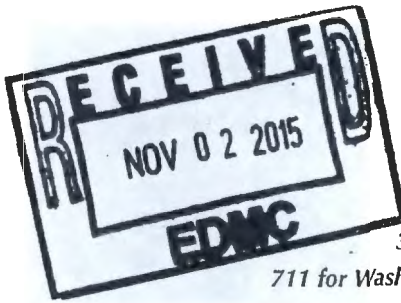




STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

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October 28, 2015

15-NWP-190

Mr. Thomas W. Fletcher, Assistant Manager, Tank Farms
Office of River Protection
United States Department of Energy
PO Box 450, MSIN: H6-60
Richland, Washington 99352

Re: Department of Ecology's (Ecology) Suggestions on Possible Hose-In-Hose-Transfer-Line Service Life Extension

Dear Mr. Smith:

The current version of the *Temporary Waste Transfer Line Management Program Plan*, RPP-12711, Revision 7 has specific limits on the shelf and service life of the Hose-In-Hose-Transfer-Lines (HIHTLs). These limits were established by the manufacturer and vendor of the HIHTLs.

The HIHTLs used for transferring Hanford tank waste exposes the ethylene propylene diene monomer of the HIHTLs to unique combinations of pressure, temperature, chemicals, and radiation. There is no reported failure of the current design at Hanford.

The current design could be suitable for a longer shelf and service life than is currently supported. Due to the time, cost, and worker exposure related to replacing HIHTLs, the cost of establishing a longer shelf and service life would be a good investment.

Ecology encourages the United States Department of Energy – Office of River Protection to pursue a program to establish more material property data on the HIHTLs to provide to the vendor and manufacturer to potentially extend their shelf and service life. Testing would need to include the following:

1. Test samples of HIHTLs that have been in storage for an extended period of time or have seen actual use.
2. Testing of HIHTL material that is exposed to temperature, chemical, and radiation in a laboratory that bounds field exposures.

All new HIHTL installations must be certified by an Independent Qualified Registered Professional Engineer (IQRPE) according to 40 Code of Federal Regulations 265.192, "Design and Installation of New Tank Systems or Components," prior to use, or if relocated, prior to reuse.

Mr. Thomas W. Fletcher
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Data collected to support a longer shelf and service life must be sufficient for the IQRPE to certify such use.

If you have any questions, please contact Jeff Lyon, Tank Storage Operations and Closure Project Manager, at jeff.lyon@ecy.wa.gov or (509) 372-7914.

Sincerely,

Cheryl Whalen
Cleanup Section Manager
Nuclear Waste Program

ja/aa

cc electronic:

Dennis Faulk, EPA
Jeff Rambo, USDOE
Christopher Kemp, USDOE
Doug Greenwell, WRPS
Jessica Joyner, WRPS
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Jeff Lyon, Ecology
Jared Mathey, Ecology
John Price, Ecology
Beth Rochette, Ecology
Maria Skorska, Ecology
Cheryl Whalen, Ecology
Environmental Portal
Hanford Facility Operating Record
USDOE-ORP Correspondence
Control
WRPS Correspondence Control

cc: Rod Skeen, CTUIR
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Alyssa Buck, Wanapum
Russell Jim, YN
Steve Hudson, HAB
Administrative Record: 241-C-102
NWP Central File
NWP Reader File