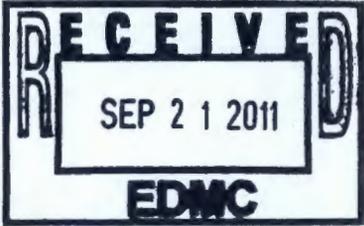


**Office of River Protection, State of Washington Department of Ecology  
Change Notice**

1. Document Title and Number: RPP-6711, Rev. 3-C "Evaluation of Hose-in-Hose Transfer Line Service Life"		
2. Minor Field Change:  <input type="checkbox"/> Yes: (WRPS Signature Only – Attach signed form to Primary Document for record purposes)  <input checked="" type="checkbox"/> No: Proceed to Box 3	3. Document Issue Date:  3/28/2011	5. Notice Number: 2011-5  
	4. Document Modification Notice Date: 9/12/11	
6. Do proposed changes require schedule changes? (Would this extend completion of retrieval beyond 12 months from date of initiation?)  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	7. Do proposed changes include specific additions, deletions, or modification to scope and/or requirements which affect the overall intent of the plan?  <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	8. (Check only one box) <input type="checkbox"/> Significant Modification (Check if the answer to question in either section 6 or 7 is "yes". Significant modifications require revision of the primary document.) Minor Modification <input checked="" type="checkbox"/> Requires modification of the document <input checked="" type="checkbox"/> Can be accomplished with Modification Notice.
9. Description and Justification of Change: <b>Change Description:</b> RPP-6711, Rev. 3-C "Evaluation of Hose-in-Hose Transfer Line Service Life", must be updated to reflect the comment resolutions described in the attached RCR. <b>Justification:</b> These comments reflect the Ecology review of the new methodology for evaluating the HIHTL's life extensions.		
10. Impact of Change: None.		
11. Additional Requirements and/or Provisions <sup>1</sup> : Ecology agrees the changes specified in this RCR may occur concurrently with retrieval of C-107. Ecology also agrees that future HIHTL's life extensions will use the process defined in RPP-12711, current revision.		
<b><u>Approvals</u></b>		
Washington River Protection Solutions, LLC.	Office of River Protection	State of Wash., Dept. of Ecology
<input type="checkbox"/> Provisional Approval <sup>2</sup> Date	<input type="checkbox"/> Provisional Approval <sup>2</sup> Date	<input type="checkbox"/> Provisional Approval <sup>2</sup> Date
<input checked="" type="checkbox"/> Final Approval <i>DG BAIDE</i> Date <i>9-14-11</i> <i>DG Baide</i>	<input checked="" type="checkbox"/> Final Approval Date <i>9/13/11</i>	<input type="checkbox"/> Final Approval Date <i>9-13-11</i> <i>[Signature]</i>

**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.

REVIEW COMMENT RECORD (RCR)		1. Date 9/12/11		2. Review No.	
		3. Project No. NA		4. Page 1 of 5	
5. Document Number(s)/Title(s) RPP-6711, Rev. 3-C "Evaluation of Hose-in-Hose Transfer Line Service Life"		Project Manager Name Chris Kemp		Reviewer Name Jeff Lyon Michelle Hendrickson	
<u>W.B. Barton</u> Organization Manager (Optional)		10. Agreement with indicated comment disposition(s)  _____ Reviewer/Point of Contract  _____ Date  _____ Author/Originator		_____ Reviewer/Point of Contact  <u>9-14-2011</u> Date  <u>W.B. Barton</u> Author/Originator	
12. Item	13. Comment(s)/Discrepancy(s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	14. Reviewer Concurrence Required	15. Disposition (Provide justification if NOT accepted.)	16. Status	
1.	Attach with an email or transmittal sheet all of the 2004 to 2009 soil temperature and ambient air temperature data used in the calculation as it cannot be referenced in another document.		Partially accepted, A reference to PNNL-15160 will be included in document. This data can be retrieved by contacting MSA meteorology and the results of the raw data can be found in the Hanford Site Climatological Summary with Historic data PNNL-15160.		
2.	Why was a linear correlation used for the soil to EPDM heat transfer coefficient calculation used rather than using EPDM's actual value? Either clearly state the basis and demonstrate "how the linear extrapolation approach is conservative" or revise the calc.		Accepted, the document will be revised to include a statement that the heat transfer coefficient for		

REVIEW COMMENT RECORD (RCR)		1. Date 9-12-11		2. Review No.	
		3. Project No. N/A		4. Page 2 of 5	
12. Item	13. Comment(s)/Discrepancy(s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	14. Reviewer Concurrence Required	15. Disposition (Provide justification if NOT accepted.)		16. Status
			EDPM was not used because the calculation conservatively assumes that 100% of the soil temperature transfers to the inner pipe. The calculation did not take credit for the insulation, outer EDPM pipe wall, or the air space.		
3.	Pg. W-22 The ARES calc state the "Where waste transfer history is known..." In order to even complete the waiver process asking for a HIHTL service life request, the HIHTL waste the basis and demonstrate "how the linear extrapolation approach is conservative" or revise the calc. transfer history must always be known and used in service life calculations. Otherwise the line should be immediately removed from service if no data has been maintained or pedigree and records can be found. Revise this statement.		Accepted, document will be revised to delete the word "where".		
4.	Ecology cannot find record of RPP-8080, RPP-14859, or RPP-42496, thus, references to these documents should be deleted, or this information provided to Ecology for review and concurrence.		Partially Accepted, These documents are all available electronically on the Hanford HLAN system.		
5.	Ecology appreciates the inclusion of a summary of the flushing data records, but cannot find any flushing records from 2009 to 2011?		Accepted, add statement that the hoses have not been used during the referenced time frame or attach flushing records to document.		
6.	Ecology appreciates the summaries, but no records of operational parameters are attached or provided within Appendix X. Where these provided to the IQRPE for his review? Include these records as an attachment as is required per Appendix D or RPP-12711, item B.		Partially Accepted, This information is referenced in the document and is available from Process		

REVIEW COMMENT RECORD (RCR)		1. Date 9-12-11		2. Review No.	
		3. Project No. N/A		4. Page 3 of 5	
12. Item	13. Comment(s)/Discrepancy(s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	14. Reviewer Concurrence Required	15. Disposition (Provide justification if NOT accepted.)		16. Status
			Engineering. The data is too voluminous to include in the document.		
7.	Pg. X-5 The second bullet states that RPP-12711 provides "guidance for condition to be considered in hose assembly life extensions". This statement is incorrect. Modify the statement to reflect that PRR-12711 "includes required conditions to be evaluated in hose assembly life extensions".		Accepted, Add a statement on page X-5 which states that this is being performed as a requirement of RPP-12711.		
8.	Pg. X-6 and Pg. X-20 contain conflicting statements regarding the tanks in questions C-103 vs. C-110, whether deadhead pressures were reached, for how long, if the pressure relief valve worked, what indication (disc malfunctioned but no alarms were heard), etc. Clarify the history of the HIHTLs and associated jumpers with regards to pressure.		Partially Accepted Discussion with Ecology indicated that a table incorporating the operating parameters (max temp, pressure, % solids) from Appendix D would be helpful. Agree to consider adding table to future life extensions beyond Appendix Y.		
9.	Pg X-8 Will C-107, C-108, and C-112 retrieval operations all be completed by August 2012, or will ORP/TOC guarantee that the HIHTLs and associated jumpers be removed and replaced at this time?		Accepted but modified. The HIHTL's will not be used beyond the dates analyzed in the life extension. WRPS will work with Ecology to develop a basis for extending the HIHTL's beyond 10 years, if needed.		

## REVIEW COMMENT RECORD (RCR)

1. Date 9-12-11

2. Review No.

3. Project No. N/A

4. Page 4 of 5

12. Item	13. Comment(s)/Discrepancy(s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	14. Reviewer Concurrence Required	15. Disposition (Provide justification if NOT accepted.)	16. Status
10.	Pg. X-12 How do the values in Table X-4 differ from the original values presented in Appendix U? What was the calculational differences based on and why?		Reject per discussion with Ecology, this information is described in two places in the document. See last paragraph on page X-9 and on page X-12.	
11.	Pg. X-14 For all 241-C Farm retrieval operations conducted to date, where all solid volumes at or below 10% in the HIHTLs and associated jumpers and velocities at or below 116 gpm or 11 fps? If so, state this in the text. If not, provide the maximum values and corresponding data sheets.		Partially accepted but modified. Discussion with Ecology indicated that for future life extensions, a table incorporating the operating parameters (max temp, pressure, % solids) form Appendix D would be added. Agree to consider adding table to future life extensions beyond Appendix Y.	
12.	Pg. X-14 Correct NPH to natural paraffin hydrocarbon (aka dodecane) rather than "natural phenomenon hazard".		Accepted but Modified. NPH will be changed to Normal Paraffin Hydrocarbon.	
13.	Pg. X-28 Rewrite the temperature calculation text to reflect that the average will be used during the months of September to June, however, the average maximum temperatures of those individual months will be represented in the updated temperature calculation.		Accepted but modified. The text will be revised to state that for evaluations of historical uses actual data will be used.	

REVIEW COMMENT RECORD (RCR)		1. Date 9-12-11	2. Review No.	
		3. Project No. N/A	4. Page 5 of 5	
12. Item	13. Comment(s)/Discrepancy(s) (Provide technical justification for the comment and detailed recommendation of the action required to correct/resolve the discrepancy/problem indicated.)	14. Reviewer Concurrence Required	15. Disposition (Provide justification if NOT accepted.)	16. Status
14.	Appendix X and the IQRPE certification each specify "bound the future use of these HIHTLs with the highest average parameters from C-108, C-110, and C-109" for dose, chemical compatibility, operational parameters, percent of liquids, solids, waste forms, etc. However, no comparison is provided to the anticipated values to be expected from retrieval operations for C-107, C-112 and additional efforts of C-108. Provide a basis for these bounding parameter values from sampling or data in TWINS that indicate these conditions are indeed "bounding" of upcoming retrieval efforts or update these assumptions with actual anticipated values.		Accepted, A basis for the anticipated values expected from retrieval operations for C-107, C-112 and additional efforts of C-108 will be incorporated into the revised document. The most conservative values will be used which are the C-107 waste. Future Operation estimates will use the C-107 data.	
15.	All HIHTLs and associated jumpers passed leak testing on what dates? (After Appendix X and the IQRPE's review were written.)		Accepted, This information is provided in the IQRPE ICAR report.	