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Office Of River Protection  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
August 17, 2006

**EDMC**

Approval: Jay A Hedges Date: 12/5/06  
J. Hedges (H0-57)  
Ecology IAMIT Representative

Approval: Woody Russell Date: 11/16/06  
J. R. Eschenberg/Z. Smith (H6-60)  
DOE IAMIT Representative

Approval: Nick Ceto Date: 12/6/06  
N. Ceto (B1-46)  
EPA IAMIT Representative, Chairperson

Minutes Prepared by:

Sonya Moore Date: 12-8-06  
S.L. Moore (H8-40)  
Fluor Hanford, Inc.

Anderson, F.J.	CH2M	H6-03	Kristofzski, J.G.	CH2M	H6-03*
Bartus, D.B.	EPA	H0-57	LaMont, P.E.	ORP	H6-60
Biagini, K.P.	ORP	H6-60	Liou, W.S.	ORP	H6-60
Bilson, H.E.	FH	H8-20	Louie, C.S.	ORP	H6-60*
Bohnee, G.	NPT*		Long, J.D.	ORP	H6-60
Braswell, S.M.	ORP	H6-60*	Luke, J.J.	CH2M	H6-03*
Brown, M.J.	Ecology	H0-57*	Lyon, J.J.	Ecology	H0-57*
Burandt, M.E.	ORP	H6-60	McCormick, M.S.	RL	A5-11
Caggiano, J.A.	Ecology	H0-57	Miera, F.R.	CH2M	H6-03*
Ceto, N.	EPA	B1-46	Morrison, R.D.	FH	H8-12*
Chalk, S.	RL	A7-75	Niles, K.	OOE*	
Cimon, S.	ODE*		Olinger, S.J.	ORP	H6-60
Clark, D.L.	ORP	H6-60*	Piippo, R.	FH	H8-12*
Cusack, L.J.	Ecology	H0-57*	Post, T.C.	EPA	B1-46*
Dahl, S.L.	Ecology	H0-57*	Price, J.B.	Ecology	H0-57
Einan, D.R.	EPA	B1-46	Quintero, R.A.	ORP	H6-60*
Eschenberg, J.R.	ORP	H6-60	Russell, R.W.	ORP	H6-60*
Fort, L.	Ecology	H0-57*	Skinnarland, R.R.	Ecology	H0-57*
Fredenburg, E.A.	Ecology	H0-57	Smith, T.Z.	ORP	H6-60*
Furlong, P.T.	ORP	H6-60	Stevens, A.J.	ORP	H6-60
Harris, S.	CTUIR*		Thompson, J.F.	ORP	H6-60
Hedges, J.	Ecology	H0-57*	Uziemblo, N.H.	Ecology	H0-57
Henry, D.	OOE*		Vance, J.G.	FH	H8-12*
Horst, L.	OOE*		Voogd, J.A.	CH2M	H6-03*
Huffman, L.A.	ORP	H6-60*	Wemhoff, G.M.	ORP	H6-60
Jackson, D.E.	RL	A4-52	Whalen, C.L.	Ecology	H0-57*
Jaraysi, M.N.	CH2M	H6-03	Wolf, A.	CTUIR*	
Jentzen, B.K.	Ecology	H0-57	Administrative Record		H6-08*
Jim, R.	Yakama*		*w/Attachment		

**Office Of River Protection  
Tri-Party Agreement Milestone Review  
Meeting Minutes  
August 17, 2006**

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General Discussion

ORP brought up the issue of having the quarterly meeting so long after the quarter ends (e.g. June to August). They suggested reporting on more than just the previous quarter. Ecology and EPA said there was no problem with that,

The Milestone Performance chart (Page 4) of the handout contains an error: Schedule at Risk should be 0 rather than 1.

M-062-08 was missed, as is reflected in the tables on pages 5-7 (is shown as Unrecoverable). Ecology requested ORP to include a column for missed, rather than placing the milestone in the unrecoverable column.

The summary cost and schedule performance information (Pages 8-11) indicates ORP is doing a good job staying on track with projections. A lot of schedule variance has been recovered, but ORP is still carrying large variances against the old baseline. Ecology asked for explanation of how ORP could go forward with changes to the baseline based on goals that have not been agreed to in the TPA. ORP explained that the baseline is focusing on next five years and there are a lot of uncertainties in out-years. They are going through a series of independent reviews and have not submitted anything to HQ as yet. Ecology wants it noted that they are concerned about the impact of ORP baseline budget planning in relation to the general Hanford path forward.

**M-045-00B, Complete Specified "Near-Term" SST Waste Retrieval and Interim Closure Activities, to Result in the Retrieval of all Tank Wastes in WMA-C SSTs Pursuant to the Agreement Criteria in Milestone M-45-00.**

Due: 9-30-06

EPA, Ecology, and ORP have established a tank retrieval and storage team (Retrieval Team) to address schedules and assumptions. The Retrieval Team will be discussing retrieval issues. This milestone is unrecoverable; a Change Request will be submitted for this milestone.

Implementation of full-scale LDMM technologies: ORP has completed a High Resolution Resistivity (HRR) injection test at Tank S-102, and by September 30, 2006, will transmit a report evaluating the results of the test to Ecology as well as ORP's recommendation for future use of the HRR system.

ORP received a letter from Ecology on the C-101 TWRWPs; the parties have narrowed down the differences that may need to go to dispute resolution.

Planned Activities – ORP is entering completion of a draft plan on the C-200 demonstration project. An SST Performance Assessment was submitted to Ecology in July for review and comment. ORP is working to develop a process to address major comments from that review, which is an ongoing effort.

**M-045-02M, Submit Biennial Updates to SST Retrieval Sequence Document, Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition.**

ORP submitted a report on March 13 to complete this milestone, but Ecology sent a letter in May containing Notices of Deficiencies. ORP responded to that letter stating ORP did not concur with all deficiencies but would work with Ecology. ORP is working through the Retrieval Team to be more responsive to what Ecology is requesting. They are committed to revise and resubmit the report as necessary but the Retrieval Team needs to progress farther to determine the path forward.

Action: Ecology would like to come to an agreement on the parameters that are being used for the Hanford Tank Waste Operation Simulator (HTWOS) modeling by the end of the month.

**Tank 241-C-106**

ORP will revise C-106 Appendix H documentation to show a direct tie to the SST Performance Assessment. The documents will be submitted to NRC to close out their review on C-106. ORP will provide the Regulators revisions to other SST documentation, which includes comments from the Regulators.

**Tank 241-S-102**

ORP will respond to a letter from Ecology by August 31 with either a recovery plan or evidence of completion of Interim Stabilization (IS) of that tank. ORPs' view is that IS of this tank was completed but, subsequently, liquid was added to the tank to facilitate retrieval. Retrieval activities are continuing.

**Tank 241-S-112**

The tank is currently in its second caustic soak to see if will reduce the volume to below 360 cubic feet. If this does not reduce the volume, ORP will deploy additional technology sometime in 2007. Ecology's position is not to stop at 360 ft<sup>3</sup> but to continue until the limit of the technology has been reached. ORP stated they do operate technologies to their limit. ORP considers tank retrieval complete when the deployed technology(ies) reach its(their) limit and the resulting residual volume is less than 360 ft<sup>3</sup>. Ecology asked that ORP work closely with them on this issue.

### **C-Farm Retrieval**

Retrieval of C-204 was started in July and is expected to be completed next month. There are 3,000-4,000 gallons of residuals left in C-103. Liquid samples have been taken and it is planned to pump this tank before the end of this month. Solid samples and a video will be taken in September and, based on calculations of the volume at that time, additional technology may be deployed.

### **M-045, -50, -60 Single-Shell Tank Corrective Action.**

M-045-55-T04 has been missed; ORP has been working with Ecology on a draft Change Request.

M-045-55 is at risk from a quarterly perspective. Started direct push work at T Farm this month.

M-045-56, "Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting)" was not met. Ecology and DOE had agreed to meet in July, but mutually agreed to postpone the meeting until late August 2006.

M-045-58 and 60 are at risk. Due to the amount of activity at C Farms, ORP is working swing shift at B Farms to do Surface Geophysical Exploration work.

A draft Change Request for M-45-55-T04, M-45-55, M-45-58, and M-45-60 was resubmitted in late July 2006.

### **M-090-00 and M-020-00, Complete Acquisition of New Facilities, Modifications of Existing Facilities, and/or Modifications of Planned Facilities, and Submit Part B Permit Applications.**

ORP noted that it is a lot of work buttoning up IDF for future use. Ecology is concerned that the delay of the Vittrification plant may also impact completion of the Canister Storage Facility (CSF) and ORP may want to consider not moving forward on that permit. There is reason to believe the cost of a new facility may be cheaper than finishing 3464 and CSF. ORP wants to meet with Ecology on these issues and Ecology stated the focus of the meeting should be on a path forward to finish the NODs.

Ecology asked if M-090-10 is really on schedule, as shown in the handout. They believe it should be showing at risk. ORP stated they will make that change.

(NOTE: Information obtained after this meeting discovered that the language shown for M-90-10 [Initiate Placement of ILAW Waste Canisters in ILW Disposal Facility] is incorrect. The language was changed [see Change Request M-90-03-02] to read "Ready to Accept Placement of ILAW Waste in ILAW Disposal Facility." This milestone is not at risk. The status report for the next Project Managers Meeting will be updated to reflect this information.)

(NOTE: Ecology stated that, even with the revised language for the title of the milestone, they believe ORP is still at risk for completing this milestone by the 8-31-08 date. The risk budget tool would need to be approved by Ecology prior to receiving waste at the ILAW, which is dependent upon a permit revision.)

Ecology is reassessing whether to continue with the evaluation of the Canister Storage Facility NOD process given the delays in startup of the WTP.

**M-062-00, Complete Pretreatment Processing and Vitrification of HLW and LAW Tank Wastes.**

ORP reported on the completion of test 38C, which had good glass performance. A full report will be coming out in September and a copy will be sent to Ecology. ORP is working on a prototypical feed; they want to test the melter combined with the dryer. Ecology asked what the volume of feed was and ORP stated it was 44-46 metric tons of glass and about 13K gallons of tank waste.

Significant Accomplishments:

ORP received approval from HQ for Critical Decisions (CD) 0 and 1. Ecology asked when ORP was asking for CD 2 and they responded they were trying to get on the docket for November. Ecology asked what the decisions were and ORP explained CD 0 is justification of major need; 1 is preliminary design; 2 is establish preliminary baseline; 3 is initiate construction; and, 4 is initiate operations

ORP stated they have a final design and are working to pull together a bottom-up cost estimate, which they expect to have in September. The funding is zeroed out for 2007 and 2008, but they are pushing HQ to obtain some funding for long lead items.

Issues:

ORP will need to evaluate issues identified by the Expert Panel Review to see if any design changes are necessary. Ecology asked if any changes to the design would have to go back through the CD process. ORP stated that would not be necessary as the CD is a process that allows the project to go forward to the next step.

**High Level Waste (HLW) Engineering Status**

HLW Engineering is working offgas jumper issues to prevent damage to the High Efficient Mist Eliminator (HEME) if it becomes necessary to bypass the Submerged Bed Scrubber or the West Electrostatic Precipitator. This is necessary as the offgas temperatures can reach 1100°C.

HLW Engineering is also evaluating what changes are necessary to ensure temperatures of the concrete in the canister cooling area do not exceed 150°F. The canisters generate a lot of heat and when glass is cooling off after it has become super heated, it acts as an insulator and gives off heat for a longer period of time. This information was not considered during the modeling of these spaces, which could result in exceeding optimum temperatures.

### **Low Activity Waste Engineering (LAW), Construction and Procurement**

While HLW is conducting a lot of engineering and almost no construction, LAW is the other way around. All slab placements inside the main facility have been completed.

Work is progressing to strip off the intumescent coating on all beams that face outside of the facility. Once this is completed and a fire test performed, the outside of the beams will be re-coated.

Installation of the roofing panels is progressing. There are four levels to the roof; the Q deck, Styrofoam insulation, a water barrier, and a steel cover.

The use of a non-nuclear purchase order for valves has become a big issue. The LAW is the first facility to utilize a Commercial Grade Dedication process for non-nuclear valves. Because the valve vendor did not tag the valves appropriately, they had to be retagged and released for installation.

Ecology asked what the percentage complete is for both Engineering and Construction. ORP stated that LAW Engineering is ~90%, Construction is ~40%; HLW Engineering is ~80%, and Construction is ~17-20%. ORP wanted the Regulators to recognize that this is all new work. The HLW and Pre-Treatment work was stopped because of seismic issues. A vast majority of the hydrogen issues are in the pre-treatment facility. There was some discussion regarding the possibility the tank farms do not meet new seismic code.

Office of River Protection

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Tri-Party Agreement  
Quarterly Milestone Review Meeting  
August 17, 2006

**Office of River Protection**

U.S. Department of Energy  
U.S. Environmental Protection Agency  
Washington State Department of Ecology

3<sup>rd</sup> Quarter of FY 2006

## Agenda

Office of River Protection  
Tri-Party Agreement  
Quarterly Milestone Review Meeting  
Ecology Offices  
August 17, 2006  
9:00 a.m. – 12:00 p.m.

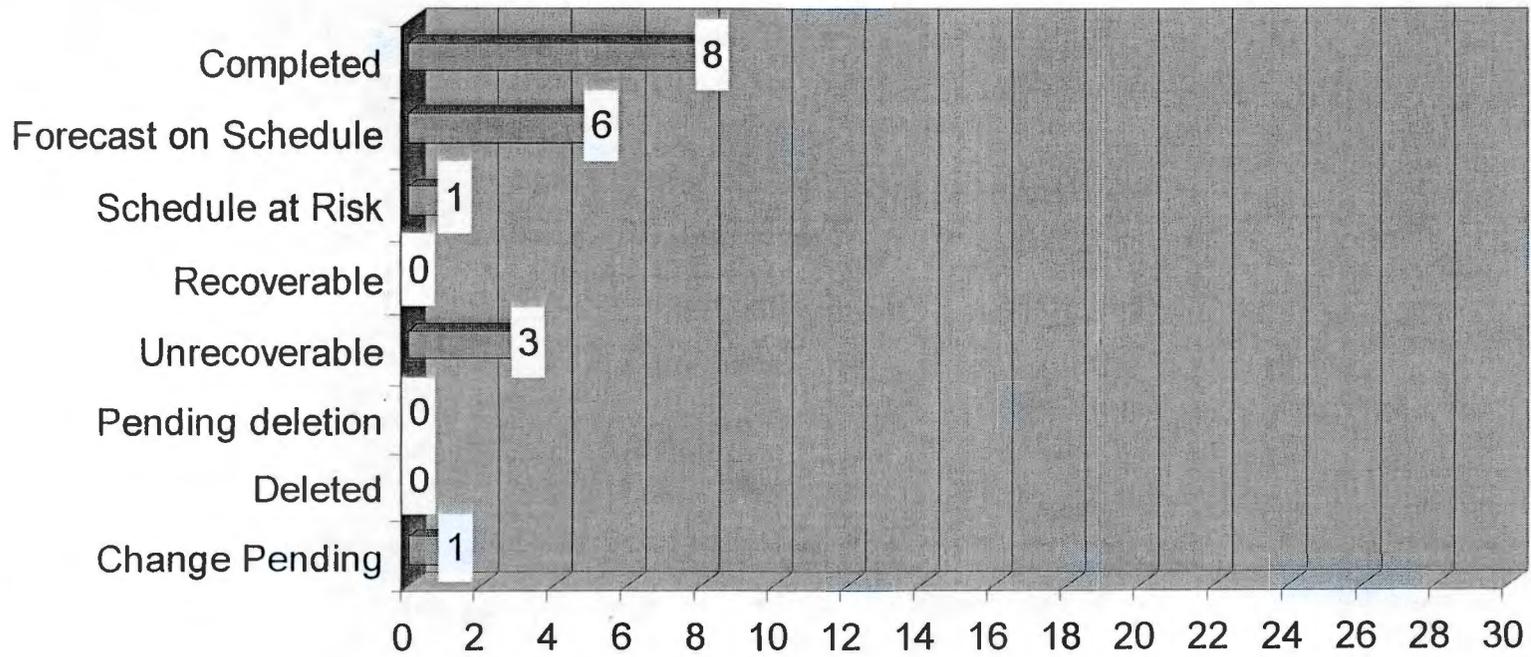
Page	Topic	Leads	Time
3 10	<ul style="list-style-type: none"> <li>• TPA Milestone Statistics</li> <li>• FY 2006 ORP TPA Cost &amp; Schedule Performance (CHG)</li> </ul>	Woody Russell / Suzanne Dahl / Jeff Lyon	9:00
38	M-45-00, Complete Closure of All Single-Shell Tank Farms	Roger Quintero / Jeff Lyon	9:10
46	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober / Joe Caggiano	9:40
48	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Cathy Louie / Les Fort	10:00
50	M-48-00, DST Integrity Assessment Program	Cathy Louie / Vic Callahan / Les Fort	10:10
52	M-23-00, Tank Integrity and Monitoring	John Long / Jeff Lyon	10:20
53	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	10:30
54	In Tank Characterization and Summary	Wen-Shou Liou / Michael Barnes	10:40
	<b>BREAK</b>		
55	M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/ Disposal of ILAW and M-20, Part B Permits	Phil LaMont / Bud Derrick	10:50
64	BNI Cost & Schedule Performance and M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes/Supplemental Technologies	Bruce Nicoll / Pete Furlong / Bobby Williams / Jim Thompson / Suzanne Dahl	11:00

**TPA Milestone Statistics**

(Including target milestones)

Milestone	Due Date	Total Active as of 03/31/06	Milestone Number	Due Date	Milestone Number	Due Date
M-20-00, Submit Part B Permit Application on Closure/Post Closure Plans for all RCRA TSD Units	12/31/08 (M-20-00)	0				
M-23-25, Tank Integrity and Monitoring	03/31/05 (M-23-25)	0				
M-23-27, Complete 244-CR Liquid Level Assessment	12/30/04	0				
M-42-00, Provide Additional DST Capacity	TBD	1	M-42-00	TBD		
M-43-00, Complete Tank Farm Upgrades	06/30/05 (M-43-00)	0				
M-45-00, Complete Closure of all SST Farms	09/30/24 (M-45-00)	31	M-45-00 M-45-00B M-45-00C M-45-00D M-45-02 M-45-02N M-45-02O M-45-05 M-45-05A M-45-05-T05 M-45-05-T06 M-45-05-T07 M-45-05-T08 M-45-05-T09 M-45-05-T10 M-45-05-T11	09/30/24 09/30/06 09/30/06 01/31/08 TBD 03/01/08 03/01/10 09/30/18 03/31/07 09/30/07 09/30/08 09/30/09 09/30/10 09/30/11 09/30/12 09/30/13	M-45-05-T12 M-45-05-T13 M-45-05-T14 M-45-05-T15 M-45-06 M-45-06-T03 M-45-06-T04 M-45-13 M-45-15 M-45-55 M-45-56 M-45-58 M-45-59 M-45-60	09/30/14 09/30/15 09/30/16 09/30/17 09/30/24 03/31/12 03/31/14 12/31/07 12/31/07 01/31/07 TBD 06/30/07 TBD 09/30/07
M-47-00, Complete All Work for Phase 1 Operations	02/28/18 (M-47-00)	5	M-47-00 M-47-02 M-47-03A	02/28/18 03/31/09 03/31/09	M-47-04 M-47-06	03/31/09 06/30/10
M-50-00, Complete Pretreatment Processing of Hanford Tank Waste	12/31/28 (M-50-00)	1	M-50-00	12/31/28		
M-51-00, Complete Vitrification of Hanford High Level Tank Waste	12/31/28 (M-51-00)	1	M-51-00	12/31/28		
M-61-00* (alternate path), Complete Pretreatment & Immobilization of Hanford Low Activity Tank Waste	12/31/28 (M-61-00)	1	M-61-00	12/31/28		
M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes	12/31/28 (M-62-00)	9	M-62-00 M-62-00A M-62-01M M-62-03	12/31/28 02/28/18 07/31/06 12/31/06	M-62-07B M-62-08 M-62-09 M-62-10 M-62-11	12/31/07 06/30/06 02/28/09 01/31/11 06/30/07
M-90-00, Interim Storage and Disposal of LAW and Interim Storage of HLW	TBD (M-90-00)	3	M-90-00 M-90-10 M-90-11	TBD 08/31/08 08/31/10		
M-48-00, DST Integrity Program, Submit Results of 4 DSTs not Previously Examined	09/30/07	4	M-48-00 M-48-15	09/30/07 09/30/07	M-48-07A M-48-07B	06/30/06 06/30/06
Interim Stabilization Consent Decree	09/30/04 (D-001-00)	1	D-001-00			
<b>Total Active Milestones:</b>		<b>57</b>				

# FY 2006 MILESTONE PERFORMANCE

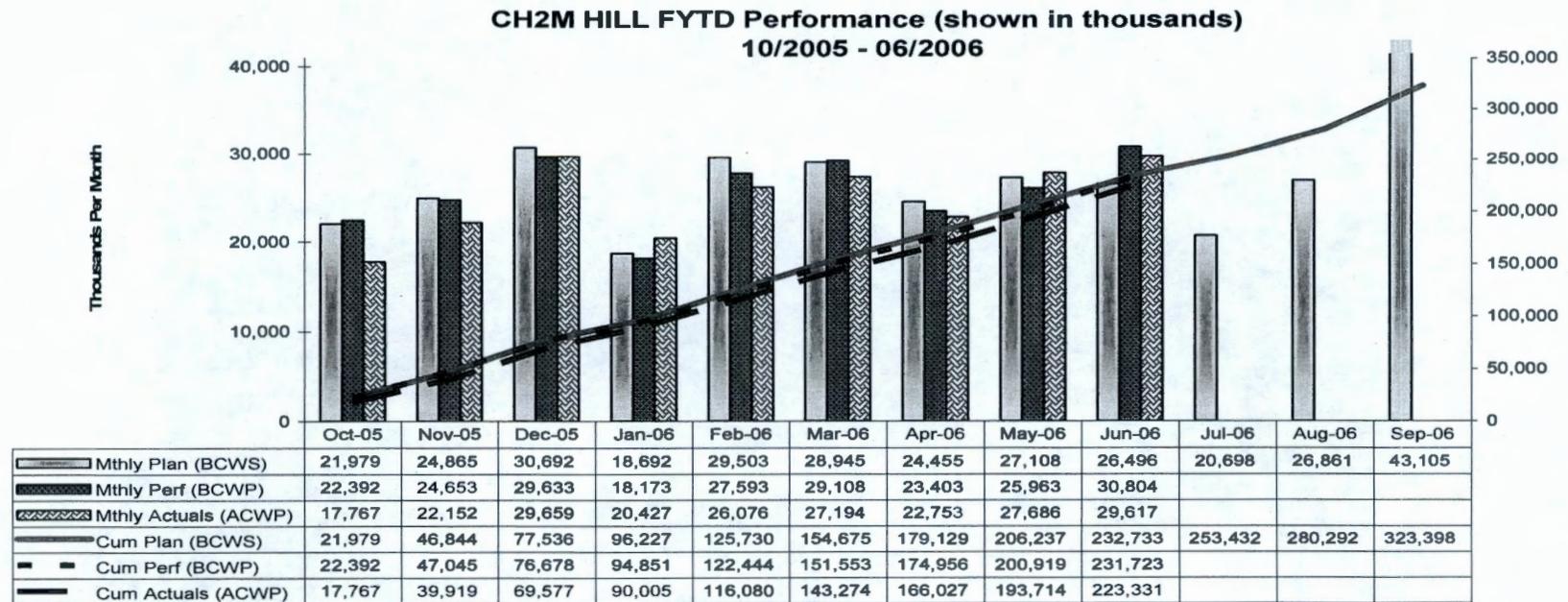


Fiscal Year 2006 Tri-Party Agreement Milestone Status										
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk					
D-001-00-R26	DOE Shall, On A Quarterly Basis, Submit To Ecology A Written Report Documenting Tank Stabilization Activities That Occurred During The Period Covered By The Report. This Written Report Shall Provide The Status Of Progress Made During The Reporting Period.	10/31/05	X 10/31/05							
M-048-07A-A	Complete construction of the AZ-301 condensate return system and remove the AZ-151 catch tank system from service by October 31, 2005. This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-A.	10/31/05	X 10/31/05							
M-046-21	Complete Implementation Of Double Shell Tank Space Optimization Study Recommendations (Tank Space Options Report Document No. RPP-7702, April 12, 2001).	12/31/05	X 12/15/05							
M-062-01L	Submit Semi-Annual Project Compliance Report	1/31/06	X 01/31/06							
M-045-02M	Submit biennial update to SST retrieval sequence document (agreement Appendix I, Section 2.1.2), double shell tank space evaluation document and Ecology concurrence of additional tank acquisition.	3/1/06	X 3/13/06							
M-048-07A-B	Completion of construction for the 241-AP-106A central pump pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary. This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-B	3/31/06	X 3/30/06							
M-048-14	Submit Written Integrity Report For The Double-Shell Tank System	3/31/06	X 3/31/06							
M-047-05A	Complete startup and turnover activities	4/30/06	X							

Fiscal Year 2006 Tri-Party Agreement Milestone Status										
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk					
	for waste retrieval and mobilization systems for selected initial low-activity waste feed tank (other than AZ-101 or AZ-102).		02/2/05							
M-045-55-T04	Submit To Ecology For Review And Comment A Draft Field Investigation Report Combining The Results Of Field Investigations And Analysis For WMAs A-AX, C & U Pursuant To The Site-Specific SST WMA Phase 1 RFI/CMS Work Plan Addenda For WMA A-AX, C And U. As part of the Phase 2 Vadose Zone project renegotiations, being developed, this target milestone scope will be included in M-45-55 Phase 1 Rollup documentation due in 1/07. Project continues to complete field characterization activities per approved workplan, but will defer stand alone paper study for additional characterization during phase 1.	4/30/06					X			X
M-048-07A	Complete construction of the AZ-301 condensate return system and pit upgrades. This includes: 1) Complete construction of the AZ-301 condensate return system and remove the AZ-151 catch tank system from service [see M 45-07A-A]; 2) Complete construction of AP-106A Central Pump upgrade [M 48-07A-B]; and 3) complete construction of SY-B Valve Pit upgrade [see M 48-07A-C].	6/30/06		X						
M-048-07A-C	Completion of construction for the 241-SY-B valve pit upgrade (remove existing equipment, evaluate pit integrity, and replace pit coating, if necessary). This scheduled deliverable is a subset of M-48-07A, and thus labeled as M-48-07A-C.	6/30/06		X						

Fiscal Year 2006 Tri-Party Agreement Milestone Status										
Milestone No.	Description	Due Date	Completed	Forecast		Recoverable	Unrecoverable	Pending Deletion	Deleted	Change Pending
				On Schedule	Schedule at Risk					
M-048-07B	The Disposition of all Double-Shell Tank Transfer System Components that will not remain in use beyond June 30, 2005.	06/30/06		X						
M-062-08	Submittal Of Hanford Tank Waste Supplemental Treatment Technologies Report, Draft Hanford Tank Waste Treatment Baseline, And Draft Negotiations Agreement In Principle (AIP).	6/30/06					X			
M-045-56B	Ecology and DOE agree, at a minimum, to meet yearly (by July or as needed to support annual budgeting) for the specific purpose of assessing the adequacy of information, and the need for the establishment of additional agreement interim measures.	07/01/06		X						
M-062-01M	Submit Semi-Annual Project Compliance Report	07/31/06		X						
M-045-00B	Complete specified "near term" SST waste retrieval and interim closure activities, to result in the retrieval of all tank wastes in WMA-C SSTs pursuant to the agreement criteria in milestone M-45-00.	09/30/06					X			
M-045-00C	Initiate negotiation of SST waste retrieval and closure activities and associated schedules (for the period February 07 through August 08).	09/30/06		X						

## FISCAL-YEAR-TO-DATE PERFORMANCE GRAPH



**BCWS = BUDGETED COST FOR WORK SCHEDULED**

**BCWP = BUDGETED COST FOR WORK PERFORMED**

**ACWP = ACTUAL COST FOR WORK PERFORMED**

# FISCAL-YEAR-TO-DATE PERFORMANCE

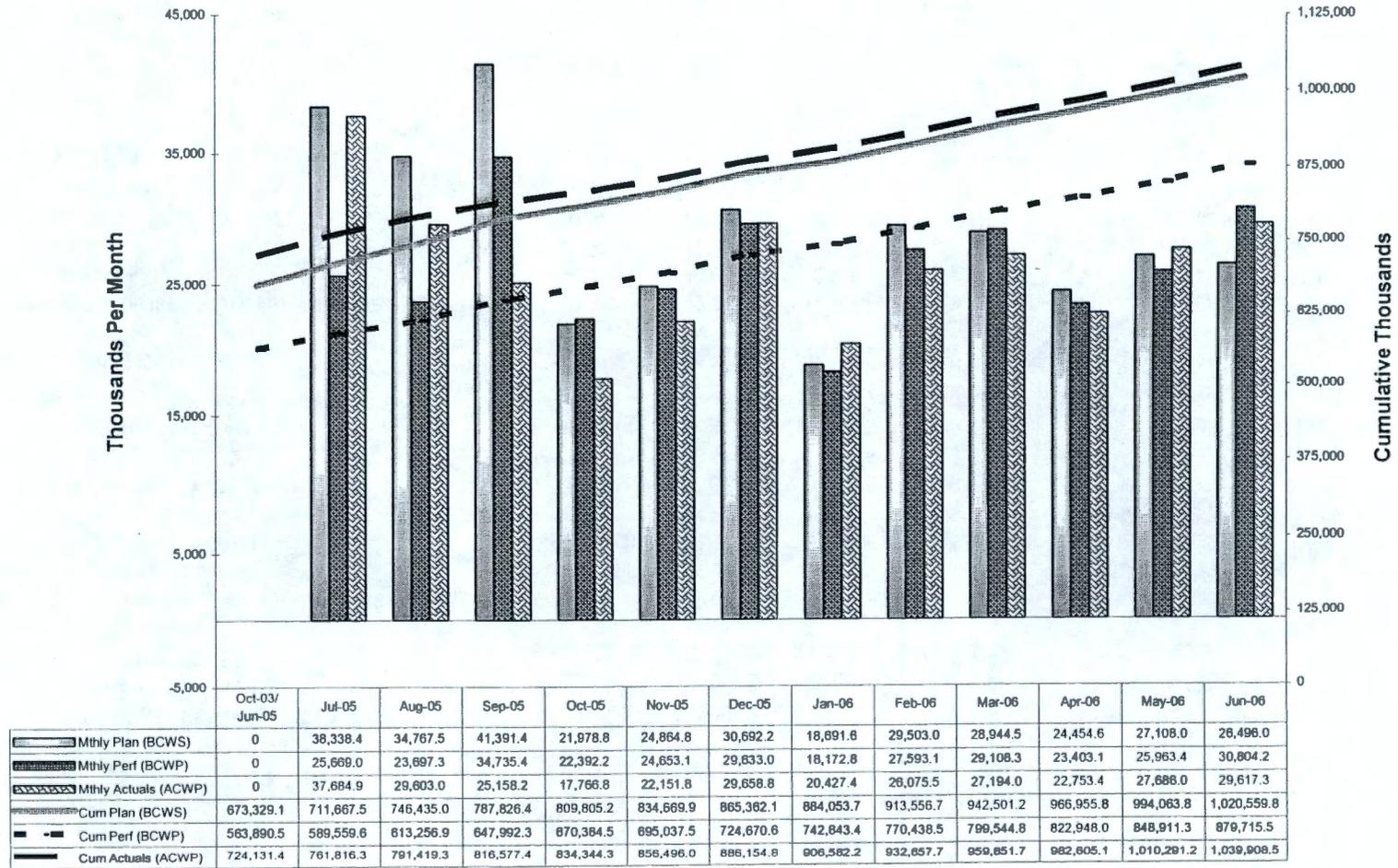
CH2M HILL Hanford Group, Inc.  
**FISCAL-YEAR-TO-DATE PERFORMANCE - 10/2005 - 06/2006**  
**BY WORK BREAKDOWN STRUCTURE**

Dollars in Thousands

WBS	TITLE	Cumulative Fiscal-Year-To-Date								
		Budgeted Cost			Actual Cost Work Performed	Variance				Budget at Completion (BAC)
		Work Scheduled	Work Performed	Schedule		SV %	Cost	CV %		
<b>5.07</b>	<b>BASE OPERATIONS - Excluding 5.07.02</b>	104,124.0	104,158.6	103,656.6	34.6	0.0%	502.0	0.5%	157,263.1	
5.07.02	Env/TPA Milestone Achievement	<u>14,617.0</u>	<u>14,192.6</u>	<u>14,220.3</u>	<u>(424.4)</u>	-2.9%	<u>(27.6)</u>	-0.2%	<u>18,774.2</u>	
	<b>TOTAL BASE OPERATIONS</b>	<u>118,741.0</u>	<u>118,351.2</u>	<u>117,876.8</u>	<u>(389.7)</u>	-0.3%	<u>474.4</u>	0.4%	<u>176,037.3</u>	
<b>5.08</b>	<b>RETRIEVE AND CLOSE - Excluding foll. WBS elements</b>	0.0	0.0	(15.4)	0.0	0.0%	15.4	0.0%	0.0	
5.08.02	WTP Feed Delivery Program	5,300.7	5,584.2	5,132.3	283.5	5.3%	451.9	8.1%	7,377.6	
5.08.03.02	10 DST Retrieval Systems (W-211)	1,676.3	1,667.2	1,702.1	(9.1)	-0.5%	(35.0)	-2.1%	1,676.3	
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	2,818.1	2,795.8	2,793.0	(22.3)	-0.8%	2.8	0.1%	2,865.8	
5.08.04.02	Upgrade Transfer System (E-525)	2,697.1	2,188.7	2,387.5	(508.4)	-18.9%	(198.8)	-9.1%	2,712.4	
5.08.05	Retrieval / Closure Program	36,893.7	38,314.8	31,542.5	1,421.1	3.9%	6,772.2	17.7%	50,620.2	
5.08.06/7	SST Retrieval East / West Area	16,349.0	15,325.5	17,084.6	(1,023.4)	-6.3%	(1,759.1)	-11.5%	20,707.8	
5.08.12/13	SST Closure	<u>359.3</u>	<u>354.6</u>	<u>244.1</u>	<u>(4.7)</u>	-1.3%	<u>110.5</u>	31.2%	<u>458.8</u>	
	<b>TOTAL RETRIEVE AND CLOSE</b>	<u>66,094.1</u>	<u>66,230.8</u>	<u>60,870.8</u>	<u>136.7</u>	0.2%	<u>5,360.0</u>	8.1%	<u>86,418.9</u>	
<b>5.09</b>	<b>TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements</b>	2,960.1	2,914.7	2,657.5	(45.3)	-1.5%	257.2	8.8%	3,998.1	
5.09.02.02	TRU / LLW Packaging	0.0	0.0	60.2	0.0	0.0%	(60.2)	0.0%	0.0	
5.09.02.03/05	LAW Treatment	23,038.9	21,968.0	23,076.4	(1,070.9)	-4.6%	(1,108.4)	-5.0%	27,357.7	
5.09.03.01	Integrated Disposal Facility	6,105.6	6,496.9	5,210.5	391.4	6.4%	1,286.5	19.8%	7,174.3	
5.09.03.04	Initial IHLW Storage Facility (W-464)	<u>79.7</u>	<u>79.8</u>	<u>22.4</u>	<u>0.1</u>	0.1%	<u>57.4</u>	71.9%	<u>109.4</u>	
	<b>TOTAL TREAT AND DISPOSE WASTE</b>	<u>32,184.2</u>	<u>31,459.5</u>	<u>31,027.0</u>	<u>(724.8)</u>	-2.3%	<u>432.4</u>	1.4%	<u>38,639.5</u>	
<b>5.10</b>	<b>ANALYTICAL/TECHNICAL SERVICES</b>	<u>15,714.1</u>	<u>15,681.6</u>	<u>13,556.3</u>	<u>(32.5)</u>	-0.2%	<u>2,125.3</u>	13.6%	<u>22,301.9</u>	
<b>RPP TOTAL</b>		<u>232,733.4</u>	<u>231,723.2</u>	<u>223,331.0</u>	<u>(1,010.3)</u>	-0.4%	<u>8,392.2</u>	3.6%	<u>323,397.6</u>	

# CUMULATIVE COST / SCHEDULE PERFORMANCE GRAPH

**CH2M HILL Performance Cost/Schedule (shown in thousands)**  
**10/2003- 06/2006**



BCWS = BUDGETED COST FOR WORK SCHEDULED

BCWP = BUDGETED COST FOR WORK PERFORMED

ACWP = ACTUAL COST FOR WORK PERFORMANCE

**CUMULATIVE PROGRAM-TO-DATE PERFORMANCE**

**CH2M HILL Hanford Group, Inc.**  
**CUMULATIVE PERFORMANCE MEASUREMENT - 10/2003 - 06/2006**  
**BY WORK BREAKDOWN STRUCTURE**

Dollars in Thousands

WBS	TITLE	Cumulative Program-To-Date							Budget at Completion (BAC) *
		Budgeted Cost			Variance				
		Work Scheduled	Work Performed	Actual Cost Work Performed	Schedule	SV %	Cost	CV %	
<b>5.07</b>	<b>BASE OPERATIONS - Excluding 5.07.02</b>	364,453.0	361,106.2	375,928.4	(3,346.8)	-0.9%	(14,822.2)	-4.1%	417,592.2
5.07.02	Env/TPA Milestone Achievement	<u>72,573.8</u>	<u>63,408.8</u>	<u>54,730.4</u>	<u>(9,165.0)</u>	-12.6%	<u>8,678.4</u>	13.7%	<u>76,731.0</u>
	<b>TOTAL BASE OPERATIONS</b>	<u>437,026.8</u>	<u>424,515.0</u>	<u>430,658.8</u>	<u>(12,511.8)</u>	-2.9%	<u>(6,143.8)</u>	-1.4%	<u>494,323.2</u>
<b>5.08</b>	<b>RETRIEVE AND CLOSE - Excluding foll. WBS elements</b>	8,925.6	9,039.1	8,395.2	113.5	1.3%	643.9	7.1%	8,925.6
5.08.02	WTP Feed Delivery Program	26,745.8	27,044.1	35,883.9	298.3	1.1%	(8,839.8)	-32.7%	28,822.6
5.08.03.02	10 DST Retrieval Systems (W-211)	28,407.3	19,171.9	20,809.5	(9,235.4)	-32.5%	(1,637.6)	-8.5%	28,407.3
5.08.04.01	Tank Farm Restoration and Safe Operations (W-314)	37,585.8	34,398.8	41,356.2	(3,187.0)	-8.5%	(6,957.4)	-20.2%	37,633.4
5.08.04.02	Upgrade Transfer System (E-525)	17,292.5	13,641.5	26,114.5	(3,651.0)	-21.1%	(12,473.0)	-91.4%	17,307.8
5.08.05	Retrieval / Closure Program	127,122.3	118,131.5	131,569.4	(8,990.8)	-7.1%	(13,437.9)	-11.4%	140,848.9
5.08.06/7	SST Retrieval East / West Area	109,973.1	54,142.6	132,549.5	(55,830.5)	-50.8%	(78,406.9)	-144.8%	114,332.0
5.08.12/13	SST Closure	<u>17,023.3</u>	<u>7,157.7</u>	<u>10,521.7</u>	<u>(9,865.6)</u>	-58.0%	<u>(3,364.0)</u>	-47.0%	<u>17,122.9</u>
	<b>TOTAL RETRIEVE AND CLOSE</b>	<u>373,075.7</u>	<u>282,727.2</u>	<u>407,199.9</u>	<u>(90,348.5)</u>	-24.2%	<u>(124,472.7)</u>	-44.0%	<u>393,400.5</u>
<b>5.09</b>	<b>TREAT AND DISPOSE WASTE - Excl. foll. WBS Elements</b>	24,982.7	22,216.1	17,366.6	(2,766.6)	-11.1%	4,849.5	21.8%	26,020.7
5.09.02.02	TRU / LLW Packaging	28,343.4	11,695.5	19,878.2	(16,647.9)	-58.7%	(8,182.7)	-70.0%	28,343.4
5.09.02.03/5	LAW Treatment	59,933.4	47,206.7	85,098.8	(12,726.7)	-21.2%	(37,892.1)	-80.3%	64,252.3
5.09.03.01	Integrated Disposal Facility	32,883.6	29,034.8	20,551.2	(3,848.8)	-11.7%	8,483.6	29.2%	33,952.4
5.09.03.04	Initial IHLW Storage Facility (W-464)	<u>4,759.7</u>	<u>4,523.9</u>	<u>2,660.6</u>	<u>(235.8)</u>	-5.0%	<u>1,863.3</u>	41.2%	<u>4,789.3</u>
	<b>TOTAL TREAT AND DISPOSE WASTE</b>	<u>150,902.8</u>	<u>114,677.0</u>	<u>145,555.4</u>	<u>(36,225.8)</u>	-24.0%	<u>(30,878.4)</u>	-26.9%	<u>157,358.1</u>
<b>5.10</b>	<b>ANALYTICAL/TECHNICAL SERVICES</b>	<u>59,554.5</u>	<u>57,796.3</u>	<u>56,494.4</u>	<u>(1,758.2)</u>	-3.0%	<u>1,301.9</u>	2.3%	<u>66,142.2</u>
<b>RPP TOTAL</b>		<u>1,020,559.8</u>	<u>879,715.5</u>	<u>1,039,908.5</u>	<u>(140,844.3)</u>	-13.8%	<u>(160,193.0)</u>	-18.2%	<u>1,111,224.0</u>

\* BAC on this chart and in succeeding Cumulative Performance tables is for the period FY 2004 - FY 2006.

# EXECUTIVE SUMMARY

## ON

### TANK FARM EARNED VALUE REPORTING

This Executive Summary reports the cost and schedule performance for the Tank Farm Contractor, CH2M HILL Hanford Group, Inc. (CH2M HILL) for the month of June 2006.

CH2M HILL continued to support the development of the Tank Farm Contractor (TFC) Life Cycle Baseline Change Request (BCR) RPP-06-003. Comments and findings from the joint self assessment that was performed by CH2M HILL, the ORP, and the U.S. Department of Energy-Headquarters (DOE-HQ) personnel in early June have been incorporated into the document. The schedule remains on track to support submittal of the BCR baseline documentation to the External Independent Review team in July, in support of their planned Site visit in August.

CH2M HILL continues to experience positive cost performance against the baseline for FY 2006. The cost performance index (CPI) has consistently been above the 1.0 goal for each of the last eight months, with a cumulative CPI at the end of June of 1.04 (+\$8.2M). The favorable cost performance is primarily attributed to lower than anticipated costs for shared site services and the 222-S Laboratory Base Services, and efficiencies and cost pass-backs in Program Support; partially offset by cost accrual in support of quarterly financial statements, and increased SST retrieval costs. In June, CH2M HILL experienced significant favorable schedule performance due to acceleration of Isolation of Transfer System Components work scope; which resulted in a reduction in the unfavorable fiscal year schedule variance from \$5.3M in May to \$1.0M. As of June, the cumulative schedule performance index (SPI) has also reached the 1.0 goal.

## CUMULATIVE PERFORMANCE (\$000)

### 5.07 - BASE OPERATIONS (EXCLUDES 5.07.02)

**Scope Description:** The baseline scope for this work breakdown structure (WBS) includes monitoring and maintaining the DSTs and equipment in compliance with Technical Safety Requirements, and Environmental, Safety, Health and Quality programmatic requirements. This also includes necessary support activities such as project management, engineering, business services, and support to training and procedures. Base Operations also provides site, shared, and miscellaneous services including Service Assessment Pool and Advanced Medical Services. In addition, contract fee for completing PBIs is included.

	BCWS	BCWP	ACWP	SV	CV	BAC
FYTD	104,124.0	104,158.6	103,656.6	34.6 0.0%	502.0 0.5%	157,263.1
Program -to-date	364,543.0	361,106.2	375,928.4	(3,346.8) -0.9%	(14,822.2) -4.1%	417,592.2

### SCHEDULE VARIANCE

**Description and Cause:** The baseline reflects a fiscal-year-to-date (FYTD) favorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable variance is primarily due to the contract fee associated with PBI milestones not being earned as planned.

**Impact:** Earning capability has been adversely impacted.

**Corrective Action:** None required.

### COST VARIANCE

**Description and Cause:** The baseline reflects a FYTD favorable variance that is within the threshold of  $\pm 10\%$  or \$1M; however, this is a result of significant offsetting variances. Site-Wide Shared Services has a favorable variance due to lower than planned costs for Advanced Medical Services, expenses related to site layoff costs, and work for others. The favorable variance is offset by cost accruals in support of quarterly financial statements; a cost accrual related to an expected sales/use tax settlement; and greater than planned costs for tank farm sampling support. The program-to-date unfavorable cost variance is due to unplanned costs

associated with vapor mitigation activities; and greater than planned costs for Readiness-to-Serve, Site Wide Services, certain administrative functions, implementing the new work planning system, and work force restructuring. The unfavorable variance was partially offset by a cost pass-back for benefits in FY 2005.

**Impact:** The unfavorable program-to-date variance is unrecoverable.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

### 5.07.02 - ENVIRONMENTAL/TRI-PARTY AGREEMENT MILESTONE ACHIEVEMENT

**Scope Description:** The baseline provides for the safe and compliant storage of the Hanford Site tank wastes until waste is retrieved for processing (currently 53 million gallons of waste in 177 SST and DSTs and approximately 60 miscellaneous underground storage tanks (MUSTS). This includes monitoring and maintaining activities associated with the Hanford Federal Facility Agreement and Consent Order (HFFACO), commonly referred to as the Tri-Party Agreement. Scope includes compliance efforts to meet Tri-Party Agreement Milestones M-23, M-48, and M-46, including characterization, DST Space Management and DST Integrity. Scope includes transfer operations and the operations and maintenance of the 242-A Evaporator to reduce the volume of waste stored in DSTs.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	14,617.0	14,192.6	14,220.3	(424.4) -2.9%	(27.6) -0.2%	18,774.2
<b>Program-to-date</b>	72,573.8	63,408.8	54,730.4	(9,165.0) -12.6%	8,678.4 13.7%	76,731.0

#### SCHEDULE VARIANCE

**Description and Cause:** The baseline reflects a FYTD unfavorable variance for DST Integrity activities caused by integrated work priority decisions and resource availability issues on integrity assessment work, and deferral of Tank 241-AY-102 ultrasonic testing (UT) activities to FY 2007. This is partially offset by a favorable variance for DST Facility Upgrades where stack isolation work was started earlier than planned, and Cross Site Transfers where work on pressure testing of SN-285 was accelerated to minimize resource impacts to the W-314 SY-B Pit Upgrades. The program-to-date unfavorable variance is due to deferral of certain DST Infrastructure and Tank Farm Upgrades activities; delays in DST UT activities caused by vapor mitigation activities and the need to rescan two DSTs; and vendor-experienced software problems.

**Impact:** The FYTD unfavorable variance will improve slightly over the next few months as the schedule variance for the transfer line integrity assessment improves. The program-to-date unfavorable variance will result in some DST Infrastructure and Tank Farm Upgrades activities being deferred or deleted.

**Corrective Action:** The FYTD unfavorable variance related to integrity assessment work will have substantial recovery by the end of the fiscal year, but will be partially offset by deferral of the UT activities. The program-to-date variances are being addressed by development of a

revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

## **COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is due to low field productivity, weather delays on AP Valve Pit Integrity Assessment field work, and failed encasement drain valves on DST Transfer System Integrity Assessments. The unfavorable variance is partially offset by favorable performance on SST/DST Upgrades and 242-A Evaporator.

The program-to-date favorable cost variance is due to lower than planned level-of-effort support to DST waste transfers as a result of delays in SST retrievals, and under-runs in certain level-of-effort DST Space Management Project activities.

**Impact:** The unfavorable program-to-date variance for DST Integrity activities is not recoverable.

**Corrective Action:** The program-to-date unfavorable variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

## 5.08 - RETRIEVE AND CLOSE (EXCLUDES 5.08.02, PROJECTS, 5.08.05, RETRIEVALS & CLOSURE)

**Scope Description:** The remaining scope in the baseline for WBS 5.08 is Interim Stabilization, and installation and startup of the AP-101 Waste Transfer Pumping System. Work in this WBS removes pumpable liquids from SSTs to minimize the risk of leakage (referred to as "Interim Stabilization") and meet Consent Decree commitments. The scope also includes consolidation of some of the activities associated with interim isolation of tanks with retrieval and closure of SSTs. In the future, specific life cycle scope in this WBS also includes DST Retrieval and Closure and Closure of Long Term Facilities and Post Closure Monitoring. These activities are all outside of the contract period reporting window.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	0.0	0.0	(15.4)	0.0 0.0%	15.4 0.0%	0.0
<b>Program-to-date</b>	8,925.6	9,039.1	8,395.2	113.5 1.3%	643.9 7.1%	8,925.6

### SCHEDULE VARIANCE

**Description and Cause:** The FYTD and the program-to-date favorable variances are within the threshold of  $\pm 10\%$  or \$1M.

**Impact:** No impact.

**Corrective Action:** None required.

### COST VARIANCE

**Description and Cause:** The FYTD and the program-to-date favorable variances are within the threshold of  $\pm 10\%$  or \$1M. However, a favorable program-to-date variance for Interim Stabilization activities, which were completed under the estimated cost is partially offset by the AP-101 Transfer Pump Replacement, where costs were in excess of baseline estimates due to vapor mitigation activities and the use of significant amount of overtime.

**Impact:** No impact.

**Corrective Action:** None required.

### 5.08.02 - WASTE TREATMENT PLANT (WTP) FEED DELIVERY PROGRAM

**Scope Description:** The baseline provides Waste Feed Delivery management and engineering support. It also provides management of construction projects and startup and testing oversight. Emerging issues necessary to safely manage and perform work have expanded the scope of work performed in this WBS to include vapor mitigation efforts and stack relocation activities.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	5,300.7	5,584.2	5,132.3	283.5 5.3%	451.9 8.1%	7,377.6
<b>Program-to-date</b>	26,745.8	27,044.1	35,883.9	298.3 1.1%	(8,839.8) -32.7%	28,822.6

#### SCHEDULE VARIANCE

**Description and Cause:** The FYTD and the program-to-date variances are within the threshold of  $\pm 10\%$  or \$1M.

**Impact:** No impact.

**Corrective Action:** None required.

#### COST VARIANCE

**Description and Cause:** The baseline reflects a FYTD favorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable cost variance is due to greater than planned costs for support of vapor mitigation activities.

**Impact:** Increased program-to-date costs are impacting ability to complete all planned baseline scope.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

**5.08.03.02 - PROJECT W-211 (10 DST RETRIEVAL SYSTEMS)**

**Scope Description:** The baseline for this WBS element includes activities required to modify ten DSTs and associated tank farm infrastructure (e.g., pits and buildings) to enable retrieval and delivery of tank wastes to the WTP. Project W-211, Initial Tank Retrieval Systems, will install retrieval systems in 10 DSTs.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	1,676.3	1,667.2	1,702.1	(9.1) -0.5%	(35.0) -2.1%	1,676.3
<b>Program-to-date</b>	28,407.3	19,171.9	20,809.5	(9,235.4) -32.5%	(1,637.6) -8.5%	28,407.3

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable variance is a result of deferring the AY-101, AY-102, and AZ-102 Retrieval Systems to future years and the AN-101 Retrieval System construction and startup activities to later in FY 2006.

**Impact:** There is no adverse impact to the overall project and near-term waste transfers.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

**COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable cost variance is primarily due to costs related to added scope, the as-built drawings effort, and vapor mitigation activities on the AN-101 Retrieval System.

**Impact:** Necessary work will be completed in accordance with the Project W-211 Ramp-Down Plan to support near-term waste transfers and C-Farm retrieval in FY 2006.

**Corrective Action:** None required.

**5.08.04.01 - PROJECT W-314 (TANK FARM RESTORATION AND SAFE OPERATIONS)**

**Scope Description:** The baseline for Project W-314 provides essential tank farm infrastructure upgrades to support waste feed delivery to the WTP and to correct environmental compliance deficiencies with the tank farm support systems. Work scope includes waste transfer line installation, valve pit upgrades, ventilation system upgrades, instrument/control system upgrades, electrical distribution system upgrades and installation of a Master Pump Shutdown system. The project scope includes Phase 1 and 2 upgrades in seven different tank farms (AN, AW, AY, AZ, AP, SY, and A), as well as transfer system upgrades between tank farms.

	<b>BCWS</b>	<b>BCWP</b>	<b>ACWP</b>	<b>SV</b>	<b>CV</b>	<b>BAC</b>
<b>FYTD</b>	2,818.1	2,795.8	2,793.0	(22.3) -0.8%	2.8 0.1%	2,865.8
<b>Program-to-date</b>	37,585.8	34,398.8	41,356.2	(3,187.0) -8.5%	(6,957.4) -20.2%	37,633.4

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable variance is primarily due to delays in field construction and successor activities as a result of changes to operational priorities, as-found field conditions, and vapor mitigation.

**Impact:** None.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

**COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD favorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable variance is primarily caused by vapor mitigation activities and as-found field conditions, which resulted in additional effort in field construction, project management support, and engineering.

**Impact:** The program-to-date cost variance is not recoverable.

**Corrective Action:** None required.

**5.08.04.02 - PROJECT E-525 (UPGRADE TRANSFER SYSTEMS)**

**Scope Description:** The baseline for Project E-525 provides activities required to define, design, procure, construct, test, turnover, and manage modifications to a portion of the DST Transfer System. The scope of Project E-525 is further defined within the following five design/construction packages: 1) AZ-151 Catch Tank Replacement, 2) Clean-Out Box (COB) Modifications, 3) SY-Farm Transfer Lines, 4) 204-AR Load-Out Facility Transfer Line, and 5) PFP Transfer Lines. These modifications brought a portion of the DST transfer system into compliance with WAC 173-303-640, in support of Tri-Party Agreement Milestone M-43-00.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	2,697.1	2,188.7	2,387.5	(508.4) -18.9%	(198.8) -9.1%	2,712.4
<b>Program-to-date</b>	17,292.5	13,641.5	26,114.5	(3,651.0) -21.1%	(12,473.0) -91.4%	17,307.8

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance due to delay in the start of the SY Transfer Line backfill construction until after completion of the DST Isolation work. The program-to-date unfavorable variance is primarily due to delays and deferrals in field construction for the AZ-151 Catch Tank Bypass, SY-Farm Transfer Line Upgrades, and remaining AW-Farm COBs. Additionally, in anticipation of reduced funding for FY 2006, actions were taken early in FY 2005 to ramp-down project work and defer other activities in line with the Deferred Use Components List.

**Impact:** There is no impact from the FYTD variance, the SY Transfer Line backfill will start in late June and will be completed in early August.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

**COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable cost variance is primarily in Field

## 5.10 - ANALYTICAL TECHNICAL SERVICES

**Scope Description:** The baseline scope includes ATS management and Hanford Services support in order to meet the capability/capacity requirements on the 222-S Laboratory complex for the Hanford mission. Also included are: 222-S Laboratory spares; 222-S Laboratory spare reserves; capital equipment not related to construction; technology development activities; perform facility assessment and characterization activities; develop NEPA and other regulatory documentation, deactivation plans, post-deactivation surveillance and maintenance plans; develop deactivation endpoints and turnover package; flush, isolate, and blank process or sub-process systems; and remove radioactive and hazardous materials and mixed wastes.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	15,714.1	15,681.6	13,556.3	(32.5) -0.2%	2,125.3 13.6%	22,301.9
<b>Program-to-date</b>	59,554.5	57,796.3	56,494.4	(1,758.2) -3.0%	1,301.9 2.3%	66,142.2

### SCHEDULE VARIANCE

**Description and Cause:** The baseline reflects a FYTD variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable schedule variance is because of delayed 222-S Laboratory upgrades due to change in operational priorities.

**Impact:** Continued degradation of facilities/equipment will occur until upgrades are completed.

**Corrective Action:** Behind schedule laboratory upgrades will be performed in FY 2006, or later, subject to funding availability and operational necessity.

### COST VARIANCE

**Description and Cause:** The baseline reflects a FYTD and program-to-date favorable cost variance in 222-S Lab Base Services due to: 1) less than planned dedicated and matrixed staff in support of Maintenance, Production Control, and Technology Development; and 2) planning labor rates were greater than actual costs. Waste Management activities reflect a favorable variance due to the continuing negotiations of MLLW rate structure and material procurement delays of waste containers. Additionally, program-to-date unplanned costs have been incurred relative to the transition of the 222-S Laboratory analysis activities to Advanced Technology Laboratories (ATL). Specific costs include ATL transition costs, Information Resource

**5.09.03.04 - PROJECT W-464 (INITIAL IHLW STORAGE FACILITY)**

**Scope Description:** The baseline provides for Project W-464, Interim Storage Facility which is a Canister Storage Building Retrofit Subproject that addresses initial operations storage. This element provides onsite interim storage for Initial Operations IHLW canisters until they can be shipped to an offsite geological repository. The planning for receipt and interim storage of the IHLW canisters shall comply with the Waste Acceptance System Requirements Document and the Office of Civilian Radioactive Waste Management Waste Acceptance Preliminary Specifications. This WBS covers equipment for transportation of IHLW canisters from the WTP to the interim storage facilities. The work scope activities included under this WBS element are as follows: Provide Project Management (Capital) and project engineering required for execution of design, procurement and construction of the Interim Storage Facility.

	BCWS	BCWP	ACWP	SV	CV	BAC
FYTD	79.7	79.8	22.4	0.1 0.1%	57.4 71.9%	109.4
Program-to-date	4,759.7	4,523.9	2,660.6	(235.8) -5.0%	1,863.3 41.2%	4,789.3

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects FYTD and program-to-date variances that are within the threshold of  $\pm 10\%$  or \$1M.

**Impact:** No impact.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The baseline reflects a negligible FYTD favorable variance. The program-to-date positive cost variance is due to efficiencies realized on the detailed design activity, resulting from favorable contract performance.

**Impact:** No impact.

**Corrective Action:** None required.

**5.09.03.01 - INTEGRATED DISPOSAL FACILITY (IDF)**

**Scope Description:** The baseline provides for planning, designing, and constructing the onsite expandable IDF for disposing of compliant ILAW stream packages produced at the WTP and through supplemental treatment, and the U.S. Department of Energy, Richland Operations Office (DOE-RL) generated mixed low-level waste (MLLW) and LLW. The IDF will consist of the initial capacity near-surface, remote-handled waste trench facility to support WTP Operations ILAW Production and the DOE-RL MLLW and LLW disposal quantities. Infrastructure necessary to provide operations and maintenance support (e.g., utilities, roads, and fencing) will be provided by this WBS.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	6,105.6	6,496.9	5,210.5	391.4 6.4%	1,286.5 19.8%	7,174.3
<b>Program-to-date</b>	32,883.6	29,034.8	20,551.2	(3,848.8) -11.7%	8,483.6 29.2%	33,952.4

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD favorable variance due to early completion of construction work. The final Permit for the IDF has been issued and construction activities completed. The decision to start placement of waste in IDF is pending issuance of the Final Tank Closure & Waste Management EIS. The IDF will be placed in a custodial care state to ensure that the facility maintains its' integrity as a waste disposal site.

**Impact:** Completion of the project is expected ahead of the Tri-Party Agreement milestone commitment date.

**Corrective Action:** None required.

**COST VARIANCE**

**Description and Cause:** The baseline FYTD variance is within the reporting threshold. The program-to-date favorable variance is due to the favorable fixed-price contract for the IDF.

**Impact:** No impact.

**Corrective Action:** None required.

(within 20 days of the critical path) are being actively tracked and managed through increased attention at the weekly status meetings.

## **COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is due to additional engineering manpower required to issue, review, revise, and complete the DBVS design two months later than planned. The program-to-date unfavorable cost variance is a realization of risks for which no contingency was planned, including higher than anticipated negotiated contract costs with AMEC Earth and Environmental (the primary DBVS subcontractor) for design, fabrication, and installation; and new project scope (Engineering Scale-13).

**Impact:** The program-to-date cost variances for supplemental treatment will be addressed with the approval and implementation of the life cycle performance baseline.

**Corrective Action:** Continue to manage authorized expenditures to ensure continued acceptable cost performance.

**5.09.02.03/.05 - LAW TREATMENT**

**Scope Description:** The baseline provides for bulk vitrification activities which include 1) Issue Request for Proposal for containerized grout and bulk vitrification pre-downselect; 2) Award contract to vendor for testing and engineering pre-conceptual design development; 3) Contract costs and support for vendor testing and design; 4) Issue pre-downselect data package and support the decision process; 5) Prepare conceptual design for Hanford-deployable Steam Reforming unit [Phase 0]; 6) Award vendor contracts for testing and engineering pre-conceptual design development; 7) Process Pretreatment; 8) Perform long-lead permitting activities, issue procurement package, and award contract for low-activity waste (LAW) system construction; 9) Contract costs and support for vendor design, fabrication, and testing, issue design and implement field modifications for tank farm LAW system deployment; and 10) Operate LAW system.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	23,038.9	21,968.0	23,076.4	(1,070.9) -4.6%	(1,108.4) -5.0%	27,357.7
<b>Program-to-date</b>	59,933.4	47,206.7	85,098.8	(12,726.7) -21.2%	(37,892.1) -80.3%	64,252.3

**SCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance due to late receipt of vendor design packages, the need to rework several of the 50 vendor designs, and longer-than-planned design review/comment incorporation. The program-to-date unfavorable schedule variance is due to delays caused by technical issues associated with the failed melt container, additional environmental standard for the off-gas system, and delay in placement of procurements to determine if the specifications could be modified to reduce costs.

**Impact:** The working schedule forecasts design completion on July 28. Late design completion will not impact the critical decision process, fabrication, or construction that are not scheduled until FY 2007 or later.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance. Critical path and near-critical path activities

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

## **COST VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable cost variance result from unplanned costs for rework associated with NEPA document revision per the ORP, new scope to issue the PDSA, and the packaging vendor's inadequate design estimation.

**Impact:** A revised estimate at completion for the project has been developed and will be reflected in the life cycle baseline.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

**Impact:** No impact.

**Corrective Action:** None required.

#### 5.09.02.02 - TRU / LLW PACKAGING

**Scope Description:** The baseline provides for the design, construction, testing, operation, and decommissioning of a system to treat contact handled transuranic/mixed (CH-TRUM) waste for eventual shipment/disposal at the Waste Isolation Pilot Plant. 1) CH-TRUM Waste Packaging: Nine tanks are currently thought to contain CH-TRUM waste: four T-200 series SSTs, four B-200 series SSTs, and Tank 241-T-111. 2) Remote Handled transuranic/mixed (RH-TRUM) Waste Packaging: Three tanks are currently thought to contain RH-TRUM waste: 241-AW-103, 241-AW-105 and 241-SY-102. 3) Low-Level Waste (LLW) Packaging: activities required to operate a system to package LLW such that the packages can be sent to a licensed facility for disposal. One tank, 241-T-110, is currently thought to contain LLW. The volume of LLW in this tank is approximately 400,000 gallons.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	0.0	0.0	60.2	0.0 0.0%	(60.2) 0.0%	0.0
<b>Program-to-date</b>	28,343.4	11,695.5	19,878.2	(16,647.9) -58.7%	(8,182.7) -70.0%	28,343.4

#### SCHEDULE VARIANCE

**Description and Cause:** The program-to-date unfavorable schedule variance result primarily from permitting related delays in converting a Research, Development, and Demonstration permit into an extensive Part B permit; National Environmental Policy Act of 1969 (NEPA) permitting and Part B certification issuance delays; and delays due to the ORP's decision to issue the Preliminary Documented Safety Analysis (PDSA) as new scope, in addition to the planned Documented Safety Analysis amendment. Consequently, the ORP directed a ramp-down of the Transuranic Waste (TRU) project to place the project in indeterminate standby until resolution of NEPA and other permitting issues.

**Impact:** Permitting issues and regulatory uncertainty have delayed packaging operation planning such that completion of the first 284,000 gallons of tank waste by the end of FY 2006 is no longer practical.

issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

#### 5.09 - TREAT & DISPOSE WASTE (EXCLUDES WBS 5.9.2.2/2.3/3.1/3.4)

**Scope Description:** The baseline provides for the remaining scope for WBS 5.09, which includes the Infrastructure Services that provide for electrical power to the WTP, Strategic planning including the support to Optimization Studies, Project W-QQQ support, and support to the Tri-Party Agreement Milestone M-62-08 deliverables. Also included are the Failed Melter Disposal System and future expansions to Integrated Disposal Facility (IDF). Both are outside of the contract-to-date reporting. Startup and Turnover, performance of Operations Readiness Reviews, and turnover of the constructed IDF to Operations are included in this WBS.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	2,960.1	2,914.7	2,657.5	(45.3) -1.5%	257.2 8.8%	3,998.1
<b>Program-to-date</b>	24,982.7	22,216.1	17,366.6	(2,766.6) -11.1%	4,849.5 21.8%	26,020.7

#### SCHEDULE VARIANCE

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable schedule variance is because of delay in Project W-QQQ (Hanford Shipping Facility) in order to fund higher priority work.

**Impact:** No impact.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

#### COST VARIANCE

**Description and Cause:** The baseline reflects a FYTD favorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date favorable cost variances are due to efficiencies realized in the FH support of the WTP interfaces and on Strategic Planning activities.

**5.08.12/13 - SST CLOSURE**

**Scope Description:** The baseline provides the scope for tank farm closure which includes those activities required for interim closure of each tank in the farm, followed by closure of the entire farm once all tanks within the farm are interim closed. Scope for interim closure of each tank includes characterization, engineering evaluation and reporting, deactivation and isolation of transfer lines, pits and penetrations to the tank, and placement of a grout layer in the bottom of the tank to stabilize the residual waste.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	359.3	354.6	244.1	(4.7) -1.3%	110.5 31.2%	458.8
<b>Program-to-date</b>	17,023.3	7,157.7	10,521.7	(9,865.6) -58.0%	(3,364.0) -47.0%	17,122.9

**ISCHEDULE VARIANCE**

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is within the threshold of  $\pm 10\%$  or \$1M. The program-to-date unfavorable schedule variance is primarily due to the delays in the approval of the Tank Closure EIS Record of Decision (ROD).

**Impact:** Closure of SSTs is dependent on the issuance of the EIS ROD.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the baseline will provide management with a meaningful tool to assess baseline performance.

**COST VARIANCE**

**Description and Cause:** The baseline reflects a negligible FYTD favorable variance attributable to Tanks 241-C-106 and 241-S-112 Interim Closure. The program-to-date unfavorable cost variance is due to higher than planned costs for sampling and analytical work, and closure design and work package planning.

**Impact:** Increased costs are impacting ability to complete all planned baseline scope.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical

## COST VARIANCE

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is due to unplanned Tank 241-C-103 retrieval costs for replacement of the failed sluicer and the in-tank camera, the associated radiological decontamination issues, and other issues which required overtime to resolve. Additionally, unanticipated costs were incurred for closeout of C-Farm in-progress contracts. The program-to-date unfavorable cost variance for SST retrievals is due to a realization of risks in the field for which no contingency was planned, including higher than planned material and fabrication costs, longer than planned retrieval durations, increased special equipment and engineering costs, rework due to improvements to the work planning process, weather delays resulting in work stoppages, costs due to vapor mitigation activities, costs for a second pumping system for Tank 241-S-102, and costs for the partial retrieval of Tank 241-S-109 test waste in support of the DBVS.

**Impact:** Unplanned program-to-date costs are impacting ability to complete all approved baseline scope.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

### 5.08.06/.07 - SST RETRIEVAL EAST / WEST AREA

**Scope Description:** The baseline for this element includes activities required for the retrieval of all 149 SSTs. The scope includes project management, design and engineering, retrieval procurement, retrieval system installation, and retrieval startup and readiness. Scope in this WBS also includes the operations of the SST retrieval systems.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	16,349.0	15,325.5	17,084.6	(1,023.4) -6.3%	(1,759.1) -11.5%	20,707.8
<b>Program-to-date</b>	109,973.1	54,142.6	132,549.5	(55,830.5) -50.8%	(78,406.9) -144.8%	114,332.0

### SCHEDULE VARIANCE

**Description and Cause:** The baseline reflects a FYTD unfavorable variance that is due to Tank 241-C-204 field work which was delayed due to the requirements of other higher priority activities (e.g., additional Tank 241-C-201 retrieval shifts, the SY-B pit upgrade) and resource limits; demobilization of Tank 241-C-108 construction work in March; and delays in Tank 241-C-103 retrieval. The program-to-date unfavorable schedule variance is due to delays in C-Farm Modified Sluicing and Mobile Retrieval Systems design; C-Farm retrievals due to vapor mitigation activities and as-found conditions such as the potential for gelling and high radiation; development of multiple retrieval systems and the need for multiple evolutions due to tank waste characteristics; and deferral of B, T, and U-Farm retrievals.

**Impact:** Delay in retrievals has impacted the retrieval end date, start of post-retrieval sampling activities, and the associated RDR. The program-to-date issues identified have caused an extension in the schedules for retrieval procurement, construction, and operations.

**Corrective Action:** Project Management, Work Management, and Field Crews continue to pursue opportunities to safely execute Tank 241-C-204 reconfiguration field work within current tank farm priorities. The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the baseline will provide management with a meaningful tool to assess baseline performance.

Isolation accelerated work scope and also awarding the construction contract for less than was originally planned; 3) the HRR LDM activity realized some contract efficiencies; and 4) costs are less than expected for 244-CR Vault and Hose-in-Hose Transfer Line Disposal activities. The program-to-date unfavorable cost variance is due to unplanned Closure Project surveillance and monitoring costs for vapor mitigation activities and the use of increased overtime.

**Impact:** The FYTD favorable cost variance will diminish as costs are received and work is performed.

**Corrective Action:** The program to date unfavorable variance is unrecoverable.

### 5.08.05 - RETRIEVAL / CLOSURE PROGRAM

**Scope Description:** The baseline provides for Retrieval and Closure support activities in this WBS. Specifically, the scope includes program management, regulatory documentation, SST cross-site transfers, technology development, cold test facility management and maintenance, Vadose Zone support, inactive waste sites administration, Tank Farm Support Facilities/Transfer Systems. The scope also includes the Closure Project Technical Safety Requirement/Basic Maintenance on SSTs, Closure Project Operations Essential Services, Closure Project Field Projects/Upgrades, and the solid waste management programs.

	BCWS	BCWP	ACWP	SV	CV	BAC
<b>FYTD</b>	36,893.7	38,314.8	31,542.5	1,421.1 3.9%	6,772.2 17.7%	50,620.2
<b>Program-to-date</b>	127,122.3	118,131.5	131,569.4	(8,990.8) -7.1%	(13,437.9) -11.4%	140,848.9

### SCHEDULE VARIANCE

**Description and Cause:** The baseline reflects a FYTD favorable variance that is due to acceleration of DST Component Isolation work that was planned for FY 2007 and completing it in FY 2006. The program-to-date unfavorable schedule variance is primarily due to field work delays on Vadose Zone RCRA Corrective Actions activities due to resource availability issues, vapor mitigation activities, and weather delays; delays on starting Tank Farm Risk Assessments modeling and waste constituent studies; delays in Liquid Level and Video Assessment, and Hose-in-Hose Transfer Line Disposal activities due to vapor mitigation activities, radiological conditions, and weather delays.

**Impact:** It is anticipated that the Tri-Party Agreement milestones related to Vadose Zone RCRA Corrective Actions documentation will be integrated into a renegotiated milestone.

**Corrective Action:** A proposed recovery plan for Vadose Zone RCRA Corrective Actions has been incorporated into the baseline.

### COST VARIANCE

**Description and Cause:** The baseline reflects a FYTD favorable cost variance because of: 1) lagging progress and/or costs associated with various level-of-effort Waste Management Support (Department of Transportation Type A containers) and SST Operations Essential Services (Breathing Air Facility) activities; 2) efficiencies in performing the DST Component

Construction and is due to unplanned costs attributable to unexpected as-found field conditions, enhanced work package development/approval, and vapor mitigation activities.

**Impact:** No impact.

**Corrective Action:** The program-to-date variances are being addressed by development of a revised life cycle baseline. The revised baseline incorporates the increased cost of work due to vapors, technical issues associated with in-field project work, and deferral of work based on revised funding guidance. Implementation of the revised baseline will provide management with a meaningful tool to assess baseline performance.

Management Desktop support, and Waste Management of lab samples. These costs have been offset by favorable variances elsewhere in the ATS program.

**Impact:** No impact.

**Corrective Action:** Under runs are being used to fund other high priority ATS work scope. The rest of the baseline variance will self-correct over time. The impact of unplanned costs relative to the transition of 222-S Laboratory analysis to ATL has been documented and will be reflected in the life cycle baseline update.

**Milestone M-45-00, Complete Closure of All Single-Shell Tank Farms****SST Retrieval and Closure Program****I. Deliverables****• M-45-00, Complete Closure of all Single-Shell Tank Farms**

Due: 9/30/24

Status: On schedule

**• M-45-00B, Complete Specified "Near-Term" SST Waste Retrieval and Interim Closure Activities, to Result in the Retrieval of all Tank Wastes in WMA-C SSTs Pursuant to the Agreement Criteria in Milestone M-45-00**

Due: 9/30/06 (Or as otherwise indicated within the descriptive text of this milestone.)

Status: Milestone completion by due date is unrecoverable. Current working schedule projects completion of some C-Farm retrievals extending beyond September 2006.

- Completion of four limits of technology retrieval demonstrations:
  - Saltcake dissolution (S-112): Completed (M-45-03C)
  - Modified sluicing (C-106): Completed
  - Vacuum retrieval (C-200s): In progress; C-203 field retrieval operations completed on 3/24/05; C-202 retrieval completed on 8/11/05; C-201 retrieval completed on 3/23/06; forecast completion of C-204 in FY06.
  - Mobile retrieval (C-101, C-105, C-110, or C-111): C-101 start of retrieval is currently projected for fiscal year 2011.
- Implementation of full-scale LDMM technologies for the first three 100-series tank retrievals following Tank S-112:
  - Tank S-102: High Resolution Resistivity (HRR) system installed; supporting retrieval operations. Started HRR injection test in January 2006 and completed test in May 2006. HRR Test Report is being developed and delivery to Ecology is expected in September 2006
  - Tank C-103: HRR system operating in support of retrieval operations
  - Tank C-108: HRR system to be installed by December 2006 to support start of retrieval.
- Submittal of TWRWPs:
  - Tanks C-201, C-202, C-203, and C-204: Completed on 4/8/04
  - Two (2) 100-series tanks by 7/31/04: Completed on 7/29/04 (C-103 and C-109)
  - Four (4) 100-series tanks by 10/31/04: Completed on 10/8/04 (C-102, C-104, C-107, C-108, and C-112).
  - Five (5) 100-series tanks by 1/31/05: Completed on 1/24/05 (C-101, C-105, C-110, and C-111).
- Submittal of Waste Management Area (WMA) integration plans by 6/30/05:
  - WMA C: Completed; submitted from ORP to Ecology on 6/22/05
  - WMA T: Completed; submitted from ORP to Ecology on 6/22/05.

- **M-45-00C, Initiate Negotiation of SST Waste Retrieval and Closure Activities and Associated Schedules (for the Period February 2007 through August 2008)**  
Due: 9/30/06  
Status: On schedule
- **M-45-00D, Initiate Negotiation of the SST Waste Retrieval and Closure Activities (for the Period September 2008 to September 2013)**  
Due: 1/31/08  
Status: On schedule
- **M-45-00E, Initiate Negotiation of SST Waste Retrieval and Closure Activities for the Remainder of the SST Program**  
Due: 10/31/12  
Status: On schedule
- **M-45-05, Retrieve Waste from all Remaining Single-Shell Tanks**  
Due: 9/30/18  
Status: At risk
- **M-45-05-T05, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**  
Due: 9/30/07  
Status: At risk
- **M-45-05-T06, Initiate Tank Retrieval from Five Additional Single-Shell Tanks**  
Due: 9/30/08  
Status: At risk
- **M-45-05-T07, Initiate Tank Retrieval from Seven Additional Single-Shell Tanks**  
Due: 9/30/09  
Status: At risk
- **M-45-05-T08, Initiate Tank Retrieval from Eight Additional Single-Shell Tanks**  
Due: 9/30/10  
Status: At risk
- **M-45-05-T09, Initiate Tank Retrieval from Ten Additional Single-Shell Tanks**  
Due: 9/30/11  
Status: At risk
- **M-45-05-T10, Initiate Tank Retrieval from 12 Additional Single-Shell Tanks**  
Due: 9/30/12  
Status: At risk

- **M-45-05-T11, Initiate Tank Retrieval from 14 Additional Single-Shell Tanks**  
Due: 9/30/13  
Status: At risk
- **M-45-05-T12, Initiate Tank Retrieval from 17 Additional Single-Shell Tanks**  
Due: 9/30/14  
Status: At risk
- **M-45-05-T13, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**  
Due: 9/30/15  
Status: At risk
- **M-45-05-T14, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**  
Due: 9/30/16  
Status: At risk
- **M-45-05-T15, Initiate Tank Retrieval from 20 Additional Single-Shell Tanks**  
Due: 9/30/17  
Status: At risk
- **M-45-06, Complete Closure of all Single-Shell Tank Farms in Accordance with Approved Closure/Post Closure Plan(s)**  
Due: 9/30/24  
Status: On schedule
- **M-45-06-T03, Initiate Closure Actions on a WMA Basis**  
Due: 3/31/12 (See M-45-06)  
Status: On schedule
- **M-45-06-T04, Complete Closure Actions on one WMA**  
Due: 3/31/14 (See M-45-06)  
Status: At risk

## II. Significant Accomplishments

- Retrieved waste from C-103 down to 3,000-4,000 gallons of residuals.
- Continued C-108 construction activities (HIHTL installation, pre-installation functional testing, jumper fabrication, riser abatement, etc.)
- Continued reconfiguration of equipment from C-201 to C-204 to support C-204 waste retrieval.

### III. Significant Planned Activities in the Next Six Months

- Start negotiation on M-45-00B and M45-00C milestones.
- Complete vacuum retrieval technology demonstrations at remaining C-200 tanks.
- Complete C-103 retrieval
- Construct C-108 retrieval system
- Complete HRR leak injection test post test monitoring and submit test report and continued use recommendation letter.
- Obtain Ecology approval of Mobile Retrieval System TWRWP.
- Continue development of C-200 demonstration project.

### IV. Issues

- M-45-00B commitment to retrieve all C-Farm tanks by September 2006 is unrecoverable. ORP, Ecology, and EPA have initiated the Tank Retrieval and Storage Team to explore SST retrieval assumptions and alternatives and to develop a proposed path forward for senior management consideration. Team goal is to present a proposal for SST retrieval activities between now and startup of the Waste Treatment Plant by October 2006, to support negotiation on M-45 retrieval milestones.

## SST RETRIEVAL SEQUENCE DOCUMENT

### I. Deliverables

- **M-45-02M, Submit Biennial Updates to SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition**  
Due: 3/1/06 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: Complete. RPP-21216 Rev. 1B, Single-Shell Tank Retrieval Sequence Document and Double-Shell Tank Evaluation Document, delivered to Ecology on March 13, 2006.
- **M-45-02N, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**  
Due: 3/1/08 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: On schedule
- **M-45-02O, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**  
Due: 3/1/10 (Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: On schedule

- **M-45-02P, Submit Biennial Update of SST Retrieval Sequence Document (Agreement Appendix I, Section 2.1.2), and Double-Shell Tank Space Evaluation Document and Ecology Concurrence of Additional Tank Acquisition Within 60-days (See Text of M-45-02M for further details)**  
Due: 3/1/12 (Biennially thereafter. Parties to meet annually to agree on SSTs to be retrieved during the coming year from the tank pool.)  
Status: On schedule

## II. Significant Accomplishments

- None

## III. Significant Planned Activities in the Next Six Months

- None

## IV. Issues

- Ecology provided ORP a notice of deficiency (NOD) on the document submitted to meet the M-45-02M milestone (Ecology letter dated May 25, 2006). ORP response did not concur with all stated deficiencies but committed to work with Ecology to resolve issues, provide requested information, and submit an updated document by August 31, 2006, if necessary (ORP letter dated June 2, 2006)

### TANK RETRIEVALS WITH INDIVIDUAL MILESTONES

#### Tank 241-C-106

##### I. Deliverables

- **M-45-05H, Interim Completion of Tank C-106 SST Waste Retrieval and Closure Demonstration Project**  
Due: 6/30/04  
Status: Completed
- **M-45-05L-T01, Complete Full-Scale C-106 Waste Retrieval**  
Due: 11/1/03  
Status: Completed
- **M-45-05M-T01, Submit C-106 Waste Retrieval Results, Analysis of Residual Waste(s), and (if appropriate) Request for Exception to the Criteria Pursuant to Agreement Appendix H**  
Due: 2/27/04  
Status: Completed

##### II. Significant Accomplishments

- Provided SST PA to NRC to support completion of their review of C-106 Appendix H exception request.

##### III. Significant Planned Activities in the Next Six Months

- Complete revisions to C-106 Appendix H documentation, incorporating Ecology and NRC comments and reflecting the Single-Shell Tank Performance Assessment
- Obtain Ecology and EPA approval of C-106 Appendix H exception request.

#### IV. Issues

- C-106 Closure Plan approval and SST Categorical Notice of Construction Phase 3 (closure) are pending completion of the Tank Closure and Waste Management Environmental Impact Statement and associated Record of Decision (ROD); forecast completion for the final EIS is June 2008.

### Tank 241-S-102

#### I. Deliverables

- **M-45-05C, Complete S-102 Initial Waste Retrieval Project Construction (to Include all Physical Systems Including Those Necessary for Leak Detection, Monitoring, and Mitigation)**  
Due: 3/31/04  
Status: Completed
- **M-45-06C, Submit a Certified S-102 Component Closure Activity Plan, as an Application for a Modification to the Hanford Site-Wide Hazardous Waste Facility Permit to Ecology**  
Due: 9/30/04  
Status: Completed
- **M-45-05A, Complete Initial Waste Retrieval from Tank S-102**  
Due: 3/31/07  
Status: At risk.
- **M-45-15, Interim Completion of Tank S-102 SST Waste Retrieval and Closure Demonstration Project**  
Due: 12/31/07  
Status: At risk.

#### II. Significant Accomplishments

- None.

#### III. Significant Planned Activities in the Next Six Months

- Continue to evaluate pump repair/replacement options and continue opportunistic retrieval when pump operational and resources are available.

#### IV. Issues

- None.

### Tank 241-S-112

#### I. Deliverables

- **M-45-06B, Submit a Certified S-112 Component Closure Activity Plan, as an Application for a Modification to the Hanford Site-Wide Hazardous Waste Facility Permit to Ecology**  
Due: 9/30/04  
Status: Completed.
- **M-45-03C, Complete Full-Scale Saltcake Waste Retrieval Technology Demonstration at Single-Shell Tank S-112**  
Due: 6/30/05  
Status: Completed.
- **M-45-13, Interim Completion of Tank S-112 SST Waste Retrieval and Closure Demonstration Project**  
Due: 12/31/07  
Status: On schedule.

## II. Significant Accomplishments

- S-112 retrieval is now approximately 99.3% complete with approximately 4,000 gallons (535 cubic feet) of residual waste remaining. Pumped first caustic soaking solution out of the tank and pumped a second batch of caustic soaking solution into the tank. It is planned to leave this batch in until sometime in August.

## III. Significant Planned Activities in the Next Six Months

- Complete the S-112 Remote Water Lance (RWL) Demonstration.
- Retrieve the caustic solution to the SY-102 receiver tank.

## IV. Issues

- Additional retrieval may be necessary after the RWL demonstration to meet TPA-M-45-00 volume requirements of  $\leq 360$  cubic feet. Continued retrieval after the cross-site transfer and after caustic addition will provide more information on whether this system will succeed in meeting the volume requirements.

## C-FARM RETRIEVAL SUMMARY SCHEDULE FORECASTS

### I. Deliverables: C-Farm Tanks

Tank	Final Design Drawings complete	Construction Complete	Process Control Plan Complete	Start Retrieval	Complete Retrieval	TSAP Complete	Retrieval Data Report or Appendix H to Ecology/EPA
C-101	Dec-04-06	Sep-17-07	Jul-16-07	Mar-06-08	Jun-07-08	May-15-08	Jan-20-09
C-102	Feb-05-07	Jun-08-07	Jun-18-07	Jan-23-09	May-18-09	Apr-09-09	Dec-22-09
C-103	Complete	Complete	Complete	Complete	June-30-06	Oct-24-06	Feb-14-07
C-104	May-23-07	Feb-01-08	Aug-20-07	May-18-09	Aug-25-09	Aug-24-09	Mar-30-10
C-105	Nov-27-07	Jul-10-08	Mar-20-08	Aug-26-09	Nov-13-09	Nov-11-09	Jun-24-10
C-106	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-107	Mar-02-09	Aug-05-09	Sep-21-10	Nov-05-10	Feb-10-11	Jan-24-11	Sep-02-11
C-108	Complete	Feb-07-07	Apr-25-07	May-17-07	Aug-31-07	Feb-28-08	Apr-30-08
C-109	Feb-21-08	Jul-18-08	Oct-06-08	Nov-16-09	Jan-04-10	Dec-09-09	Aug-11-10
C-110	Jul-18-08	Jan-27-10	Nov-06-08	Feb-26-10	Jun-15-10	May-25-10	Jan-24-11
C-111	Jun-11-09	Dec-21-09	Sep-09-09	Feb-11-11	Mar-22-11	Mar-03-11	Oct-10-11
C-112	Jan-09-09	Jul-22-09	Mar-30-09	Jun-16-10	Aug-16-10	Jul-30-10	Mar-25-11
C-201	Complete	Complete	Complete	Complete	Complete	Complete	Aug-4-06
C-202	Complete	Complete	Complete	Complete	Complete	Complete	Jul-31-06
C-203	Complete	Complete	Complete	Complete	Complete	Complete	Complete
C-204	Complete	Complete	Complete	Jul-19-06	Sept 30-06	Complete	April- 30-07

NOTE: Completion dates are based on the C-Farm Integrated Management Execution Schedule (IMES) forecasts as of 06/30/06 and are subject to change as efforts continue to identify and implement schedule efficiencies.

\* C-103 modified sluicing completed to limits of technology, residual volume calculation in progress.

### II. Significant Accomplishments

- Replaced failed sluicer at C-103, retrieved waste down to 3,000-4,000 gallons of residuals.
- Completed Process Control Plan for C-204.
- Continued C-108 construction activities (HIHTL installation, pre-installation functional testing, jumper fabrication, riser abatement, etc.)

### III. Significant Planned Activities in the Next Six Months

- Initiate C-204 waste retrieval.
- Complete C-103 retrieval evaluation.
- Construct C-108 retrieval system.
- Resolve Ecology comments on C-203 RDR.
- Submit C-202 and C-201 RDRs to Ecology.

### IV. Issues

- Completion of C-Farm retrievals by September 2006 is unrecoverable.

**Milestone M-45,-50,-60 Single-Shell Tank Corrective Action****I. Near-Term Deliverables:**

- **M-45-55-T03, Submit to Ecology for review and comment as an Agreement secondary document a Field Investigation Report pursuant to the site-specific SST WMA Phase I RFI/CMS Work Plan addenda for WMA T, TX, and TY.**

Due: 07/30/05

Status: Complete, Delivered on 07/29/05. Ecology comments were received on 01/05/06. Responses have been provided to Ecology.

- **M-45-55-T04, Submit to Ecology for review and comment a draft of the A-AX, C, and U Field Investigation Report.**

Due: 04/30/06

Status: Missed. Negotiations are ongoing regarding scope and schedule for this report. A draft TPA change request, letter 06-TPD-026, was provided to Ecology on May 4, 2006. Preliminary Ecology comments on the draft change package are being addressed.

- **M-45-55, Submit to Ecology for review and approval as an Agreement primary document a Phase 1 RFI report integrating results of data gathering activities and evaluations for WMAs S-SX, T, TX-TY, A-AX, B-BX-BY, C, and U; and related activities, including groundwater monitoring and impacts assessment using Hanford Site groundwater models, with conclusions and recommendations.**

Due: 01/31/07

Status: At Risk: C farm direct push characterization near the C-152 pipeline leak was completed June 9, 2006. 15 samples were pulled and sent for analysis. Push sampling equipment is being moved into BX farm. SGE activities will begin on 8/21/06 in U Farm and 8/24/06 in C Farm.

- **M-45-56, Complete Implementation of Agreed to Interim Measures.**

Due: TBD

Status: ORP planning on meeting with Ecology in August to detail the design and deployment efforts to date of the Interim Barrier over T-106. A conceptual design document is being prepared.

- **M-45-58, Submit to Ecology for review and approval as an Agreement primary document a RCRA Corrective Actions Corrective Measures Study for WMAs S-SX, T-TX-TY, B-BX-BY, A-AX, C, and U.**

Due: 06/30/07

Status: At Risk.

- **M-45-60, Submit to Ecology for review and approval as an Agreement primary document DOE's RCRA Corrective Actions Work Plan for SST WMAs.**

Due: 09/30/07

Status: At Risk.

## **II. Significant Accomplishments:**

- The SST Performance Assessment was released to the NRC. The Assessment has been formally transmitted to Ecology and EPA. The Assessment is being rolled out to stakeholders.
- Hydraulic hammer direct push system has been successfully demonstrated. Fifteen samples collected at angles of 30°, 45°, and 60° from the vertical and a moisture probe was installed. Work was completed on 6/9/06.
- Final round of SGE field work associated with the Leak Detection Test at tank 241-S-102 was completed on 6/21/06.
- A report on the Surface Geophysical Exploration field work at T farm, including the use all drywells and nearby groundwater wells was submitted for distribution on 7/3/06.

## **III. Significant Planned Actions in the Next Six Months:**

- Initiate Direct Push Technology investigation in 241-B, BX, T and U farms
- Initiate SGE work in C and U farms.
- Install moisture monitoring instruments at T Farm in support of the T-106 interim surface barrier.
- Initiate SGE work in B-BX-BY Waste Management Area and environs.
- Initiate design/construction activities for interim surface barriers at ER-311 and T-106.

## **IV. Issues**

- A draft change package for M045-55-T-04, 55, 58, and 60 has been submitted to Ecology. Preliminary Ecology comments are being addressed and the change package will be resubmitted to Ecology.

## Milestone M-47-00, Complete Work Necessary to Support Acquisition and Phase I Operations of Hanford Site High-Level Radioactive Waste Treatment, Storage, and Disposal Facilities

### I. Near-Term Deliverables:

- **M-47-02, Complete startup and turnover activities for required transfer system upgrades to allow transfer of first high-level waste feed to the Pretreatment/Treatment Complex.**  
Due: 03/31/09  
Status: Complete. ORP completion letter submitted to WDOE June 28, 2006, (06-TPD-043).
- **M-47-04, Complete startup and turnover activities for required transfer system upgrades to allow transfer of first low-activity waste feed to the pretreatment/treatment complex. Installation of the pump will not be required until necessary to support WTP waste feed activities.**  
Due: 03/31/09  
Status: Complete. ORP completion letter submitted to WDOE June 28, 2006 (06-TPD-043).
- **M-47-03A, Complete startup and turnover activities for waste retrieval and mobilization systems for selected initial high-level waste feed tank.**  
Due: 03/31/09  
Status: On schedule.
- **M-47-06, Complete negotiation of additional agreement requirements (milestones, target dates, and associated language) governing work necessary to support completion of treatment complex Phase I operations by 2018.**  
Due: 06/30/10  
Status: Negotiations are not yet underway.

### EVAPORATOR CAMPAIGNS

Source Tank/Slurry Tank (Staging Transfers to AW-102 are implicit)

FY 06	FY 07	FY 08	FY 09
Cold Run (completed in April)			
	AW-102 to AP-3/-8	AP-107 to AP-7	AP-105 to AP- 5/-7
	AY-102 to AP-3/-8		AP-104 to AP-5

### II. Significant Accomplishments:

- Nothing to report.

### III. Significant Planned Actions in the Next Six Months:

- None.

**IV. Near-term Actions Needed by DOE or Ecology:**

- Ecology concurrence that TPA Milestones M-47-02 and M-47-04 are complete (06-TPD-043).

**V. Issues:**

- Nothing to report.

**Milestone M-48-00, DST Integrity Assessment Program****I. Deliverables:**

- **M-48-14, Submit Written Integrity Report for the DST System**  
Due: 3/31/06  
Status: Complete.
- **M-48-15, Submit a Report to Ecology for the Re-examination of Six DSTs by Ultrasonic Testing**  
Due: 9/30/07  
Status: On schedule.
- **M-48-00, Complete Tank Integrity Assessment Activities for Hanford Double Shell Tanks System**  
Due: 9/30/07  
Status: On schedule.
- **M-48-07, Submit To Ecology a Disposition Plan for All DST Components Not In Use Post 2005.**  
Due: 12/16/2000  
Status: Complete.
- **M-48-07b, (Embedded milestone) Isolation, Stabilization and Monitoring (i.e., administrative and/or engineering controls in place to prevent use within twelve (12) months, or sooner, from the date of removal from service.**  
Due: 06/30/2006  
Status: Complete. ORP letter 06-TPD-042 transmitted to Ecology on June 27, 2006.
- **M-48-07A, Complete Construction of the AZ-301 Condensate Return System and Pit Upgrades. This includes construction of the AZ-301 condensate return, removal of AZ-151 catch tank from service, construction of the AP-106A central pump pit upgrades, and construction of the SY-B valve pit upgrade (milestones M-48-07A-A, M-48-07A-B & M-48-07A-C).**  
Due: 06/30/06  
Status: Complete. ORP letter 06-TPD-041 transmitted to Ecology on June 28, 2006.
- **M-48-07A-A, Complete Construction of the AZ-301 Condensate Return System and Pit Upgrades Remove the AZ-151 Catch Tank System from Service.**  
Due: 10/31/05 for AZ-301 Condensate Return system and removal of  
Status: Complete
- **M-48-07A-B, Complete construction of the AZ-301 condensate return system and pit upgrades. This includes:**

Due: 3/31/06 AP-106A Central Pump Pit Upgrade (Evaluate integrity of pit and replace pit coating if necessary).

Status: Complete.

- **M-48-07A-C, Complete construction of the AZ-301 condensate return system and pit upgrades. This includes:**

Due: 6/30/06 for complete construction for the 241-SY-B Valve Pit Upgrade (Evaluate integrity of pit and replace pit coating if necessary).

Status: Complete. ORP letter 06-TPD-041 transmitted to Ecology on June 28, 2006.

## II. Significant Accomplishments:

- Completed the SL-169/SN-271 (AW-B) transfer lines pressure testing and integrity assessments.
- Completed the SL-167 secondary piping encasement drain valve and SL-167 (AW-B) transfer line pressure testing and integrity assessments.
- Completed the SN-272 (AW-02E) transfer line pressure testing and integrity assessments.
- Completed the SN-161 (AW-01) transfer lines pressure testing and integrity assessment. Completed the DST Isolation work (M-48-07B)
- Completed the SY-B Pit Upgrade and released the integrity assessment report (M-48-07A-C).
- Completed the AN-107 ultrasonic testing (UT) fieldwork.

## III. Significant Planned Actions in the Next Six Months:

- Complete encasement pressure testing and pit assessments at pits AN-06A, AN-A, AN-B and AW-06A.
- Complete AW-103 and AY-102 UT.
- Revise the DST Integrity Assessment Report to include pits and transfer lines assessed after March 2006.

## IV. Issues

- None.

**Milestone M-23-00, Tank Integrity and Monitoring****I. Near-Term Deliverables:**

- None.

**II. Significant Accomplishments:**

- Nothing to report.

**III. Significant Planned Actions in the Next Six Months:**

M-23-26 requires completing liquid level assessments and video observation of 241-AX-IX, 241-AX-151, 241-BY-ITS-1 and 241-BY-ITS-2 facilities no later than December 31, 2006. In the next six months technical definition and work packages will be prepared and field work initiated for these facilities.

**IV. Issues**

- Nothing to report.

## Interim Stabilization Consent Decree

### I. Near-Term Deliverables:

- **D-001-00, Complete Interim Stabilization of all 29 SSTs**

Due: 09/30/04

Status: Completed on 03/18/04 with discontinuation of pumping in U-108 and subsequent consultation with Ecology staff. Interim stabilization of S-102 and S-112 held in abeyance by third amendment to the Consent Decree; these two tanks are undergoing retrieval. ORP's obligation to interim stabilize S-102 and S-112 will be satisfied upon completion of retrieval operations.

### II. Significant Accomplishments:

- S-102 has met Interim Stabilization requirements in February 2006 and an Interim Stabilization Evaluation Report for S-102 was submitted to Ecology in March 2006. The quarterly Interim Stabilization report was submitted to Ecology in April 2006.

### III. Significant Planned Actions in the Next 6 Months:

- None

### IV. Issues

- None

## In Tank Characterization and Summary

For the period from April 1 - June 30, 2006

### I. Accomplishments:

- Completed 241-AY-101 Grab Sampling to Support Tank Corrosion Program.
- Completed 241-AN-106 Grab Sampling to Support Tank Retrieval Program.
- Completed 241-AN-102 grab sampling to Support Tank Corrosion Program.
- Completed 241-AW-106 Core Sampling to Support Tank Corrosion Program.
- Completed 20 BBI updates during the 3<sup>rd</sup> Quarter of FY 2006.

### II. Planned Action within the next Six Months:

#### Tank Sampling

- Tank 241-C-103 Liquid Closure Samples in August 2006. (8/5/06)
- Tank 241-C-103 Solid Closure Samples in September 2006.
- Tank 241-S-112 Liquid Closure Samples in September 2006.
- Tank 241-S-112 Solid Closure Samples in October 2006.
- Tank 241-AY-102 Liquid Evaporator Samples in October 2006.
- Tank 241-C-204 Solid Closure Samples in October 2006.
- Tank 241-AP-108 Core Corrosion Samples in October 2006.

#### BBI Updates

- A total of 17 BBI updates are planned for the 4<sup>th</sup> quarter of FY 2006.

#### DQO

- Complete Tank Emissions DQO, Rev. 2 in July 2006 (7/26/06)
- Complete SST Component Closure DQO, Rev. 2 in August 2006
- Complete Corrosion Probe DQO in September 2006.
- Complete Evaporator DQO, Rev. 5 in September 2006.
- Complete Bulk Vitrification DQO, Rev. 1 in December 2006.

### III. Issues:

- None.

**Milestone M-90-00, Complete Acquisition of New Facilities, Modifications of Existing facilities, and/or Modifications of Planned Facilities, as Necessary for Storage of Hanford Site Immobilized High Level Waste (IHLW), Immobilized Low Activity Waste (ILAW), and Disposal of ILAW, and M-20-00, Submit Part B Permit Applications.**

**I. Near-Term Deliverables:**

- **M-20-56, Submit Canister Storage Facility Part B Permit Application**  
Due: 6/30/03  
Status: **Complete.**
  
- **M-20-57, Submit ILAW Disposal Facility Certified Part B Permit Application to Ecology**  
Due: 6/30/03  
Status: **Complete.**
  
- **M-90-09-T01, Complete Detailed Design of ILAW Disposal Facility Critical Systems to 80%**  
Due: 5/30/03  
Status: **Complete.**
  
- **M-90-08, Initiate ILAW Disposal Facility Construction**  
Due: 2/28/05  
Status: **Complete.**

**Out year (Post 2006) milestones:**

- **M-90-10, Initiate Placement of ILAW Waste Canisters in ILAW Disposal Facility**  
Due: 8/31/08  
Status: On schedule.
  
- **M-90-11, Complete Canister Storage Facility Construction**  
Due: 8/31/10  
Status: On schedule.

**II. Significant Accomplishments:**

- Completed 95% of IDF Construction open items;
- Established contract for IDF Care & Custody activities; and
- Released IDF maintenance instructions.

**III. Significant Planned Actions in the Next Six Months:**

- Review IHLW NODs with Ecology – August 2006;
- Complete IDF Function Testing and Contractor Demobilization – August 2006;
- Submit Access Control Process to Ecology - August 2006;
- Release IDF Operations Instructions August-2006;
- Submit IQRPE Report to Ecology – September 2006;
- Submit IDF As Built Drawings to Ecology – September 2006; and

- Plant sagebrush on the Hanford Site as called for in Mitigation Action Plan – December 2006.

**IV. Issues**

- None.

## Hanford Waste Treatment and Immobilization Plant (WTP) Project

### Pretreatment (PT) Facility

The PT Facility will separate the radioactive tank waste into High Level Waste (HLW) and Low Activity Waste (LAW) fractions and transfer each waste type to the respective vitrification facility for immobilization. Facility construction began November 2002 and the May 2006 Estimate at Completion (EAC) lists a construction completion date of October 2014. Currently the design is 67% complete and construction is 24% complete.

Construction was suspended in December 2005 except for support for connection of the underground transfer lines to the north and south tunnel piping.

Engineering is continuing to work through issues that were raised primarily by the External Flow-sheet Review Team (EFTR) and on building a back log of design in preparation for resumption of construction. Civil/Structural engineering continues to work on the concrete walls and slabs and structural steel above the 56' elevation. The design for the walls from the 56' to 77' elevation had been released for construction before the seismic design criteria were changed. As a result the design for these walls must be checked against the new criteria. The embed and reinforcing design for a third of the walls has been checked and work is continuing on the remainder of these fourth lift walls. The structural steel design for the 56' to 77' elevation has continued during the month.

Mechanical Systems and Plant Design continue checking the design for piping and pipe supports that had been released for fabrication prior to the seismic design criteria change. They have completed checking about twenty-eight percent of the piping that was impacted by the change in the seismic design criteria. The piping design has changed very little as a result of these checks but the number of pipe hangers has increased and a number of the existing pipe hangers that will require modification to accommodate the increased loads have been identified.

BNI continues to be very close to having resolved the issues associated with detonation of Hydrogen in Piping and Ancillary Vessels (HPAV). DOE has not accepted all of the rationale for the configuration that BNI is proposing pending receipt and review of additional information from BNI. If acceptable the configuration proposed by BNI will result has been that fewer controls and piping changes than originally anticipated. Engineering is continuing to incorporate the piping and control changes into the design model.

The recommendations provided by the EFRT combined with the changes that have been required to mitigate the HPAV issues have increased the number of controls and quantity of piping and wiring that must be accommodated on the control racks. A team was formed in engineering to bring together the disciplines that must work together to address ways of accommodating these increases. The new and modified racks for plant wash, sparge controls, and plant service air have been added to the design model at the conceptual stage and model reviews have been stated. This will allow them to identify penetrations in walls and slabs that are needed to support the new equipment.

This information is provided to the structural engineering group for use in finalization of the wall and slab design.

The factory acceptance testing of the bridge crane for the hot cell has been successfully completed at the manufacturer's facilities in Minnesota. The tests valuated all of the crane functions as well as how well the BNI software and video cameras worked with the crane. The crane will be used to perform all maintenance and repair activities in the hot cell following commissioning. A few minor corrections to the crane and completion of the acceptance paperwork will be required before the crane will be shipped. The location for storage of the crane until it is needed is still being discussed.

The BNI plans for responding to the External Flowsheet Review Team recommendations are now being received by DOE but the schedule for submitting them all to DOE has slipped into August.

Commodity	Installed during this period	Installed to date	Percentage installed to date
Concrete	0	77,110	68.74%
Structural Steel	0	2,977	18.33%
Pipe	1,290	36,490	6.82%
HVAC	0	37,890	2.29%
Cable Tray	0	340	0.94%
Conduit	0	16,990	7.20%
Cable & Wire	0	0	0.00%

Facility	Milestone	Scheduled	Projected
HLW	Receive Canister Decontamination Vessels	06/06	06/06
	Receive Waste Neutralization Vessel	08/06	08/06
	Receive four High Efficiency Mist Eliminators	08/06	08/06
LAW	Set all +3' elevation major process vessels	07/04	03/05A
	Complete placement of slabs at el. +28'	05/05	10/05A
PT	Complete Civil/Structural calculations for 56' elevation, Column lines 8-17.	11/06	11/06
	Recommend use of RF resin as baseline for ion exchange.	01/07	01/07
BOF/LAB			

Facility	Milestone	Scheduled	Projected

### High Level Waste (HLW) Vitrification Facility

HLW Engineering has issued the Piping and Instrumentation Diagram (P&ID) for the Radioactive Liquid Waste Disposal (RLD), the Canister Pour Handling (HPH) system, the melter feed system (HFP), and the process vessel vent (PVV) system. BNI is working to a goal of releasing P&IDs for 23 major systems in the HLW Facility by July 31, 2006, and has released 9 of 23 so far.

HLW Engineering is continuing their evaluation of maintaining isolation between the C2/C5 systems in a post design basis event (DBE). If the process vessel ventilation (PVV) system loses power and the vessel spargers are operated in the waste vessels there is a concern that vapor and contamination will migrate into C2 piping. Automatic isolation valves and air powered eductors are being evaluated to eliminate the migration. Eductors mounted on the vessel would be used to control migration in piping that have a positive flow and isolation valves would be used for piping with minimal flow, i.e. gages and instrumentation.

BNI has taken possession of the following Unidynamics fabricated equipment. Unidynamics has declared bankruptcy so the equipment is in an as-is condition.

- C2 Containment Door Melter 1, fabrication was suspended on 15 Feb 06
- C2/C3 Shield Door Melter 1, fabrication was suspended on 15 Feb 06
- C5 Shield Door Melter 1
- C5 Shield Door Fascia Melter 1 - QL, fabrication was suspended on 15 Feb 06
- HLW Prototype Overpack Mockup Assembly, fabrication was suspended on 15 Feb 06
- C2 Containment Door Melter 2, fabrication was suspended on 15 Feb 06
- C2/C3 Shield Door Melter 2, fabrication was suspended on 15 Feb 06
- C5 Shield Door Melter 2, fabrication was suspended on 15 Feb 06
- C5 Shield Door Fascia Melter 2- QL, fabrication was suspended on 15 Feb 06

BNI is performing the necessary planning step to ship the six melter shield doors and facias removed from Unidynamics to Oregon Iron Works (OIW). Fabrication and testing of the doors had not been completed and analysis against the revised ground motion has not been performed. OIW has the in-house capability to determine the as-delivered condition of the doors, perform the seismic analysis, perform all modifications, and test the doors. OIW was previously selected by BNI when the Trentec lost its contract for fabrication of several shield doors. BNI must process the necessary procurement documentation before the contract can be awarded.

Engineering has closed the issue associated with the oversized off-gas blowers. Ellis-Watts had provided BNI with vendor prints that showed the proposed fans exceeding the space envelope assigned by Plant Design to assure that all piping could be installed. Engineering was initially concerned that the fans would have to be relocated to another space at the -21' level. Through several weeks of discussion with Ellis-Watts the size of the fan has been reduced so it now fits within the design space envelope. It will not be necessary to redesign the piping within the fan space.

ORP and BNI have agreed on the nomenclature description for 92 gatepost milestones. Future negotiations will deal with the establishment of milestone dates. Additional milestone will have to be added to comply with the need for roughly five milestones per quarter.

BNI continues to work on ISM issues postulated for accidents involving the melter cell overhead crane (e.g., hook drag events, etc.) and the jumpers supplying spargers in each of these vessels. The latest design work involves a protection shield covering the jumpers servicing the spargers for each of these vessels. The current mitigation strategy involves a combination of equipment design and administrative controls and operator training. Later this week BNI will contact ORP to set up an in-depth BNI: ORP interface meeting to review these associated ISM issues and the respective BNI strategy to address each issue.

Construction of the HLW Vitrification Facility has used several temporary construction-aid (steel) beams that face against the concrete ceiling of the -21 foot level (i.e., bottom of the 0 level slab). These temporary beams were marked to identify them for removal. Mistakenly, a permanent support was also marked for removal. This marking task was done several months ago, in preparation for 1) the beam removal task and 2) a ventilation ducting and piping construction task that was about to start. A crew cut through this (mistakenly) marked beam, in preparation for removing it. Because the subject beam was installed as a permanent support beam, the side of the beam adjacent to the concrete slab has steel studs that extend into the concrete as an (embedded) attachment. The crew terminated the beam removal effort, put the beam into a safe configuration, and the area below the beam was barricaded-off using Danger tape. BNI has held a fact gathering meeting, and planning for follow-up actions is underway. Weld repair using filler material is desirable because of the rough cut resulting from the torch.

### **Low Activity Waste (LAW) Vitrification Facility**

Test bolt-up of the stack bottom section is continuing. This will allow a cleaner installation of the entire stack when it is assembled. The stack bottom section of the stack will be removed today to allow continued construction of the entire stack.

Installation of the roof is progressing. Installation of the insulation material is nearing completion on the south side of the roof and will soon start on the north side. Roof decking installation is nearly complete over the penetration used for installation of the Wet Process Cell crane. Installation of the roof gutter system is progressing.

Of the 2500 piping spools to be installed at the -21' level only nine spools have not been issued for fabrication. Two spools need to be revised due to interferences and seven are closure spools. There are approximately 8100 piping spools in the LAW facility.

ORP and BNI have agreed on the nomenclature description for LAW gatepost milestones. Future negotiations will deal with the establishment of milestone dates. Additional milestone will have to be added to comply with the need for roughly five milestones per quarter.

Hirschfeld Steel Corporation has been provided the drawings for fabricating the structural steel for the container import bay. This is the last major structural steel for the facility. The container import bay is located on the west side of the facility.

The Container Export Crane has been stored at the Marshalling Yard. BNI has developed a list of the documentation requirements that must be met prior to shipping the crane to the Construction Site. BNI took possession of the crane from Unidynamics after they declared bankruptcy. All the Factory Acceptance test have been successfully performed but Unidynamics was not able to complete the preparation of the requisite documentation package prior to declaring bankruptcy. BNI must now prepare the documentation package and accept it prior to shipping the crane to the Construction Site for installation.

Installation of two of the three rows of siding is progressing on the north side of the facility. Twenty-five percent of the first, lower, level and about ten percent of the second, middle, level of siding has been installed. LAW Construction anticipated Cobra has started the installation of the second row of siding on the north side of the facility.

LAW Construction is proceeding on a number of fronts. Piping and hanger installation is proceeding on the -21' level. Scheduled conduit is being installed on the -21' and 3' levels. HVAC ducting installation is proceeding on the 3' and 28' levels. Steel erection is proceeding in the container finishing line. Clayton is installing fireproofing on the 3', 28' and 48' levels. Cable tray is being installed on the 3' and 28' levels. Rain gutters and roof sheeting are being installed on the 68' level.

## **Analytical Laboratory (LAB)**

The LAB facility overall is approximately 27% complete. Engineering is 78% complete and construction is 23% complete. Cumulative performance reflects negative 1% schedule variance and a slight positive cost variance.

Concrete (basemat & 17' elevation) and steel design of the main facility structural steel (except for the stack steel) was completed in May.

Construction forces are focused on completing concrete placements (basemat and hotcells as well as the C3 decontamination and waste management areas), so that erection of structural steel and installation of siding and roofing can commence.

## **Balance of Facilities (BOF)**

The BOF sub-project provides essential site services to all production and service facilities at the WTP. BOF includes multiple facilities of varying sizes that will provide such items as electrical power, roads, security, water, steam, glass former storage, chemical treatment, and air systems.

As of May 2006 engineering is 82.4% complete, procurement is 45.8% complete and construction is 53.1% complete. Construction forces began electrical work in the Chiller Compressor Plant (CCP) and continued installation of flashing around louvers and spooled piping installation in the CCP. Construction forces began installing cathodic protection of the anhydrous ammonia lines. Construction continued excavation the radioactive liquid waste transfer lines north of the PT facility, which will enable waste to be sent to the Liquid Effluent Retention Facility (LERF) at Hanford during WTP operations. Subcontractor crews finished installing roofing panels on the Chiller Compressor Plant (CCP) and work is continuing on the roofing system (eve, ridge, flashing and gutters). Crews continue installing removable wall panels and louvers on the CCP as well as installing flashing and trim around the removable openings. In addition, construction forces continue installation of spooled piping within the CCP. Crews continue earthwork for future concrete placement of the Glass Former Facility foundation. Excavation and backfilling of utility trenches are ongoing at multiple locations within the WTP complex.

BNI construction deficiency reports issued August 29 and October 4, 2005, address vendor non-compliance with ASME B31.3 associated with pipe welds and ASME/ANSI B16.1 or B16.5 associated with Chiller Compressor Plant Heat-of-Compression Air Dryer pipe fittings. As agreed to by BNI and the vendor, Atlas Copco, independent visual inspections of the compressed air distribution piping for four of the five dryers for the Chiller Compressor Plant (CCP) were performed by Northwest Inspection Independent. During the process of evaluating repairs of the existing unacceptable welds it was determined that the repairs would be extensive and it would be better to fab new pipe. The repair specifications were sent to the vendor for pricing.

Construction crews completed excavation and compaction of the soil and placed the mudmat for the silo slab Glass Former Facility. Crews have installed the insulated

roofing panels and continue to install piping and removable wall panels at the Chiller Compressor Plant. Installation of Water Treatment Tank interconnecting pipe continues as well as installation of domestic water and non-radioactive liquid discharge tank piping and supports. All of the major skids and motor control centers were delivered from the vendor for the Water Treatment Facility.

Substantial construction completion of major subcontracts for Cooling Tower, Steam Plant, and Process/Potable Water Field Erected Tanks have been achieved. Construction is focusing on completing underground piping, Water Treatment Building and the Chiller Compressor Plant.

#### Balance of Facilities Construction Completion Status

Facility	Engineering % Complete	Construction % Complete	Scheduled Completion Date	Value \$k
1.05 Balance of Facilities Common Scope	82%	18%	JUL 2014	\$219,588
1.5A Site Work	89%	52%	JUL 2014	\$95,616
1.5B Administration Building (convert from temp)	5%	0%	JUL 2014	\$5,473
1.5C Cooling Tower Facility	99%	96%	OCT 2006	\$6,800
1.5D Fire Water Pump House Facility	97%	96%	OCT 2007	\$1,313
1.5E Fuel Oil Facility	98%	76%	NOV 2006	\$1,196
1.5F Diesel Generators Facility	53%	0%	NOV 2011	\$5,254
1.5G Glass Former Storage Facility	81%	0%	SEP 2010	\$8,321
1.5H Guard House Facility	100%	100%	COMPLETE	\$7
1.5J Chiller Compressor Plant	97%	46%	JUN 2008	\$22,174
1.5K Steam Plant Facility	99%	93%	SEP 2008	\$8,516
1.5L Wet Chemical Storage Facility	57%	0%	DEC 2013	\$4,498
1.5M Water Treatment Building	94%	53%	MAY 2007	\$7,028
1.5N Non-Dangerous, Non-Radioactive Effluent Facility	74%	81%	OCT 2007	\$1,507
1.5P Switchgear Building	92%	81%	APR 2011	\$5,993

1.5Q ITS Switchgear Building	75%	27%	FEB 2012	\$4,998
1.5S Erected Tanks - Process/Potable	100%	90%	FEB 2007	\$5,216
1.5T Failed Melter Storage	14%	0%	APR 2010	\$1,608
1.5V BOF Switchgear Building	90%	66%	APR 2011	\$5,593
1.5Y Simulator Facility	95%	93%	AUG 2010	\$14,940
1.5Z Anhydrous Ammonia	9%	0%	SEP 2008	\$1,579

**Significant Planned Actions** (next six months):

Facility	Milestone	Scheduled	Projected
BOF & LAB	LAB-Complete Installation of Basemat and In-slab Pipe	07/06	08/06
	LAB-Complete Civil & Structural Engineering	10/06	10/06
	LAB-Initiate Structural Steel Installation	08/06	10/06
	BOF-Complete Electrical Engineering Chiller compressor Plant	10/06	10/06
	BOF-Complete Electrical Engineering Water Treatment Facility	11/06	11/06
	BOF-Delivery of Glass Former Facility Bins/Silos/Steel	10/06	10/06

**Milestone M-62-00, Complete Pretreatment Processing and Vitrification of Hanford High-Level (HLW) and Low-Activity (LAW) Tank Wastes.**

- **M-62-08, Submittal of Hanford Tank Waste Supplement Treatment Technologies Report, Draft Hanford Tank Waste Treatment Baseline and Draft Negotiations Agreement in Principle.**

Due: 06/30/2006

Status: Unrecoverable – Insufficient information to compare technologies due to delays in constructing the Demonstration Bulk Vitrification System (DBVS) and lack of WTP cost and schedule information.

**1. Significant Accomplishments:**

- Obtained Critical Decision 0 and 1 approval from DOE Headquarters on July 7.
- Ecology approved the last two of seven RCRA design packages for the ICV System and the Off Gas Treatment System on July 24.
- Complete DBVS facility design on July 28.
- Continue Expert Panel review of the DBVS technical bases and design.

**2. Significant Planned Actions in the Next Six Months:**

- Submit Cost and Schedule baseline for DOE approval in September.
- Conduct External Independent Review (EIR) of completed design and cost/schedule baseline in October/November.
- Expert Panel review report due September.
- Begin 130 liter dryer tests in September.
- Obtain Critical Decisions 2 in November.
- Initiate full scale dryer test.
- Prepare for the integrated dryer and melter test
- Expert Panel review report – September.

**3. Issues:**

The DBVS facility design and/or cost and schedule baselines will require modification to incorporate resolution of issues identified by the Expert Panel Review.

## **LAW Engineering, Construction and Procurement**

### **Engineering**

LAW Engineering has issued the last power raceway drawing. Power raceways extend from the -21' to the 48' level and provide power to all the switchboards.

A shake test was performed on the site standard HEPA Filters. The design included the LAW and Lab C5/C3 filters, and the HLW and Pretreatment C3 filters. The C5 HEPA Filters for HLW and Pretreatment were not included in these tests.

### **Construction**

LAW is focused on completing all concrete placements in the main facility, and the export bay grade slab. The plan is to enclose the building with roofing and siding, set equipment at multiple elevations, and continue with bulk pipe and electrical installation.

LAW Engineering has determined that the damaged intumescent coating on the LAW Facility structural members will be repaired. Modifications have been put into place to divert water away from the columns to reduce the likelihood of future water damage.

Installation of the roofing panels started in May and siding installation started in June. Roofing panel installation started on the south east corner of the facility and is working clockwise. Installation of the penthouses and the Process Cell crane are the activities that could impact the schedule for roofing panel installation. Siding installation was started on the North side of the facility.

A CDR was prepared due to the misalignment of the melter #1 distribution box on the north end of the melter cell. The CDR was dispositioned in time to support the fabricator's on-site repair. ABB provided construction craft with the true centerline of the bus to allow its alignment with the installation centerline in the facility. Resolution of the misalignment issue allowed the melter bus to be installed.

BNI ordered several hundred valves using a nuclear purchase order even though some were for non-nuclear applications. This practice is typical of other procurements. It eliminated the inventory control problems associated with physically identical nuclear and non-nuclear components. Rebar procurement is a multi-facility example of this practice.

BNI was unable to obtain a vendor that could produce nuclear valves in the quantity demanded for the project. A decision was made to use a non-nuclear purchase order and then upgrade the valves using the Commercial Grade Dedication (CGD) process. Upon receipt of valves it was noted that the valve identification tags did not properly reflect the component configuration, therefore not meeting nuclear inspection requirements. No deficiencies were found in the valves.

Xomox, the valve vendor, retagged the valves. After retagging approximately 30 valves were released for installation. These valves will be installed in non-nuclear systems.

The last 68' Penthouse was delivered to the site and installed.

The container export crane has completed its specification testing at the vendor's site. The crane is to be installed the third fourth quarter of FY06.

Wet Process Cell bulge structure construction is complete. The fabricator is waiting on BNI to provide valves for installation.

Test bolt-up of the stack bottom section is completed. This will allow a cleaner installation of the entire stack when it is assembled. The stack bottom section of the stack will be removed today to allow continued construction of the entire stack.

Of the 2500 piping spools to be installed at the -21' level only nine spools have not been issued for fabrication. Two spools need to be revised due to interferences and seven are closure spools. There are approximately 8100 piping spools in the LAW facility.

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### Installation of Commodities this Quarter

Commodity	UOM	Engineering			Construction		
		Total Quantity Install Plan At Completion	Release Act to Date	Release This Quarter	Installed this Quarter	Install Act to Date	Install Act %
Concrete	1000 CY	28.07	27.3	0.79	0.21	22.78	81.15%
Structural Steel	1 TN	5997	5742	112.00	66.00	4585	76.45%
Pipe	1000 LF	99.97	83.92	2.65	2.65	20.68	20.69%
HVAC	1000 LB	931.2	883.73	0.00	16.91	340.73	36.59%
Cable Tray	1000 LF	16.87	14.88	-1.99	0.58	7.05	41.79%
Conduit	1000 LF	161.57	49.11	-0.27	1.40	14.38	8.90%
Cable & Wire	1000 LF	840.09	117.48	1.67	0.00	0	0.00%
Terminations	1000 EA	51.28	15.09	11.47	0.00	0	0.00%

## **HLW Engineering Status**

HLW Engineering is evaluating changes to the melter offgas jumper bypass to ensure that the High Efficient Mist Eliminator (HEME) is not exposed to high offgas temperatures. In the event that the Submerged Bed Scrubber (SBS) or the Wet Electrostatic Precipitator (WESP) needs to be bypassed direct discharge of the melter offgas to the HEME could result in damaging the HEME. To reduce the offgas temperature water is injected into the stream to cool it and eliminate the likelihood of damage. HLW Engineering is evaluating the most efficient means of cooling the melter offgas, minimizing mineral deposits, and minimizing the impacts to current piping designs.

HLW Engineering is evaluating operational and engineering changes that will be necessary to ensure that the temperature of the concrete in canister cooling area and the pour tunnel do not exceed 150°F during normal operations. Bounding temperatures and glass properties were not used in the performance of the Computational Fluid Dynamics (CFD) modeling of these spaces which could result in concrete temperatures exceeding operational limitations. Engineering changes include the installation of thermometers at the surface of the concrete, infrared temperature devices for the canisters, additional insulation on the concrete walls, and heat shields on the canister bogies. There are issues with all the alternatives. HLW Engineering is planning additional meetings to discuss the alternatives prior to deciding on the course of action.

Six shield windows in the HLW decontamination cells have been undersized resulting in personnel radiation exposure higher than the adjoining walls. Melter cell components are brought into the decontamination cell prior to off-site disposal. Initial design criteria showed that 24 inch concrete walls and 24 inch-equivalent windows were necessary for personnel protection. As the decontamination cell requirements matured 32 inches of concrete became the design requirement but the viewing window criteria inadvertently remained at 24 inch-equivalent. Recent engineering reviews discovered the oversight.

Rapid clogging of the HEPA filters due to sparger operations is not considered a concern for post accident planning. If the Melter Feed Vessel agitator power is lost operation of the vessel spargers is initiated. Using spargers introduces a large amount of aerosols that accumulate on the HEPA filters. With only intermittent operation of the spargers, one hour every 20 hours, the HEPA filters will not need to be replaced for 330 days. Sufficient actions could be taken in that timeframe to allow the HEPA Filter Housing Space cranes to be placed into operation and support replacement of the filters.

Fire and missile barriers are being installed between air conditioning condensers located on the Annex roof. A fire in one condenser or a flying object could result in losing the ITS condenser that cools the Programmable Protection System control panels.

Vessels in a R5 spaces could be a source of radiation exposure in a post Design Basis Event (DBE). Post DBE, power to the process vessel vent system (PVV) could be lost resulting in a loss of vacuum in vessel head space. When the pulse jet mixers (PJMs) or spargers are operated to mitigate hydrogen generation the vessel head space will be pressurized and could force vapor and particulates into piping outside of the R5 space. Personnel in the adjacent C2 space could be exposed to higher radiation levels due to contamination in the piping. HLW Engineering is installing eductors on the top of the vessels to evacuate the vessels during post-accident operations to prevent pressurization of the vessels and attached piping.

HLW Commodity Issuance

		Engineering		
Commodity <sup>(1)</sup>	UOM	Total Quantity Install Plan At Completion	Release Act to Date	Released this Quarter
Concrete	1000 CY	87.62	47.12	0
Structural Steel	1 TN	9,575.00	990	0
Pipe	1000 LF	160.23	67.39	0
HVAC <sup>(2)</sup>	1000 LB	1,141.77	354.14	0
Cable Tray <sup>(2)</sup>	1000 LF	35.81	27.51	3.32
Conduit	1000 LF	200.92	69.93	-3.144
Cable & Wire <sup>(2)</sup>	1000 LF	1,549.63	9.98	8.97

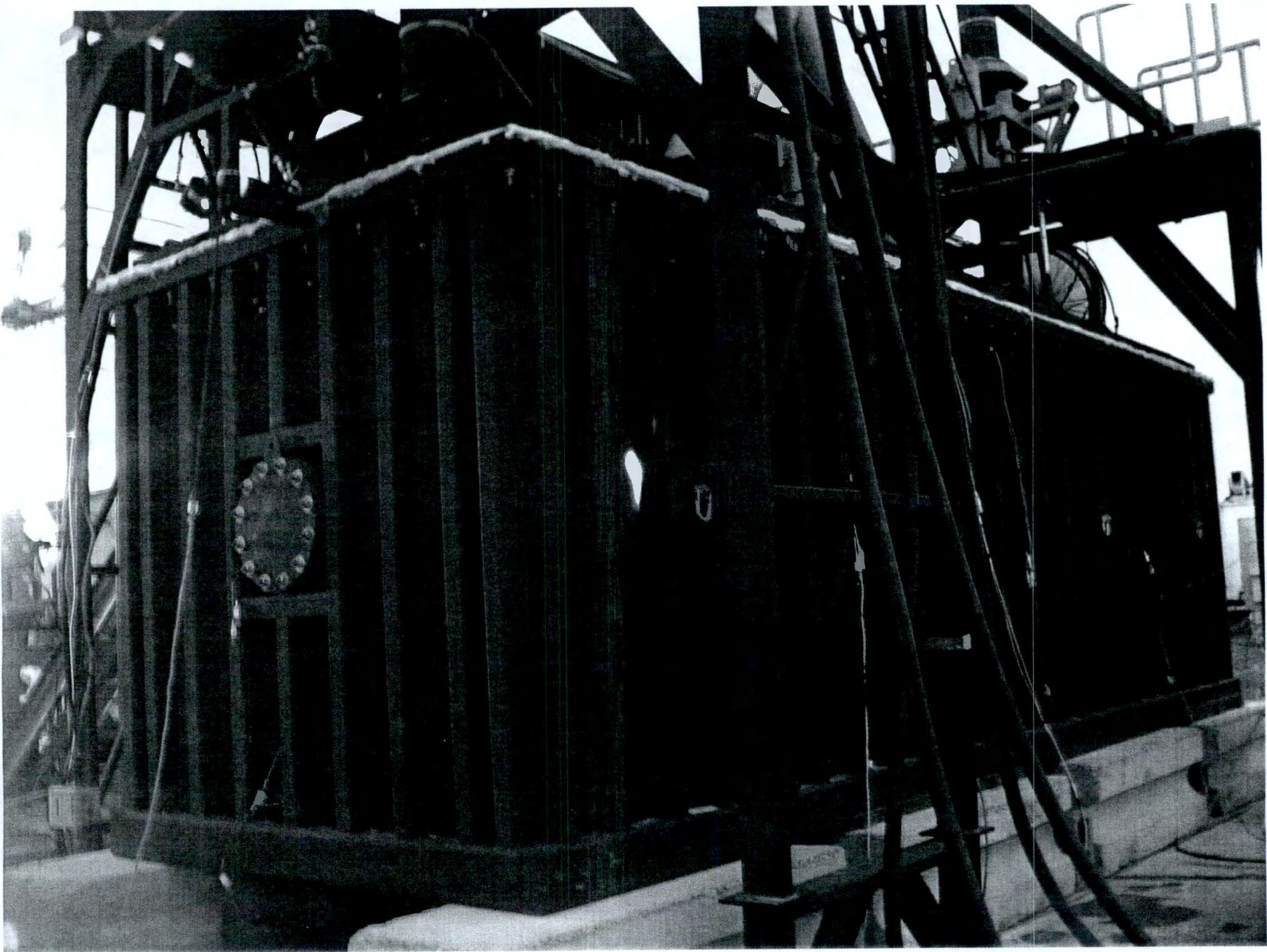
Notes:

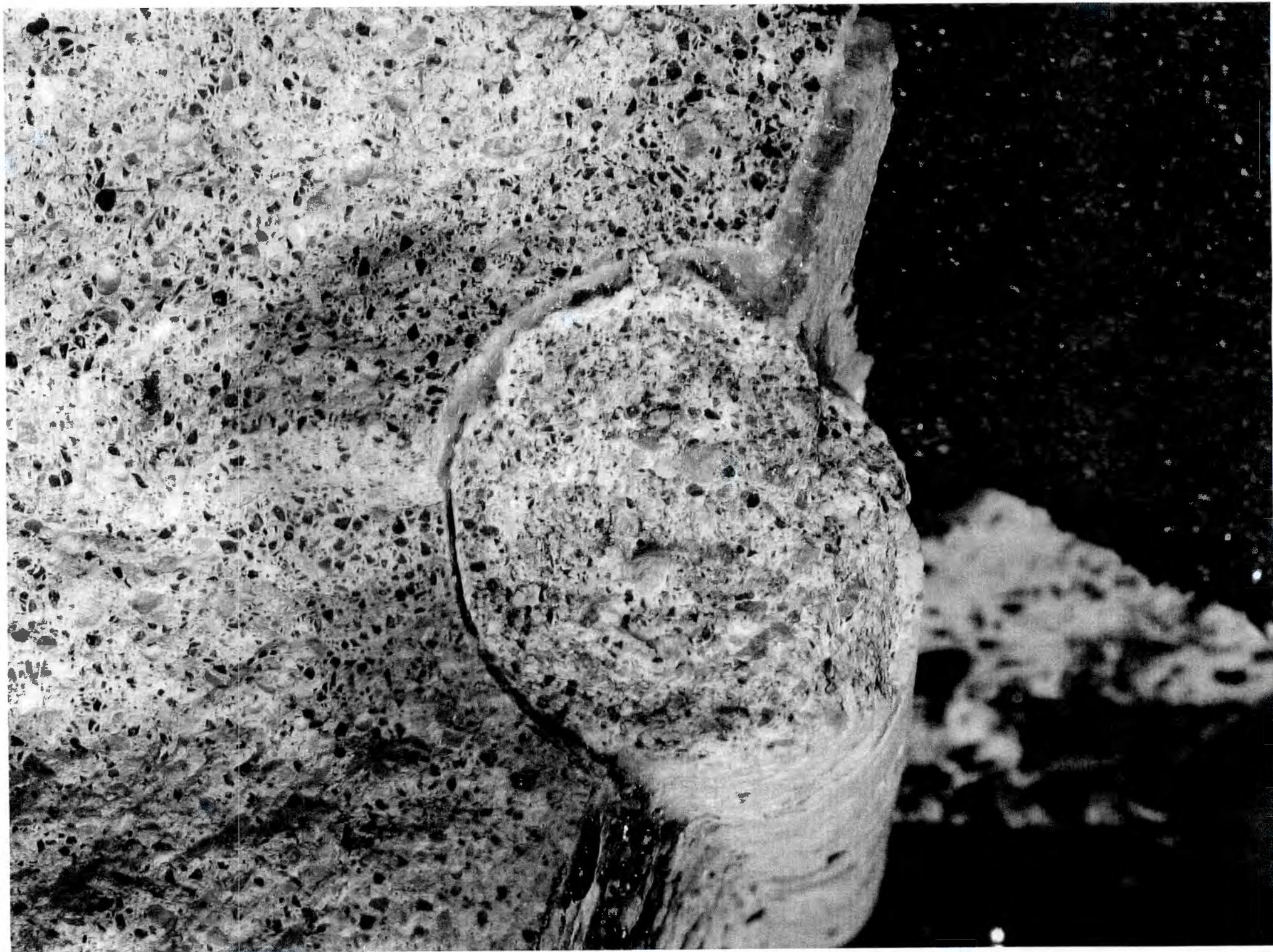
1. Data as of May 2006

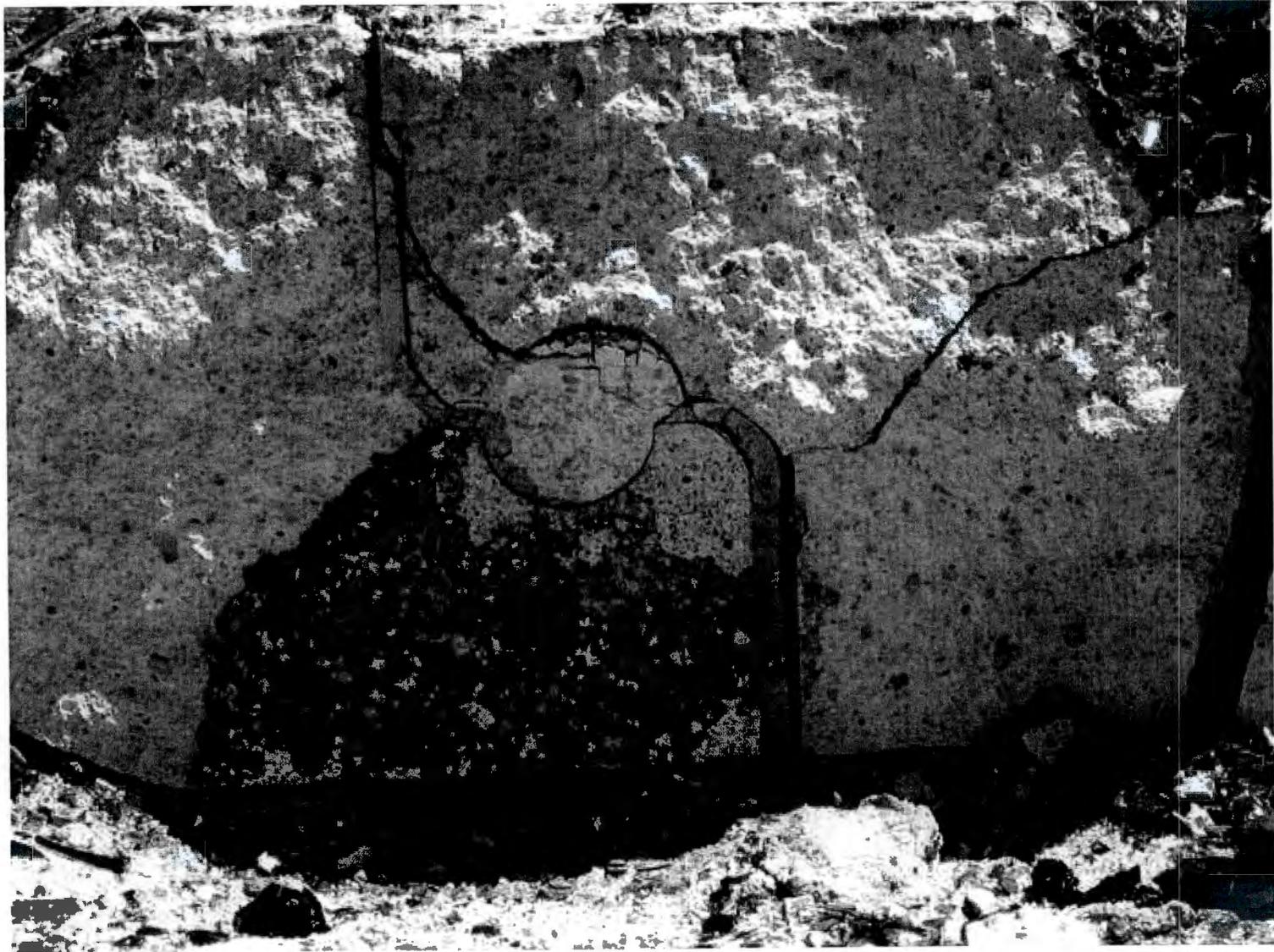
2. Release of HVAC, cable tray, cable and wire are ahead of schedule.











# Agenda

August 17, 2006

## Office of River Protection Tri-Party Agreement Quarterly Milestone Review Meeting

Ecology Conference Room 3A, 3100 Port of Benton Blvd., Richland

Chairperson: Jane Hedges

9:00 a.m. – 12:00 p.m.

Page	Topic	Leads	Time
3 10	<ul style="list-style-type: none"><li>TPA Milestone Statistics</li><li>FY 2006 ORP TPA Cost &amp; Schedule Performance (CHG)</li></ul>	Woody Russell / Suzanne Dahl / Jeff Lyon	9:00
38	M-45-00, Complete Closure of All Single-Shell Tank Farms	Roger Quintero / Jeff Lyon	9:10
46	M-45, -50, -60 Single-Shell Tank Corrective Action	Bob Lober / Joe Caggiano	9:40
48	M-47-00, Tank Waste Treatment, Storage and Disposal Facilities	Cathy Louie / Les Fort	10:00
50	M-48-00, DST Integrity Assessment Program	Cathy Louie / Vic Callahan / Les Fort	10:10
52	M-23-00, Tank Integrity and Monitoring	John Long / Jeff Lyon	10:20
53	Interim Stabilization Consent Decree	John Long / Nancy Uziemblo	10:30
54	In Tank Characterization and Summary	Wen-Shou Liou / Michael Barnes	10:40
	<b>BREAK</b>		
55	M-90-00, Complete Acquisition of Facilities for Interim Storage of IHLW and Storage/ Disposal of ILAW and M-20, Part B Permits	Phil LaMont / Bud Derrick	10:50
65	BNI Cost & Schedule Performance and M-62-00, Complete Pretreatment Processing and Vitrification of Tank Wastes/Supplemental Technologies	Bruce Nicoll / Pete Furlong / Bobby Williams / Jim Thompson / Suzanne Dahl	11:00

## Inter-Agency Management Integration Team Meeting

Ecology Conference Room 3A, 3100 Port of Benton Blvd., Richland

Chairperson: Jane Hedges

1:00 pm to 1:30 pm

Time	Topic
1:00 p.m.	M-091-42 Follow on Discussion
1:20 p.m.	Project Manager List
1:30 p.m.	Adjourn Inter-Agency Management Integration Team Meeting

**Sign In Sheet**  
**ORP - TPA Quarterly Milestone Review**  
**August 17, 2006 - 3100 Port of Benton**

NAME	ORG	MSIN	PHONE	MINUTES (Y/N)
Jeff Luke	CHA		6- <del>8229</del>	Y
Row Morrison	FH	H8-12	6-6574	Y
Jenya Moore	FH-TPA	H8-04	2-3320	Y
Shelley Simon	ODE		(541) 963-0853	X
Diana Clark	DOE-ORP	H6-60	376-7557	yes
Woody Russell	DOE-ORP	H6-60	373-5377	yes.
Cheryl Whalen	ECY		372-7972	yes
JANE HEDGES	ECY		372-7905	yes
Sharon Braswell	ORP	H6-60	376-8503	yes
Melinda J Brown	ECY		372-7886	yes
Roger Quintero	DOE-ORP	H6-60	373-0421	Y
Tom Pest	EPA	-	376-6623	Y
LOKI HUFFMAN	ORP	H6-60	376-0104	Y
JOHN KRISTOPHER	CHA/M		373-4225	Y
Gary Wemhoff	ORP		372-2733	N
LAURA CUSACK	ECY			Y
Frank Anderson	CIT/M		438-5185	N
JOE CAGGIANO	ECY	H6-57	372-7915	N
Andy Stevens	ORP		376-8235	N
Wen-Huan Lion	ORP		373-9879	N
Jim Thompson	ORP	H6-60	373-9757	N
Phil LeMont	ORP	H6-60	376-6117	N

