

Nurse Tank Rupture, June 06, 2005

An internal non-code weld had weakened the shell of an anhydrous ammonia nurse tank causing the tank to rupture. The full, pressurized tank (125 psi) was propelled across the facility yard narrowly missing bulk agricultural chemical tanks and buildings as it flew. The tank came to rest approximately 250 feet away after first splitting a tractor in half. An extensive cloud of ammonia vapor drifted away from all major populated areas although some nearby residents were treated for exposure. This tank was manufactured in 1973.



Initial location of the 1,000-gallon nurse tank. A similar tank is shown in the background.



Final resting place of the nurse tank approximately 250 feet away. Part of the tank shell is located in the lower right portion of the photograph.



Tank split apart this tractor before finally coming to rest on its side.



Running gear absent. Gear remained at load-out risers.



Front of nurse tank showing black rubber tire marks and red paint from when the tank struck the tractor. Dent and opening also caused by collision.



Large opening where the tank failed. Absent shell piece remained by load out risers.



Ammonia cloud drifted over this ditch causing grass leaf burn.



A weakened tank shell around this weld was the likely cause of the nurse tank rupture.