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Office of River Protection, State of Washington Department of Ecology
Change Notice

1. Document Title and Number: RPP-12711, Rev. 6-F "Remove Hold RPP-HOLD-51347 from RPP-12711"		
2. Minor Field Change: ☐ Yes: (WRPS Signature Only – Attach signed form) x No: Proceed to Box 3	**3.** Document Issue Date: TBD **4.** Document Modification Notice Date: 4/26/12	**5.** Notice Number: 2012-04
6. Do proposed changes require significant schedule changes? ☐ Yes x No	**7.** Do proposed changes include specific additions, deletions, or modification to scope and/or requirements which affect the overall intent of the plan? ☐ Yes x No	**8.** (Check only one box) ☐ Significant Modification (Check if the answer to question in either section 6 or 7 is "yes". Significant modifications require revision of the document.) Minor Modification x Requires modification of the document x Can be accomplished with Modification Notice.

9. Description and Justification of Change:
Change Description: RPP-12711, Rev. 6-F, "Remove Hold RPP-HOLD-51347 from RPP-12711" must be updated to reflect the removal of the HOLD document. Changes are limited to Tables A-1 & A-2.
Justification: These changes are required by the plan. See attached page changes.

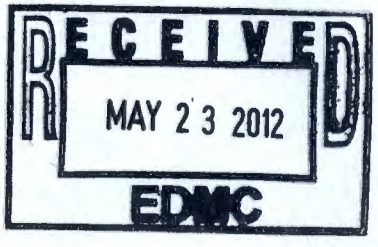
10. Impact of Change:
None.

11. Additional Requirements and/or Provisions[1]:

Approvals

Washington River Protection Solutions, LLC.	Office of River Protection	State of Wash., Dept. of Ecology
☐ Provisional Approval[2] Date	☐ Provisional Approval[2] Date	☐ Provisional Approval[2] Date
☐ Final Approval Date 5-21-12	☑ Final Approval Date 5/25/12	☐ Final Approval Date 5-21-12

Notes
1 - For use by Ecology to identify any additional information needed to make a decision regarding the request for modifications. In addition, Ecology will identify actions, if any, regarding the modification request that DOE may take pending Ecology's final decision
2 – Provisional approval allows DOE and it's contractors to take specific actions identified in section 11, prior to final approval of this modification.



Temporary Waste Transfer Line Management Program Plan

Author Name:
JR Parham
Washington River Protection Solutions, LLC
Richland, WA 99352
U.S. Department of Energy Contract DE-AC27-08RV14800

EDT/ECN: ECN-12-000361 UC: N/A
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Abstract: This plan defines a program to ensure temporary waste transfer routes are managed in a manner that ensures compliance with environmental regulations. Appendix A contains an evaluation of the methods and sensitivity of leak detection associated with temporary waste transfer lines. Appendix B describes waste handling and waste minimization for HIHTLs. Appendix C describes flushing, draining and removal of HIHTLs. Appendix D describes HIHTL service life extension considerations.

Tank Operations Contractor (TOC) **RECORD OF REVISION**	(1) Document Number: **RPP-12711**	Page 1

(2) Title:

Temporary Waste Transfer Line Management Program Plan

Change Control Record

(3) Revision	(4) Description of Change – Replace, Add, and Delete Pages	Authorized for Release	
		(5) Resp. Engr. (print/sign/date)	(6) Resp. Mgr. (print/sign/date)
0	Original Release EDT-635924	SL Swaney	TM Horner
1	Direct Rev - ECN-720231-R0	SL Swaney	TM Horner
2	Direct Rev - ECN-721019-R0 Incorporates ECNs 672973, 672974, 720920-R0, 720544-R1 and 720665-R0	SL Swaney	MJ Sutey
2A	Direct Rev – (Page Change) – ECN-721019-R1; Incorporates changes to the C-200 series tanks.	DG Baide	WT Thompson
3	Direct Rev – ECN-721019-R3; Incorporates ECN-721019-R2 and includes C-200 and U-200 HIHTL configuration modification.	DG Baide	WT Thompson
3A	Direct Rev – (Page Change) – ECN-721019-R4; Incorporates information not previously recorded from ECN-720655-R0.	PF Kison	WT Thompson
3B	Direct Rev - (Page Change) –ECN-722908-R0; Add C-103 Transfer Route Information.	JR Bellomy	WT Thompson
3C	Direct Rev - (Page Change) –ECN-722908-R1; Update C-03B Leak Rate based upon testing.	JR Bellomy	WT Thompson
3D	Direct Rev - (Page Change) –ECN-723678-R0; Update Rad Requirements	DB Parkman	WT Thompson
3E	Direct Rev - (Page Change) –ECN-723966-R0; Update pages A-21, A-23 and A-39 to show Vacuum Return HIHTL.	DB Parkman	WT Thompson
3F	Direct Rev - (Page Change) –ECN-723881-R0; Adds Page A-23C, A-23D and A-36C. NOTE: Pages A-23A, A-23B, A-36A and A-36B have already been added by ECN-722908-R1.	RS Robinson	WT Thompson
3G	Direct Rev - (Page Change) –ECN-724101-R2; Update information from removal of SY/PPP HIHTL.	MH Brown	CW Jorgensen
3H	Direct Rev – (Page Change) – ECN-723881-R1; Update pages A-23C and A-36C (Ref. ECN-723881-R0) to reflect new location of POR104 leak detector.	JR Bellomy	WT Thompson
3I	Direct Rev - (Page Change) –ECN-724610-R0; Adds pages A-23E & F and A-36D to reflect waste retrieval of C-109.	JR Bellomy	WT Thompson
3J	Direct Rev - (Page Change) –ECN-725247-R0; Revises page A-5 and adds Appendix D to allow HIHTL service life extension.	RS Robinson	WT Thompson
3K	Direct Rev - (Page Change) –ECN-725247-R1; Appendix D to incorporate Department of Ecology Comments.	RS Robinson	MR Koch
4	Direct Rev – ECN-725247-R2	RS Robinson	WT Thompson
5	Direct Rev – ECN-725668-R0	RS Robinson	WT Thompson
5A	Direct Rev – (Page Change) – ECN-726124-R0; Updates page A-19 and A-32A to reflect waste removal from the C-104 heel pit.	JR Bellomy	MJ Sutey
5B	Direct Rev – (Page Change) – ECN-726124-R1; Remove pages A-19A and A-32A (added per ECN-726124-R0)	JR Bellomy	MJ Sutey
5C	Direct Rev – (Page Change) 0 ECN-725221-R0; Add pages A-19A through A-19D and pages A-32A and A-32B.	JR Bellomy	MJ Sutey
6	Direct Rev – ECN-726742-R0; Incorporates ECN-725221-R0 and deletes hoses removed from the field.	MF Erhart	TR Farris
6A	Direct Rev – ECN-10-001076; Replace page A-15 and add pages 18B and 33A	MF Erhart 9/2/2010	WB Barton 9/2/2010
6B	Direct Rev – ECN-10-001119; Replace page A-13 and add pages A-18B, A-18C, A-33B, and A-33C	MF Erhart 8/8/2011	WB Barton 9/9/2011
6C	Direct Rev – ECN-10-001227; Add Page A-16A, A-16B, A-18D, A-33D, A-33E and A-33F	JR Bellomy	RE Bauer

Tank Farm Contractor (TFC) **RECORD OF REVISION**	(1) Document Number: RPP-12711	Page 2

Change Control Record

(3) Revision	(4) Description of Change – Replace, Add, and Delete Pages	Authorized for Release	
		(5) Resp. Engr. (print/sign/date)	(6) Resp. Mgr. (print/sign/date)
6D	Direct Rev – ECN-11-002040; Replace page A-10 to A-13, A-27, A-34, and A-39; add pages A-11A and A-13A.	JR Bellomy	RE Bauer
6E	Direct Rev – ECN-11-001852; Replace pages A-10 to A-12, A-13A, and A-27 to A-28. Change required for C-109 hard heel retrieval	TM Green	WB Barton
6F RS	Direct Rev – ECN-12-000361; Replace pages A-10 to A-12, A-13A, and A-27 to A-28. Change to remove RPP-HOLD-51347	TM Green TMGreen 5/2/12	WB Barton 5-4-12 W.B.Barton

Table A-1. In-Pit Leak Detection Methods and Limitations.

Pit			Leak Detection			
Pit Location	Pit Type	Transfer Line Type, EIN, and Connecting Pit	Device	Method	Modification	Limitation
S-102	Distributor pit for SST	HIHTL I-30512-0-1 (to S-A)	Coffer dam (H-2-46155) and leak detector (H-2-34965)	Waste pools and leak detector alarms after 1 in. accumulation in pit	Coffer dam is self draining with a 5/8-in. hole.	Waste must first fill the encasement hose before filling pit. Coffer dams contain a 5/8-in. hole, drilled slightly below grade, to allow the pit to drain without operator intervention. Leak of a liquid with a viscosity equal to water requires a flow rate equal to or greater than 1.3 gpm to pool.
AN-106	DST pump pit AN-106A	HIHTL Assembly I-19643-3 I-19643-1 (to POR 104 portable valve pit C Farm retrieval) HIHTL Assembly I-68511-0-01 I-68511-0-02 (to POR 104 portable valve pit C Farm Retrieval)	In-line leak detector (H-2-34965) pump pit dwg. Previously installed on H-2-72010 Sh 1 Connected to POR104 per ECN-721373	Waste pools and leak detector alarms after 1-in. accumulation in pit floor.	None	Waste must fill the encasement before waste can be detected by the pump pit leak detector and alarm when 1 in. of liquid is accumulated.
POR117 (located between C-108 and POR209)	TVFM (Throttle Valve Flow Meter) Box	HIHTL I-34610-0-01 (to POR209 diversion box) HIHTL I-57780-0-02 I-26119-0-02 (to C-109 saltwell pump pit)	In-line leak detector (H-2-34965-010) TVFM Box install per ECN-10-000946	Waste pools and leak detector alarms after 1-in. accumulation in pit floor.	None	Waste must fill the encasement before waste can be detected by the pump pit leak detector and alarm when 1 in. of liquid is accumulated. If POR117 and POR209 are set at the same elevation, waste must accumulate in both structures to the alarm level.

Table A-1. In-Pit Leak Detection Methods and Limitations.

Pit			Leak Detection			
Pit Location	Pit Type	Transfer Line Type, EIN, and Connecting Pit	Device	Method	Modification	Limitation
C-108	Sluice box #1 Riser 7	HIHTL I-12023-0-01 (Disconnected)	In-line leak detector (H-2-34965-010) sluice box #1 install per ECN-722615-R1	Waste pools and leak detector alarms after 1–in. accumulation in sluice box floor	Drain plugs are installed to aid in liquid accumulation. To remove liquid, the drain plugs are temporarily removed.	Waste must fill the encasement hose before filling the sluicer box. A test was performed to show the leak detector will alarm at 0.72 gpm in 9.75 minutes. Ref. CLO-WO-04-000160.
C-108	Saltwell pump pit	HIHTL I-12023-0-02 (Disconnected)	In-line leak detector (H-2-34965-010) saltwell pump pit install per ECN-722623-R1	Waste pools and leak detector alarms after 1-in. accumulation in pit floor.	Coffer dam installed w/drain cover to aid in liquid accumulation. Sump pump used to remove accumulated waste.	Waste must fill the encasement hose before filling the saltwell pump pit. A test was performed to show the leak detector will alarm at 1.12 gpm in 8.5 minutes. Ref. CLO-WO-05-000987.
C-108	Sluice box #2 Riser 2	HIHTL I-12023-0-03 I-95247-0-02 (Disconnected)	In-line leak detector (H-2-34965-010) sluice box #2 install per ECN-722614-R1	Waste pools and leak detector alarms after 1-in. accumulation in sluice box floor.	Drain plugs are installed to aid in liquid accumulation. To remove liquid, the drain plugs are temporarily removed.	Waste must fill the encasement hose before filling the sluicer box. A test was performed to show the leak detector will alarm at 0.97 gpm in 16.75 minutes. Ref. CLO-WO-04-000160.

Table A-1. In-Pit Leak Detection Methods and Limitations.

Pit			Leak Detection			
Pit Location	Pit Type	Transfer Line Type, EIN, and Connecting Pit	Device	Method	Modification	Limitation
C-109	Sluice box #1	HIHTL I-57780-0-01 I-26119-0-01 (from POR209 Diversion Box)	In-line leak detector (H-2-34965-010 Sluice box #1. Install per ECN-722773-R0	Waste pools and leak detector alarms after 1-in. accumulation in sluice box floor	Drain plugs are installed to aid in liquid accumulation. To remove liquid, the drain plugs are temporarily removed.	Waste must fill the encasement hose before filling the sluicer box. A test was performed to show the leak detector will alarm at 2 gpm in 2.75 minutes. Ref. CLO-WO-06-001987.
C-109	Saltwell pump pit	HIHTL I-57780-0-02 I-26119-0-02 (to POR117 TVFM Box)	In-line leak detector (H-2-34965-010) saltwell pump pit. Install per ECN-722774-R0	Waste pools and leak detector alarms after 1-in. accumulation in pit floor	Drain is covered to aid in liquid accumulation. Sump pump used to remove accumulated waste.	Waste must fill the encasement hose before filling the saltwell pump pit. A test was performed to show the leak detector will alarm at 1 gpm in 11.37 minutes. Ref. CLO-WO-06-001985.
C-109	Sluice box #2	HIHTL I-57780-0-03 I-26119-0-03 (from POR209 Diversion Box)	In-line leak detector (H-2-34965-010) Sluice box #2. Install per ECN-722020-R0.	Waste pools and leak detector alarms after 7/16-in. (ECN-724741-R0) accumulation in sluice box floor.	Drain plugs are installed to aid in liquid accumulation. To remove liquid, the drain plugs are temporarily removed.	Waste must fill the encasement hose before filling the sluicer box. A test was performed to show the leak detector will alarm at 1 gpm in 1.08 minutes. Ref. CLO-WO-06-001987.

Table A-1. In-Pit Leak Detection Methods and Limitations.

Pit			Leak Detection			
Pit Location	Pit Type	Transfer Line Type, EIN, and Connecting Pit	Device	Method	Modification	Limitation
See previous page	See previous page	Hose-in-Hose Transfer Line I-34610-0-01 (to POR117 TVFM Box)	See previous page	See previous page	See previous page	See previous page
		Hose-in-Hose Transfer Line I-57780-0-03 I-26119-0-03 (to C-109 Sluice Box at Riser 2)				
		Hose-in-Hose Transfer Line I-57780-0-01 I-26119-0-01 (to C-109 Sluice Box at Riser 7)				

Table A-2. Transfer Line and Pit Hold-up/Estimated Time for Leak Detection.

A	B	C	D	E	F	G	H	I	J	K	L	M
Hose					Pit				Total Volume and Time @ 2 gpm			Min. Detectable Leak Rate in Pit [4] (gpm)
Transfer Line Type and EIN[1]	Transfer Line Length (ft)	Hold-up Volume of 4-in. annulus (gal)[2]	Time to fill hose @ 2 gpm Leak (min)	HIHTL Assembly Drawing	Pit	Hold-up Volume of 1 in. (gal)	Time to Fill Pit to1 in. (min)[3]	Pit Drawing	Total Hold-up Volume (Col C+G) (gal)	Total Time (Col D+H) (min)	Total Time (hr)	
HIHTL I-12023-0-01 Hose #10	71	24.4	12.2	H-14-107258	Disconnected	108.6	54.3	H-14-107391	133.0	66.5	1.11	0.09
					C-108 sluice box #1 (Riser 7)	6.9	3.5	H-14-106603	31.3	15.7	0.26	0.02
HIHTL I-12023-0-02 Hose #11	70	23.8	11.9	H-14-107258	Disconnected	21.1	10.6	H-14-107904	44.9	22.5	0.38	0.03
					C-108 saltwell pump pit (Riser 13)	17.6	8.8	H-2-38597	41.4	20.7	0.35	0.03
HIHTL I-12023-0-03 I-95247-0-02 Hose #12 & 13	76	26.2	13.1	H-14-107258	Disconnected	108.6	54.3	H-14-107391	134.8	67.4	1.12	0.09
					C-108 sluice box #2 (Riser 2)	6.9	3.5	H-14-106603	33.1	16.6	0.28	0.02
HIHTL I-34610-0-01 Hose #17	10	3.4	1.7	H-14-107258	POR209 Diversion Box	108.6	108.6[7]	H-14-107391	112.0	110.3	1.84	0.08
					POR117 TVFM Box	21.1	21.1[7]	H-14-107904	24.5	22.8	0.38	0.02

Table A-2. Transfer Line and Pit Hold-up/Estimated Time for Leak Detection.

A	B	C	D	E	F	G	H	I	J	K	L	M
Hose					Pit				Total Volume and Time @ 2 gpm			Min. Detectable Leak Rate in Pit [4] (gpm)
Transfer Line Type and EIN[1]	Transfer Line Length (ft)	Hold-up Volume of 4-in. annulus (gal)[2]	Time to fill hose @ 2 gpm Leak (min)	HIHTL Assembly Drawing	Pit	Hold-up Volume of 1 in. (gal)	Time to Fill Pit to1 in. (min)[3]	Pit Drawing	Total Hold-up Volume (Col C+G) (gal)	Total Time (Col D+H) (min)	Total Time (hr)	
HIHTL I-57780-0-01 I-26119-0-01 (jointed assembly)	280	96.4	48.2	H-14-107258	POR209 Diversion Box	108.6	54:3	H-14-107391	205	102.5	1.71	0.14
					C-109 sluice box #1 (Riser 7)	6.9	3.5	H-14-106603	103.3	51.7	0.86	0.07
HIHTL I-57780-0-02 I-26119-0-02 (jointed assembly)	235	80.9	40.4	H-14-107258	POR117 TVFM Box	21.1	10.6	H-14-107904	102.0	51.0	0.85	0.07
					C-109 saltwell pump pit (Riser 13)	17.6	8.8	H-2-38597	98.5	49.2	0.82	0.07
HIHTL I-57780-0-03 I-26119-0-03 (jointed assembly)	186	64.0	32.0	H-14-107258	POR209 Diversion Box	108.6	54.3	H-14-107391	172.6	86.3	1.44	0.12
					C-109 sluice box #2 (Riser 2)	6.9	3.5	H-14-106603	70.9	35.5	0.59	0.05