HIHTL Deployments

HIHTL INSTALLATION HISTORY:

Project	Fluid	Hose Diameters	Average Flow Rate	Number of Transfer Routes	Distances
SY-101 Emergency Pumping and Cross Site – Hanford, WA (1999 – 2000)	Liquid High-Level Mixed Waste with entrained solids	2" (50mm) primary hose, 4" (100mm) encasement hose	90 gpm (20 m^3/hr), 3.6 Mgal (13700 m^3) total	3	165' (50m)
Interim Stabilization – Hanford, WA (2000 – 2004)	Interstitial Liquid	2" (50mm) primary hose, 4" (100mm) encasement hose	9 gpm (2 m^3/hr), with flush flows to 90 gpm (20 m^3/hr) 2.6 Mgal (8500 m^3) total	17	106' to 790' (30m to 240m)
Single-Shell Tank Retrieval – Hanford, WA (2002 – Present)	Liquid High-Level Mixed Waste with entrained solids	2" (50mm), 3" (75mm), and 4" (100mm) primary hose, 4" (100mm) and 8" (200mm) encasement hoses	9 gpm (2 m^3/hr) to 97 gpm (22 m^3/hr) 4.6 Mgal (17,400 m^3) to date	55	30' to 1800' (10m to 540m)
K-Basin Sludge Transfer (Oct 2006)	Slurry with solids content to 30% by volume	1 ¼" (32mm) primary hose, 4" (00mm) encasement hose	70 gpm (16 m^3/hr) of slurry 9000 gal (35 m^3)total sludge volume	1	2460' (740m)
F Farm Retrieval - Savannah River, NC (Sept to Dec 2008)	3-phase slurry with solids content to 50% by volume	1 ½" (40mm) primary hose, 4" (100mm) encasement hose	10-30 gpm (2 to 7 m^3/hr) 10,000 gal (38 m^3) total sludge volume	2	1100' (330m)
K-Basin Sludge Treatment Project (May 2009 to present)	Slurry with solids content to 25% by volume	1 ½" (40mm) primary hose, 4" (100mm) encasement hose	70 gpm (16 m^3/hr) of slurry 35 cubic yards (27 m^3) total sludge volume	3	150' (45m)
Fukushima Dai-ichi Recovery Project – Unit 1, Japan (June to Aug 2011)	Contaminated sea water, sludge, and oil mixture	4" (100mm) primary hose, 6" (150mm) encasement hose	150 gpm (35 m^3/hr)	2	1530' (460m)
Fukushima Dai-ichi Recovery Project – Unit 4, Japan (June to Aug 2011)	Unit 4 reactor sludge	2" (50mm) primary hose, 4" (100mm) encasement hose	40 gpm (10 m^3/hr)	1	950' (285m)
Silo 130 waste transfer - AREVA La Hague, France (Nov 2011 – May 2012)	UNGG waste – water, powdered graphite, corrosion products, Mg+ and U	2" (50mm) primary hose, 4" (100mm) encasement hose	45 gpm (10 m^3/hr)	1	4760' (1430m)

- ***Total volume transferred: Over 10 Mgal/30M litres of High-Level Waste***
- ***Total number of transfer routes installed to date: 85***
- ***Combined length of transfer routes installed: Over 11 Miles/17Km***

River Bend Transfer Systems, LLC

Compliant, Contained, Cost Effective