# Hanford Advisory Board Agency Update U.S. Department of Energy, Office of River Protection

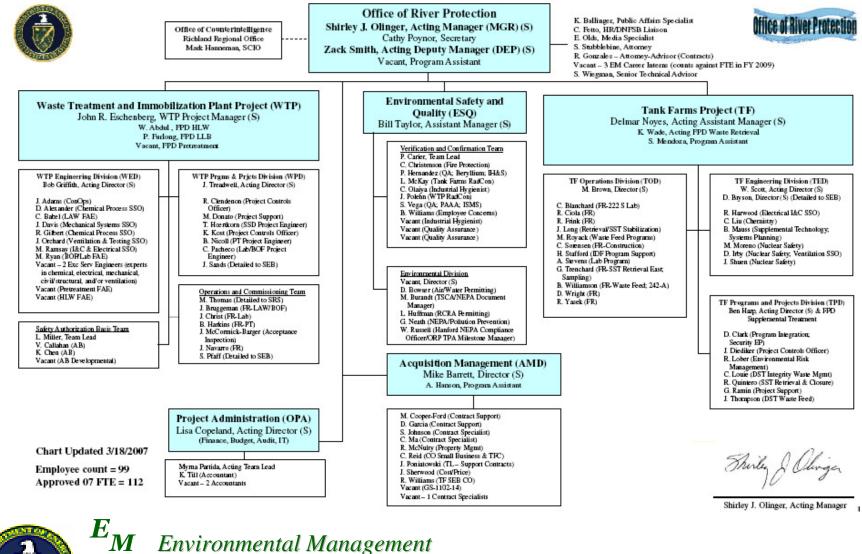
## T. Erik Olds April 6, 2007



Environmental Management safety  $\otimes$ performance

closure

#### Current ORP Staff



safety & performance & cleanup & closure

- Tank 241-C-108 Tank retrieval operations were started on December 20, 2006, and have progressed to approximately 65% complete.
- **Tank 241-S-102** Tank retrieval is approximately 91% complete.
- Tank 241-S-112 –Field work has been completed to remove 614,000 gallons of radioactive and chemical sludge and other solid waste material during the week of March 26, 2007. This is the seventh waste retrieval project from a single-shell tank under the Tri-Party Agreement.

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- The last of three engineering scale tests, to demonstrate resolution of Molten Ionic Salt migration, was completed on March 16, 2007. Initial qualitative results demonstrated that Molten Ionic Salt did not migrate through the refractory.
- Construction activities at the Horn Rapids Test Site are ongoing to support the June 2007 integrated dryer and melter test. The test will demonstrate resolution of Molten Ionic Salt migration at full scale and provide processing information such as sintered metal filter performance.
- The ORP commitment to EM-1 to have updated baseline documentation by April 2007 is on schedule.



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### The Waste Treatment Plant Update



Percent complete reflects plant wide engineering and construction craft hours.



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- Low-Activity Waste (LAW) Facility Imbed and rebar installation is progressing on the container export bay, which will result in a 48-foot high extension on the main facility. Construction crews continue to install rebar, construction aids, and placement forms to support the basemat placement. Crews are also excavating the melter assembly pad, which will free up a large work area for construction forces.
- Analytical Laboratory (LAB) Structural steel erection is progressing. All steel from the basemat to the roof structure is being installed. The LAB is scheduled to be dried in during calendar year 2008.
- **Balance of Facilities** Construction forces continue to install large bore pipes and hangers in the Chiller Compressor Plant; the Water Treatment Plant Main Control Center, conduit for monitoring devices and tank lighting, and piping to skids; piping between the tank and building in the Fuel Oil Facility; and communication conduit in the Steam Plant Facility.
- **Pretreatment Facility** Good progress is being made on the fabrication and testing of the four largest shield doors in the PT Facility. The vertical and horizontal shield doors that separate the decontamination cell from the hot cell have been fabricated and tested. The fabrication of the vertical and horizontal shield doors for the filter cave is about 50% complete. Fabrication of these doors is expected to be completed and tested in April 2007.
- **High-Level Waste (HLW) Facility** Engineering continues to issue drawings, calculations, etc. in readiness for construction startup in late 2008.



## FY 2006 Appropriations Funding, FY 2007 and FY 2008 Planned Funding, and FY 2009 Targets - \$ in Thousands

	FY 2006	FY 2007	FY 2008	FY 2009
	Approp	Planned	Request	Targets*
Defense Environmental Cleanup				
Office of River Protection				
Tank Farm Activities				
ORP-0014: Radioactive Liquid Tank Waste Stabilization and	327,109	276,656	272,972	270,554
Disposition				
ORP-0100: River Protection Community and Regulatory Support	466	471	471	468
Subtotal, Tank Farm Activities	327,575	277,127	273,443	271,022
Waste Treatment and Immobilization Plant				
ORP-0060: Major Construction-Waste Treatment Plant				
01-D-16A: Low Activity Waste Facility	161,376	186,000	143,000	78,000
01-D-16B: Analytical Laboratory	44,552	59,000	45,000	29,000
01-D-16C: Balance of Facilities	64,352	57,000	72,000	21,000
01-D-16D: High Level Waste Facility	102,964	177,000	177,000	195,000
01-D-16E: Pretreatment Facility	147,515	211,000	253,000	367,000
Subtotal, Waste Treatment and Immobilization Plant	520,759	690,000	690,000	690,000
Subtotal, Office of River Protection	848,334	967,127	963,443	961,022
Program Direction	17,530	22,069	22,333	22,881
Subtotal, Defense Environmental Cleanup	865,864	989,196	985,776	983,903
Total, River Protection	865,864	989,196	985,776	983,903



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\*Reflects target reallocation for WTP line items.

### Planned Tank Farm Activities for FY 2007, FY 2008 and FY 2009\* - \$ in Millions

		FY 2007	FY 2008	FY 2009	
	Minimum Base/Essential Services	\$251.6	\$256.2	\$251.1	
	<ul> <li>DST Integrity Project</li> </ul>				
	- DST/SST Operations				
	- Tank Sampling				
	- Vadose Zone				
	- Tank Farm Life Extension Upgrades				
	- 222-S Laboratory Operations				
	- 242-A Evaporator Opreations				
	- Site Services				
	- WTP Electricity				
	- DOE Mission Support				
	- Contractor Fee				
	<u>Retrievals</u>	\$21.4	\$16.1	\$18.8	
	- Complete one retrieval per year				
	Supplemental Treatment	\$3.7	\$0.7	\$0.7	
	- Pretreatment Developmental Testing				
	- Complete DBVS CD-2				
	- Complete full-scale test melt 38-D				
	Total	\$276.7	\$273.0	\$270.6	
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### Significant ORP Milestones for FY 2007, FY 2008 and FY 2009

#### No milestones have been missed or are in jeopardy of being missed due to ORP budget requests

FY 2007 Milestones

- M-45-55 Submit to Ecology for review and approval a primary document a phase 1 RFI report for all SST WMAs by 1/31/07. (*Change Request under the Tri-Party Agreement submitted, discussions ongoing*)
- M-45-05A Complete waste retrieval from Tank S-102 by 3/31/07. (*Milestone will be missed due to pump failure on* 3/15/07)
- M-45-58 Submit to Ecology for review and approval a corrective measures study for interim corrective measures for all SST WMAs by 6/30/07. (*Change Request under the Tri-Party Agreement submitted, discussions ongoing*)
- M-62-11 Submit a Final Hanford Tank Waste Treatment Baseline Following completion of negotiations required in M-62-08 by 6/30/07. (*Milestone will be delayed due to lack of supplemental Treatment data required by M-62-08*)

#### FY 2008 Milestones

- M-45-13 Interim completion Tank S-112 waste retrieval and closure demonstration project by 12/31/07. (*Retrieval likely will be met, approved Risk Assessments and closure plan questionable*)
- M-45-15 Interim completion of Tank S-102 waste retrieval and closure demonstration project by 12/31/07. (*Milestone will be missed due to pump failure on 3/15/07*)
- M-62-07B Complete assembly of LAW melter #1 so that it is ready for transport and installation into LAW vitrification facility and move #1 melter into HLW vitrification facility by 12/31/07. (*Milestone will be missed due to delays in WTP construction*)
- M-45-00D Initiate negotiation of SST waste retrieval and closure for 2008-2013 by 1/31/08. (Milestone will be missed, unable to negotiate additional retrievals since C-Farm retrievals are not complete)

#### FY 2009 Milestones

• M-62-09 – Start WTP cold commissioning by 2/28/09. (*Milestone will be delayed due to delays in WTP construction*)



- Demonstration Bulk Vitrification System
- Continue Tank Retrieval
- Continue Vadose Zone Characterization
- Double Shell Tank Integrity Assessment
- Tank Closure & Waste Management EIS
- Resequence LAW, BOF, LAB
- Resume Construction Activities on HLW and PT
- Resolve External Flowsheet Review Team (EFRT) Issues

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• Certify the Earned Value Management System



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