

Fact Sheet



Kelly Air Force Real Property Agency

February 2003

Zone 4 Cleanup Plan Proposed

Modeling shows installing permeable reactive barriers (PRBs) and extraction wells outside of the boundaries of the former Kelly Air Force Base will reduce the off-base plume of contaminated groundwater by 62% in five years and 99% in ten years. The Air Force has proposed installing two PRBs to the east of East Kelly, and vertical groundwater extraction wells south of East Kelly. These clean up systems will bring the levels of the solvents Tetrachloroethene (PCE) and Trichlorethene (TCE) as well as their breakdown products Dichloroethene (DCE) and vinyl chloride (VC) in the shallow groundwater to drinking water standards.

The shallow groundwater is 15 to 40 feet beneath the surface and is not a source of drinking water in San Antonio. One thousand feet of impermeable clay and rock separate the groundwater from the Edwards Aquifer.

The proposed PRBs will be underground trenches filled with iron filings placed to intercept the flow of groundwater. As contaminants are carried by groundwater through the trenches, they chemically react

with the iron filings and are converted to carbon dioxide, water and the mineral chloride. This process treats the groundwater contamination completely underground.

The proposed vertical extraction wells will take water out of the ground and pump it to the East Kelly water treatment plant where it will be cleaned. Because of the slower movement of groundwater in this area, it was determined that this method may treat groundwater faster than a PRB.

These two proposed systems will work with two existing cleanup systems on the former base. Both existing systems keep contaminated groundwater from moving off-base by capturing and pumping it to the two water treatment plants on Kelly.

The solvents in the groundwater, PCE and TCE were used on base to degrease engine parts and entered the shallow groundwater as a result of spills over the years.

The Air Force sent a cleanup proposal for the groundwater in Zone 4 titled "Draft Final Zone 4 Corrective Measures Study," to the Texas Commission on Environmental Quality

(TCEQ) in 2002. The TCEQ must approve this cleanup proposal before it can be considered the final environmental cleanup remedy for this area. The Air Force expects to have all cleanup systems in place and operating by 2004.

The Zone 4 Corrective Measures Study (CMS) is available at:
San Antonio Central Library
(Government Documents Section)
600 N. Soledad
San Antonio, TX 78205

Kelly AFRPA Library
Bldg. 1650, room 138
Kelly AFB, TX 78241

Questions?

AFRPA is dedicated to involving the community in the cleanup program for the former Kelly Air Force Base. For more information on this project, please call the AFRPA Public Information Line at 210-925-0956 or visit our web site at www.kellyafb.net.