START

The Environmental Restoration of Hanford

Facts

Expedited Cleanup Project

Carbon Tetrachloride Plume

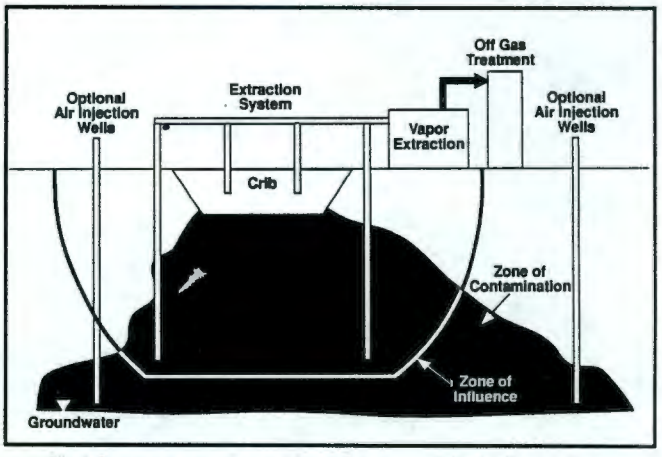
Wastes from processes to recover plutonium have been discharged to the ground in the Hanford 200 West Area. One of these wastes, carbon tetrachloride, has contaminated more than seven square miles of groundwater in the middle of the Hanford Site.

Carbon tetrachloride concentrations over 100 times the maximum allowable have been detected within five miles of the boundary of the Hanford Site. Carbon tetrachloride concentrations in the groundwater could exceed the maximum level at locations even closer to the site boundary. In some areas of the plume, workers drilling wells must wear special equipment to protect themselves from vapors. However, most of the carbon tetrachloride probably remains in the soil.

Waiting to clean up the carbon tetrachloride on the normal schedule outlined in the Tri-Party Agreement would allow it to move through the Hanford Site and potentially off the site. Preliminary studies indicate that a vapor extraction method could be used to remove the carbon tetrachloride from the soil which would limit its spread both on and off the site.

If cleanup does not start soon, it will cost much more in the future. Prompt action would reduce the potential exposure of site workers to this waste which is known to cause cancer. Because of the nature of the contaminant, and the sediments beneath the disposal sites, this project has a very good chance of success and would be a benefit to the environment, public and Hanford workers.

The current cleanup concept involves a vapor extraction system which is a commercially



available treatment technology. Air injected into wells and withdrawn from other wells forces the carbon tetrachloride to vaporize. It can then be trapped for treatment and disposal. Existing wells in the vicinity of the site can be used; additional wells may be installed around the outside of the area to increase efficiency. This cleanup action would continue until the existing plume of carbon tetrachloride is stabilized.

Personnel at Hanford are already conducting additional activities to understand this site better. The first documents needed to approve this as an expedited action are being written. The public should review the plan in the summer of 1991 with cleanup actions starting during the fall. The clean up of this site could continue for several years.

For further information on this project, contact one of the following people:

EPA (lead regulatory agency): Doug Sherwood at 509-376-9529

DOE: Julie Erickson at 509-376-3603

Ecology (support regulatory agency): David Nylander at 509-546-2977

0191