

All of Hanford's underground waste tanks generate hydrogen gas to some degree since the radioactivity in the waste releases hydrogen from basic nuclear reactions. The routine release of hydrogen bubbles from the waste into the headspace (open space) of Hanford's tanks is actively managed in order to safely operate the tank farms. Tank AN-105 is one of five Hanford double shell tanks that has regularly released hydrogen. The gas release in March was not unexpected and levels of hydrogen did not accumulate anywhere close to the concentration that might pose a risk if an ignition source were present. Tank Farms have controls in place to eliminate ignition sources for these tanks. Double-shell tanks are equipped with ventilation and monitoring systems, and workers routinely take air samples to monitor gas generation. These systems prevent excessive amounts of gas from accumulating. The Department is developing upgrades to the systems used to vent, monitor and measure gas generation, consistent with recommendations by the Defense Nuclear Facilities Safety Board. The Department remains committed to the safety of our workers, the public and the environment.