

Geoff Daly

Dear Sirs/Madam,

I am commenting on the need for modifying the Newer WTP Back-up transfer Line and the Existing Transfer line from the 242-A Evaporator to accommodate a leak detection sensing system to the LERF.

I am recommending the use of a lined sealed polymer concrete trench with removable access panels for ease of Operation & Maintenance in the event of a complete leak or pipe failure, needing repair - attention. The pipe should be the latest usable materials for fabrication a pipe in a pipe [major companies in the chemical industry use them for handle hazardous/corrosive liquids. They are constructed with access ports to feed liquid sensor probes into the bottom of the Pipe Annulus with an appropriate signal line back to the central control/command center (Fiber optical sensors can be considered or the standard liquid peizeo liquid units). If it is feasible the GF Plastic piping company has a wide range of high pressure and chemical pipe in pipes, which should do the job of handling these water like fluids and condensates, unless they cannot handle any radiation and become brittle....then 316L SS should be utilized, except will be harder to dismantle, whereas the special plastics can crushed mechanically and be ground up and Vitrified with Lo/HI level wastes and the appropriate BoroSilicate sands, grouts.

Concerning the trench and its covers, being made of Polymer Concrete this would be a very light-weight, strong and chemical impervious made with Fly Ash and Bottoms, Pozzolan/Natural Zeolites and 10% Portland cement powder. All can be recycle at a later date and used for Grouts to encapsulate Radionuclides and part of the Vitrification process. Note: - Hanford has huge deposits of Fly Ash and Bottoms for ingredients to make the Polymer Concrete trenches and covers from onsite sources.

Is a no brainer at the end of the day and offers a real safe way of providing a safe Leak-proof Transfer piping system and using materials that can be easily recycled and useful.

Contact me as a follow up if I can be of assistance, at the above email address.