



UNITED STATES DEPARTMENT OF ENERGY

# OFFICE OF RIVER PROTECTION

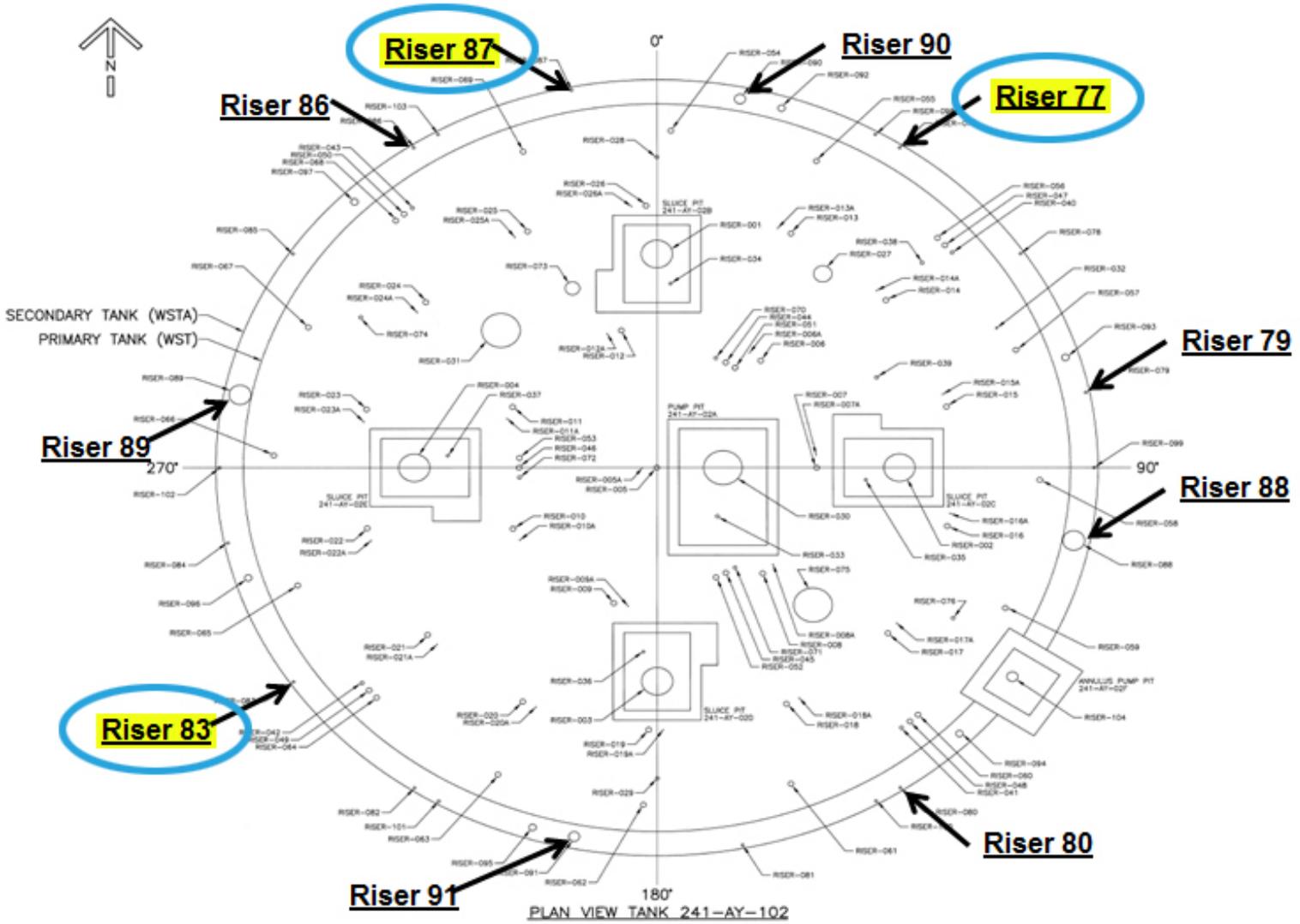
## Hanford Advisory Board Agency Update

**JD Dowell, Deputy Manager**

Thursday, March 6, 2014



# AY-102 Status





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## AY-102 Status



Refractory Installation – circa 1970



**Mission:** Safely manage Hanford's 56 million gallons of liquid radioactive tank waste, while designing, constructing, commissioning and operating the Waste Treatment Plant until the mission is complete.



# Integrated Path to Mission Completion



**200 WEST AREA**

S, SX, SY Farms

TX, TY Farms

T Farm

U Farm

**200 EAST AREA**

B, BX, BY Farms

AY, AZ Farms

C Farm

AW, AP Farms

A, AX Farms

AN Farm

**WASTE TREATMENT PLANT**



# Our Team

## 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.

## Washington River Protection Solutions (WRPS)

WRPS is the prime contractor responsible for safely managing and operating the Tank Farms.

## Bechtel National, Inc. (BNI)

BNI is responsible for the engineering and construction of the Waste Treatment Plant.

## Advanced Technology and Laboratories International (ATL)

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





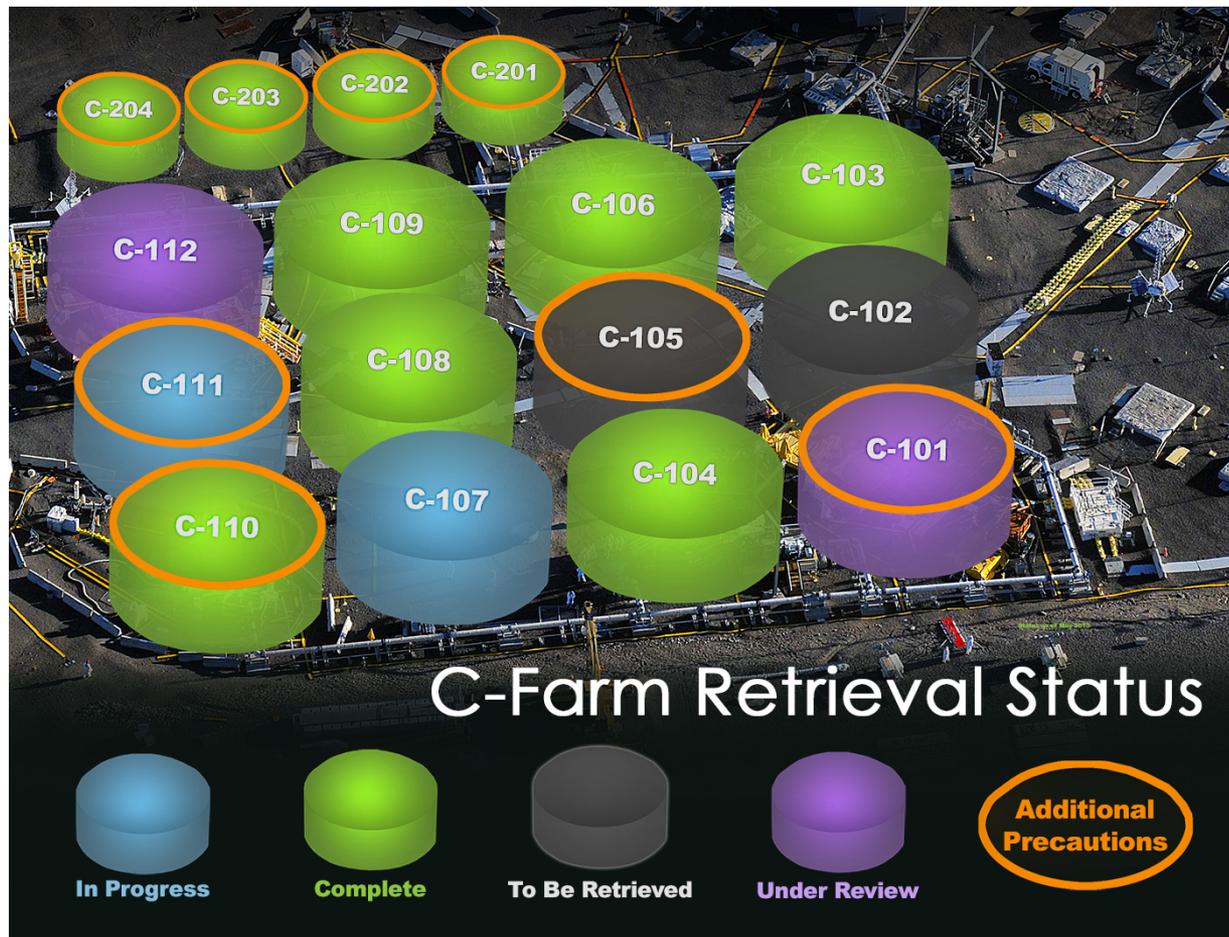
# Tank Farms Update





# 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 B-1 requires DOE to retrieve 10 C-Farm tanks by September 30, 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



*Aerial photograph of C-Farm with graphical overlay that depicts current status of each single-shell tank*

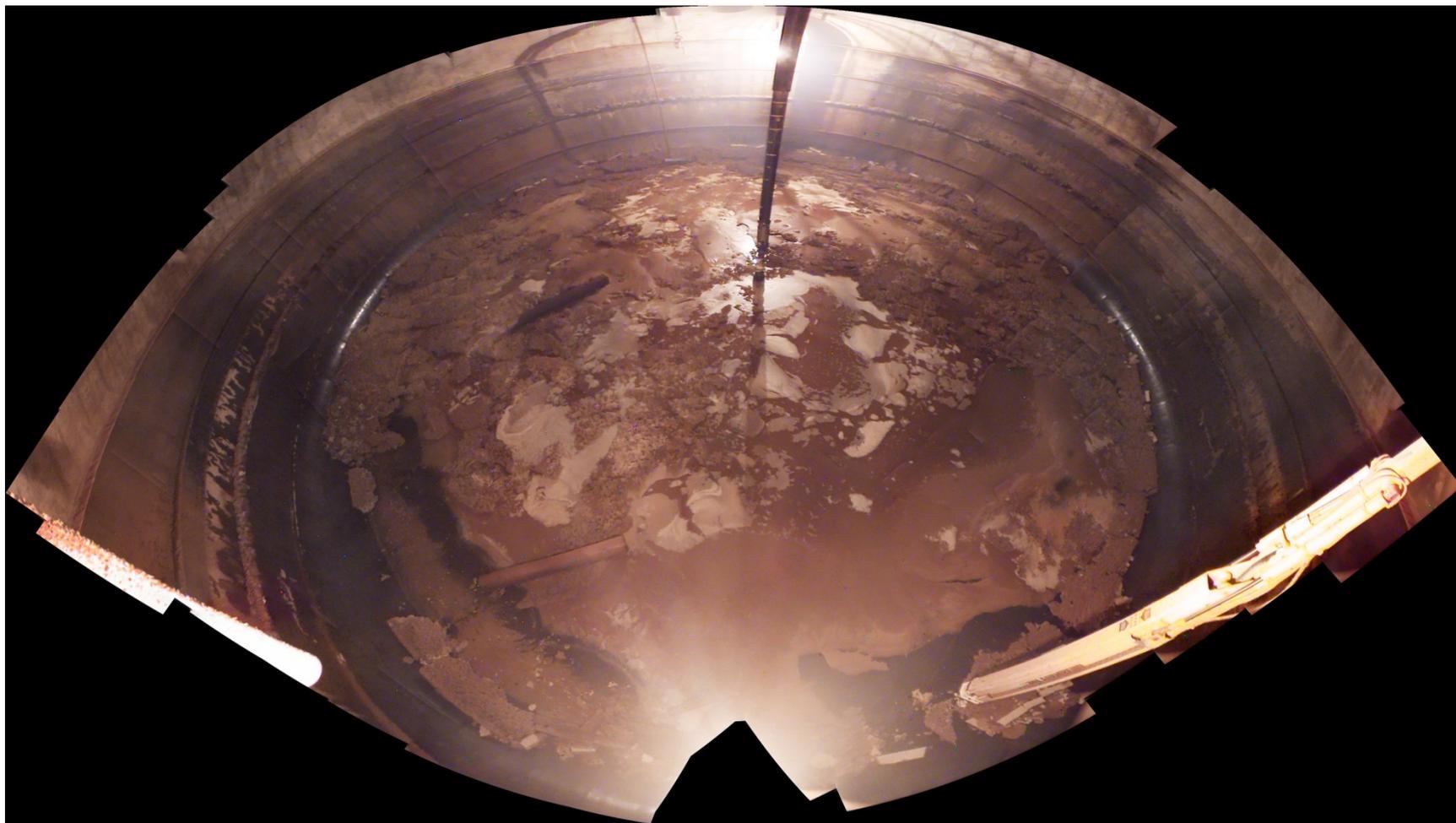


# C-107 Continues Retrieving



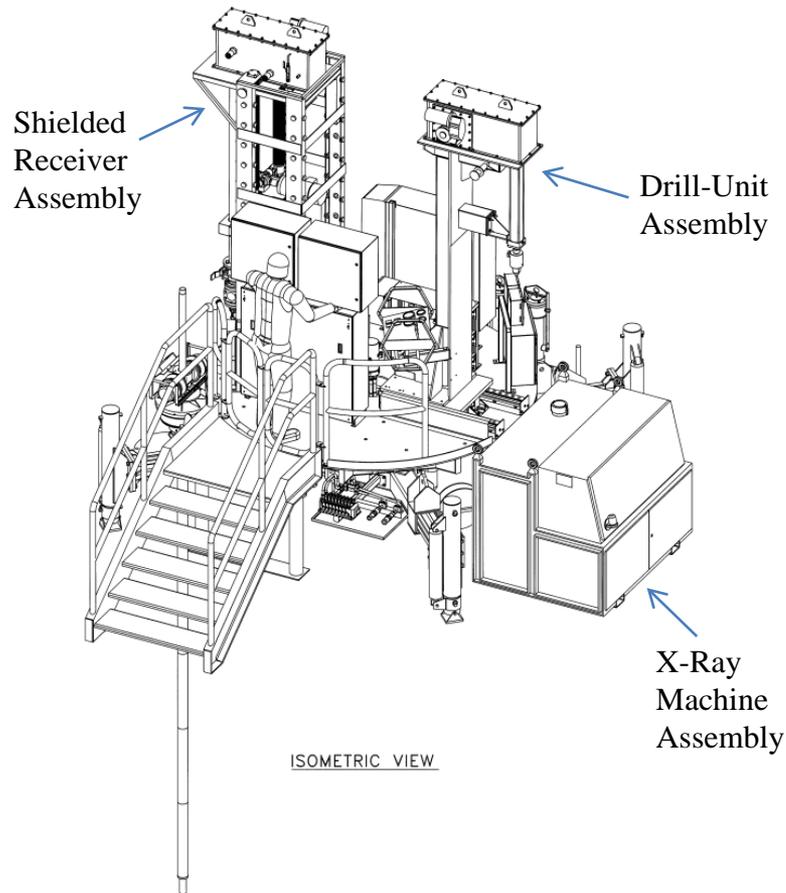


## C-112 – Retrieval Efforts





# In Tank Characterization



Core Sampling System



# 242-A Evaporator Update





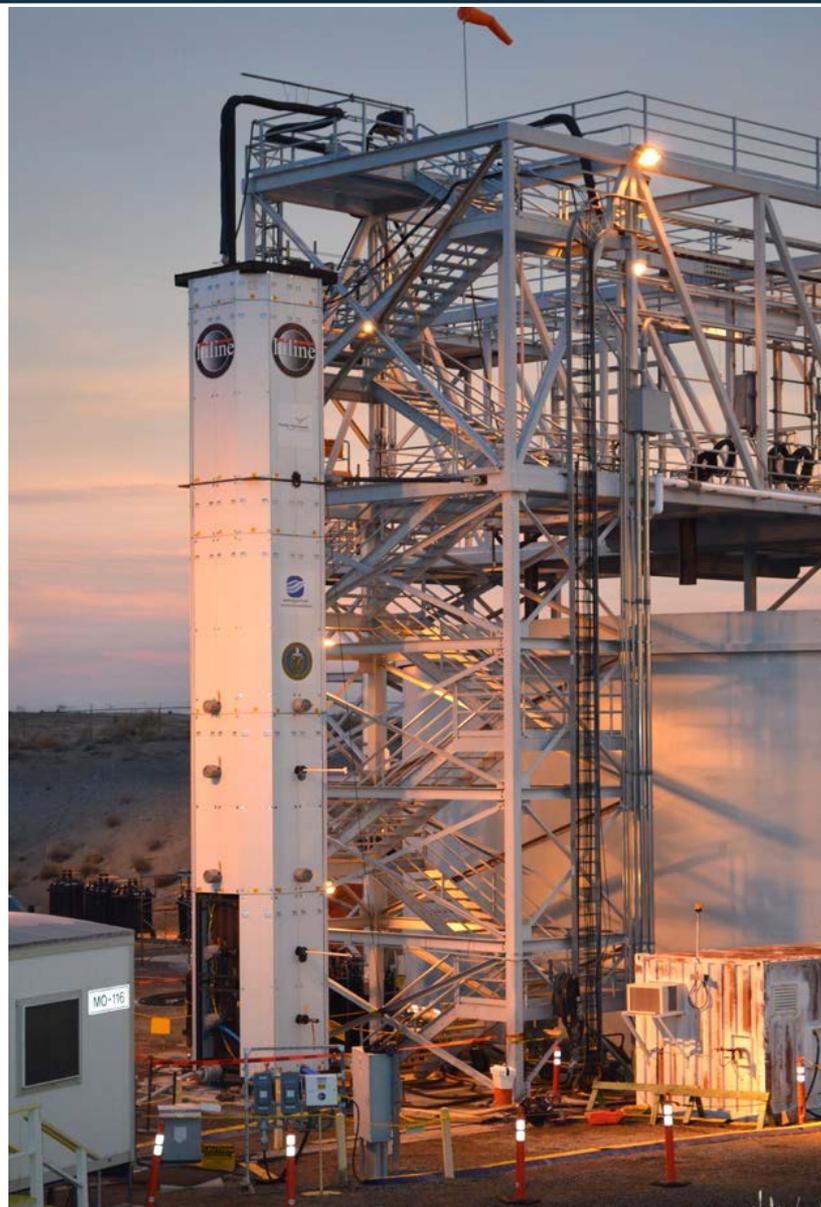
# Double-Shell Tank Management

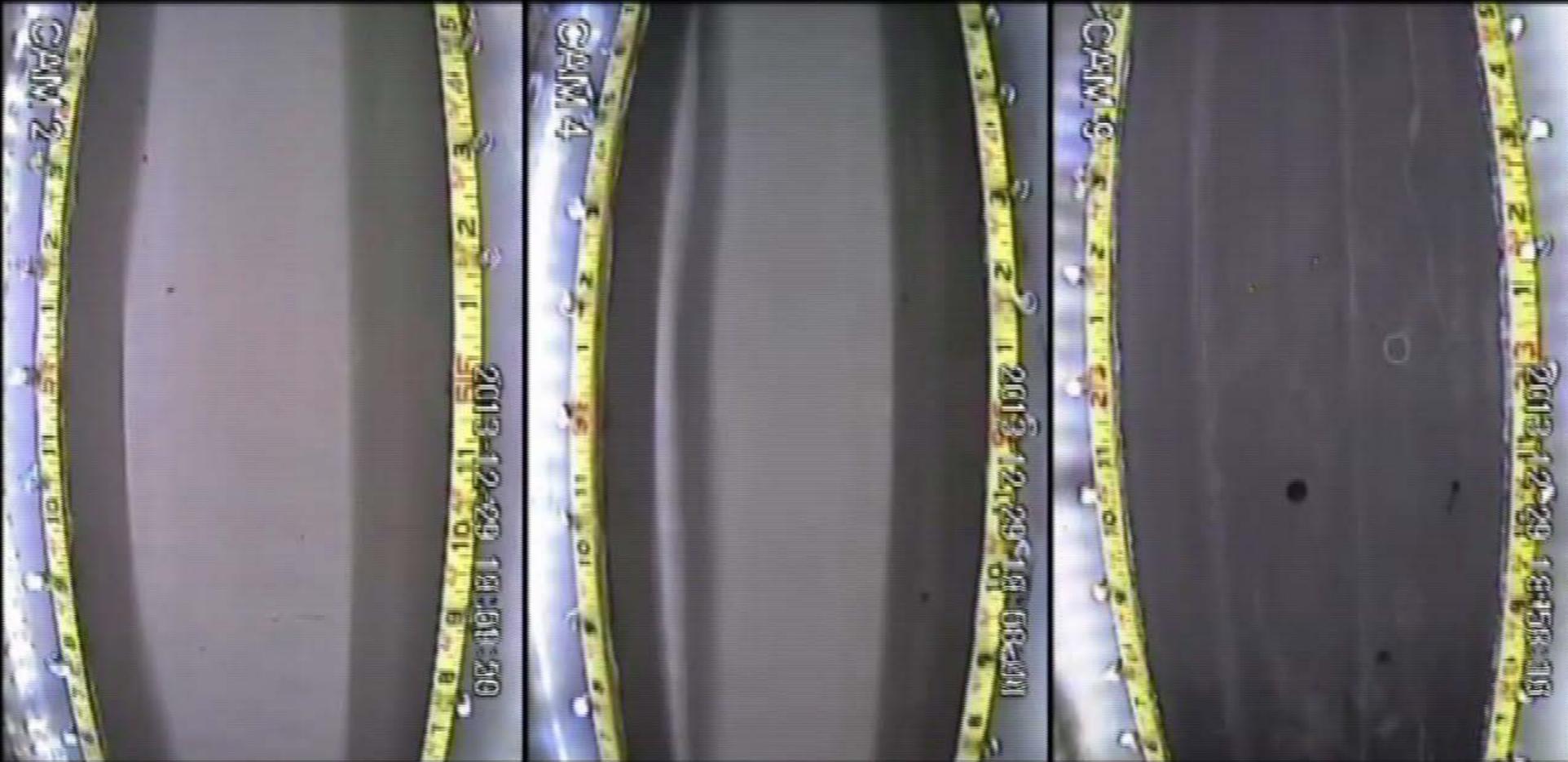


8,000-gallon tanker truck to create additional tank space



# Deep Sludge Experiment







## AY-102 Pumping Plan

- ORP has met with Ecology to further understand specific comments and concerns related to the pumping plan
- ORP requested an extension to March 7<sup>th</sup>
- Plan identifies actions that will be required to empty the tank



# Waste Treatment and Immobilization Plant Update

High-Level  
Waste Facility

Pretreatment  
Facility

Analytical  
Laboratory

Balance of Facilities  
(20 support buildings)

Low-Activity  
Waste Facility

September 10, 2013

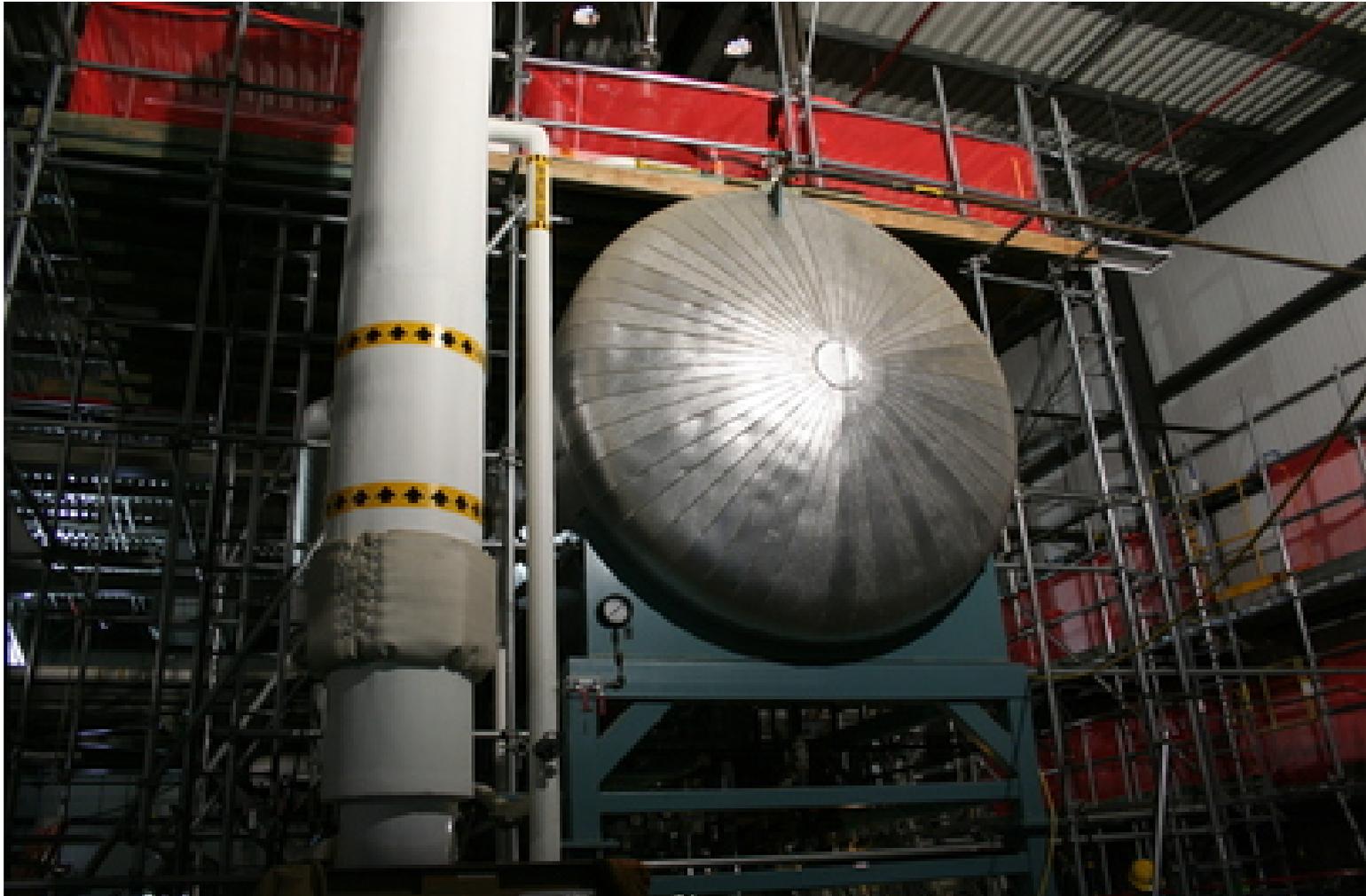


# Autosampling System in the Analytical Laboratory





# Steam Plant Boiler at WTP





# WTP Full Scale Test Facility



The Pulse Jet Mixing Control Test Vessel is lifted into the Full-Scale Test Facility.





# ORP Profile

PBS	PBS Title	FY 2013 Full Year CR* (\$ in 000's)	FY 2014 Omnibus Budget (\$in 000's)
ORP-0014	Radioactive Liquid Tank Waste Stabilization and Disposition	\$ 463,085	\$ 520,216
Subtotal	Radioactive Liquid Tank Waste Stabilization and Disposition	\$ 463,085	\$ 520,216
ORP-0060	WTP – Subprojects A-D	\$ 515,429	\$ 510,000
ORP-0060	WTP – Subproject E	\$ 118,927	\$ 180,000
Subtotal	Major construction – Waste Treatment Plant	\$ 634,356	\$ 690,000
Total – ORP	Office of River Protection Funding Summary	\$1,097,441	\$1,210,216

\*Continuing Resolution



# ORP Cleanup Priorities

- Base Operations
- WTP Technical Issues Resolution
- Waste Treatment Plant (WTP) Low Activity Waste (LAW)/Analytical Laboratory/Balance of Facilities (BOF) Completion
- C Farm Retrieval
- Glass as soon as possible
- Retrieval of next nine SSTs



# HAB Advice – Past Six Months

Advice	Description	Summary	Status
#273 12/12/13	Openness and Transparency Related to Tank Waste Treatment	<ul style="list-style-type: none"><li>• Values views of HAB and public</li><li>• Share a common goal to see tank waste cleanup mission on a realistic, achievable and sustainable path</li></ul>	Complete
#272 09/06/13	DOE-ORP Budget Request	<ul style="list-style-type: none"><li>• Conduct public meeting and workshop on budget formulation and funding submission</li><li>• With funding uncertainties unable to provide priority list</li><li>• Your input on priorities was beneficial in developing budget request</li></ul>	Complete
#271 09/06/13	Leaking Tanks	<ul style="list-style-type: none"><li>• ORP is developing longer-term approach</li><li>• The Framework document strategy to achieving our mission</li></ul>	Complete



**Protect the Public, the Environment and Our Workers**

**Safety Always Comes First!**



White Bluffs overlooking the Columbia River on the Hanford Reach