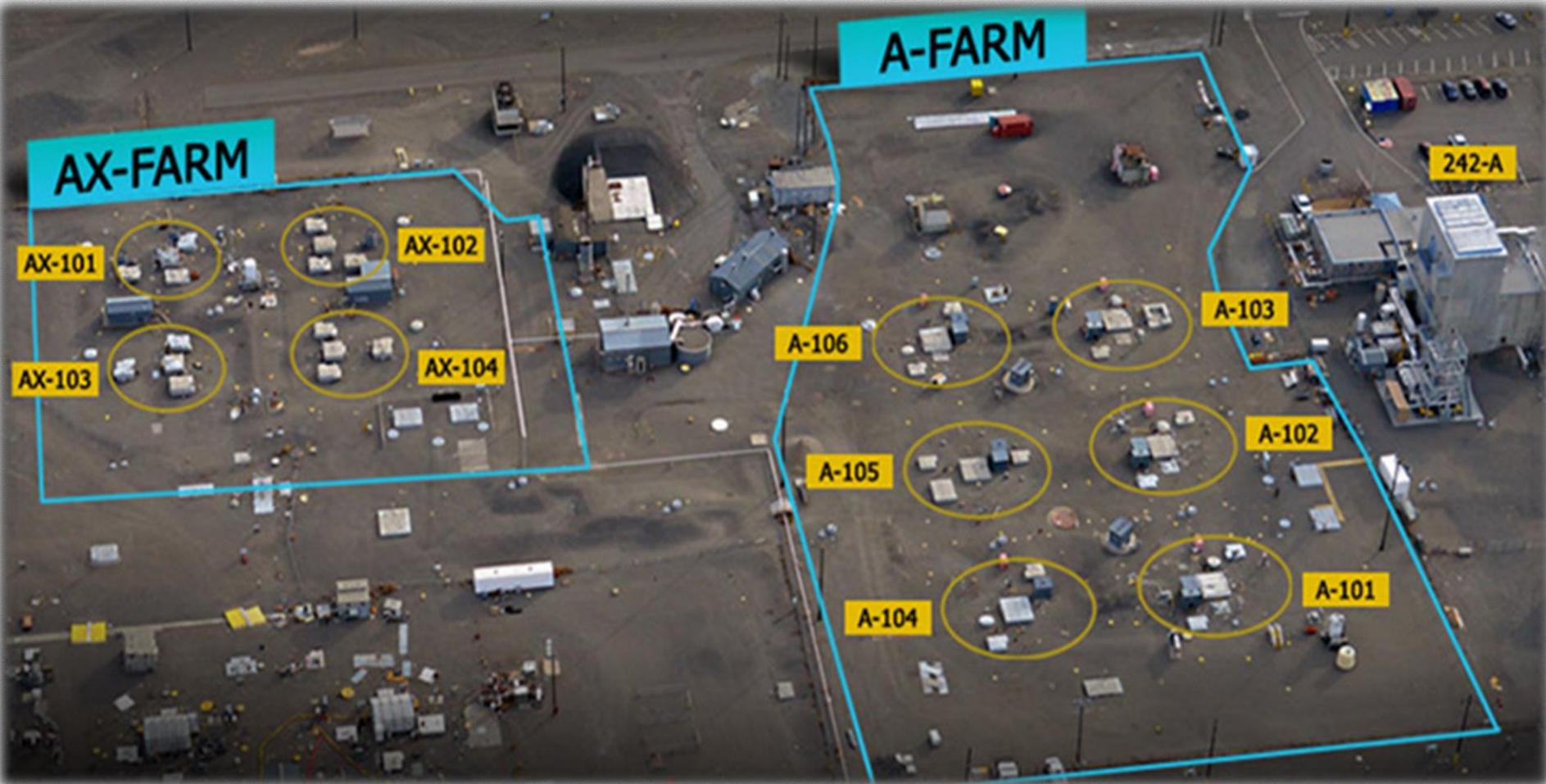
Retrieval
Methodology
Key





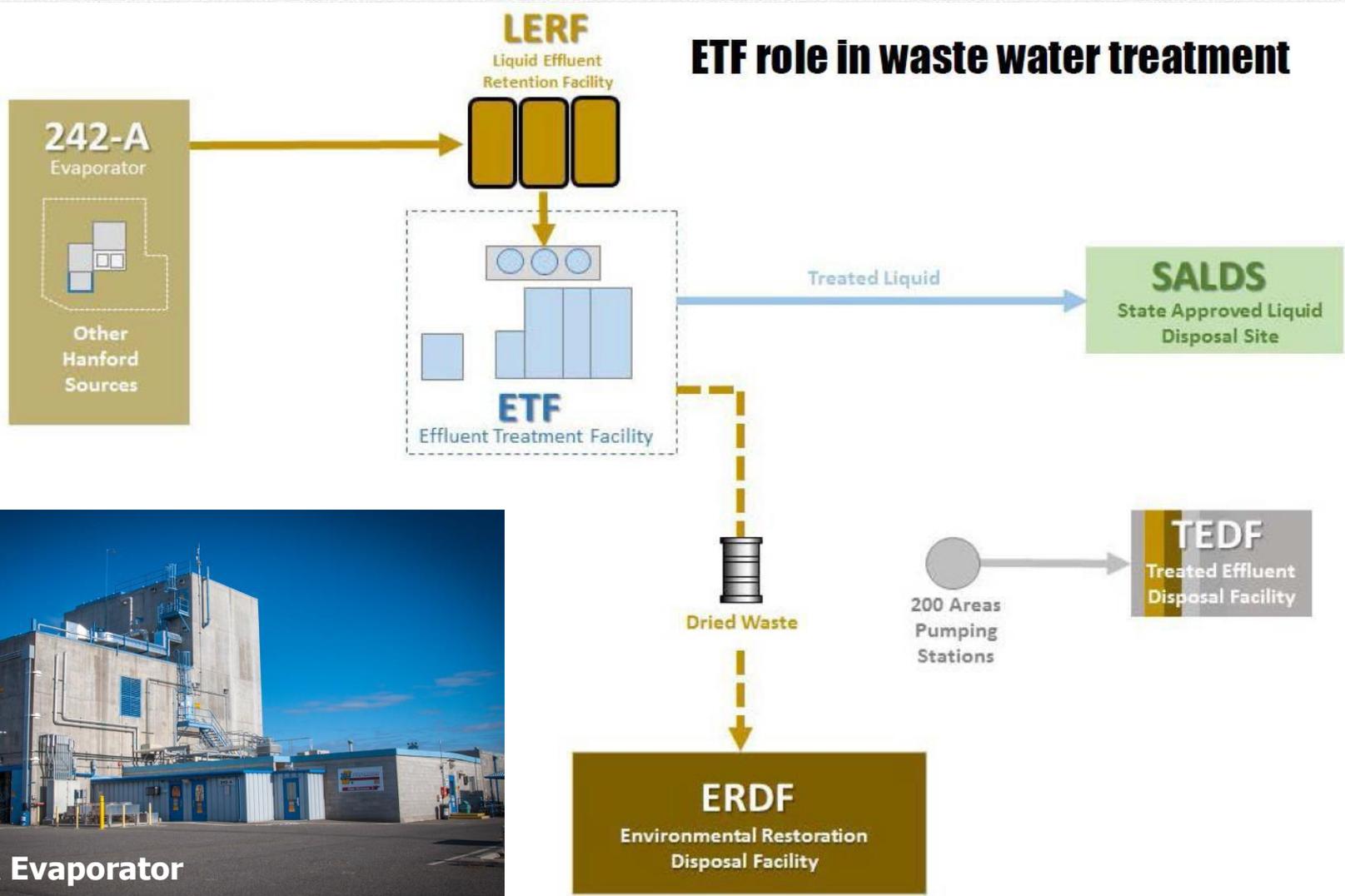
C-Farm Retrieval Status







Effluent Treatment Facility Restarts Operations



242-A Evaporator





- 95 percent of liquid waste and sludge retrieved (~595k gal)
- 4 extended reach sluicers were recently installed
- Pumping expected to resume in November
- Deadline to complete retrieval March 4, 2017



DOE and Washington River Protection Solutions worked closely with the Washington Department of Ecology over 18 months to plan for AY-102 retrieval. Retrieval began ahead of schedule on March 3, 2016.



Questions?

The Hanford Reach
White Bluffs Overlooking the Columbia River

