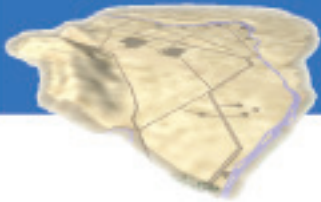


Overview



Interim Surface Barriers Protect the Environment

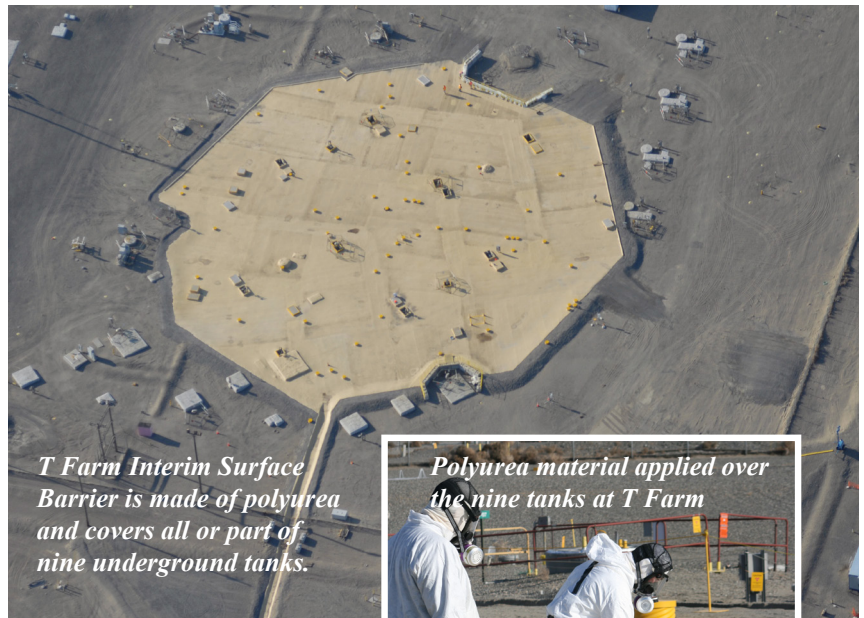
Interim Surface Barriers are being constructed over several of Hanford's single-shell tank farms to add an additional measure of environmental protection until a decision is made about the best way to deal with radioactive and chemical contaminants in the soil beneath these farms.

The temporary barriers are made of impermeable materials that prevent thousands of gallons of rain and snowmelt per year from percolating into the soil and driving these contaminants downward toward the water table. Barriers have been constructed so far in the T and TY Farms, the sites of a number of tank and/or line leaks several decades ago. Four additional barriers to cover areas of other farms are anticipated.

The 60,000 square foot barrier in T Farm was constructed as a demonstration project under terms of the Tri-Party Agreement. T Farm is the site of the largest tank leak in Hanford's history... some 115,000 gallons. To cover this leak a barrier constructed of polyurea material was placed over all or part of nine tanks. The barrier is sloped and moisture drains through a covered and lined trench to an infiltration area outside the farm. T Farm was constructed between 1943 and 1944, making it the oldest tank farm on the Hanford Site. It contains sixteen single-shell tanks and seven are classified as assumed leakers.

In TY Farm, where conditions are somewhat different, the barrier was constructed of an asphalt material and placed over all six tanks of the farm. It, too, is sloped and moisture drains through an underground pipe to a nearby evaporation basin. The basin is lined with a geo-membrane material to prevent it from leaking, then covered with soil and seeded with native plants and grasses to take up the moisture. TY Farm was constructed between 1951 and 1952 and contains six single-shell tanks. Five of the tanks are classified as assumed leakers.

Monitoring instruments were placed in the soil prior to installation of the barriers to measure soil moisture and track the performance of the barriers. The barriers are expected to last up to 25 years and are strong enough to allow vehicles to drive on them should that be necessary.



T Farm Interim Surface Barrier is made of polyurea and covers all or part of nine underground tanks.



Polyurea material applied over the nine tanks at T Farm



TY Farm asphalt barrier with well covers shown in place

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