



# Air Force Base Conversion Agency

## NEWS RELEASE

---

### KELLY OFF-BASE CLEANUP PROPOSALS SENT TO TEXAS NATURAL RESOURCES CONSERVATION COMMISSION

**San Antonio, Texas** – Modeling shows that an Air Force concept for cleaning up shallow groundwater contamination east of the former Kelly Air Force Base will reduce the contaminated plume by 65 percent in the first five years, 94 percent in ten years and 99 percent in 15 years. This concept will reduce the plume faster than six others also considered by the Air Force.

The Air Force proposes the installation of two permeable reactive barriers to the east of Zone 4, or East Kelly, and vertical groundwater extraction wells south of East Kelly.

The permeable reactive barriers will be underground trenches filled with iron filings placed to intercept the groundwater flows. As water passes through the trenches, the iron filings convert the contaminants to carbon dioxide, water and minerals. This process takes advantage of the natural flow of the groundwater and treats it completely underground.

The vertical extraction wells to be installed south of East Kelly will capture and pump groundwater to the East Kelly water treatment plant. Because of the slower movement of groundwater in this area, these wells can treat groundwater faster than a permeable reactive barrier could.

These proposed systems will work together with two existing cleanup systems installed on the former base, both of which keep contaminated groundwater from moving under neighborhoods by catching and pumping it to the two water treatment plants on Kelly.

The first is a system of vertical and horizontal extraction wells inside the perimeter of East Kelly. The second of these systems combines a containment wall with several vertical extraction wells at the southern edge of main Kelly.

“The idea is to keep groundwater from leaving Kelly and to treat the higher concentrations of contamination that are off-base,” explained William Ryan, the Base Realignment and Closure environmental coordinator at Kelly. “When the systems are put into place, we should see dramatic reductions in the size of the plume. As we monitor progress, it will seem as though we’re pulling the plume back onto base. In fact, we saw a reduction in the plume last year.”

The Air Force sent the proposal, detailed in the “Draft Final Zone 4 Corrective Measures Study,” to the Texas Natural Resources Conservation Commission last Friday.

In January, the Air Force also sent the TNRCC a proposal for cleaning up shallow groundwater contamination moving off the former base under neighborhoods near Growden Road. This proposal, the “Draft Final Zone 5 Corrective Measures Study,” recommends the

April 8, 2002

No. DK1/2002-04-01



use of one permeable reactive barrier at Kelly's northern boundary and the use of enhanced bioremediation at the source of the contamination.

Enhanced bioremediation speeds the natural breakdown of contaminants by microbes already present in the ground. A substance like vegetable oil is injected into the ground to "feed" the microbes, which then break down the contaminants by breathing them in.

During the Zone 5 groundwater investigation, the Air Force also found a contaminated groundwater plume north of the base. This plume appears to come from an off-base source and this information was given to the TNRCC for review.

The systems described in the Zone 4 and Zone 5 corrective measures studies will clean up the solvents, perchlorethylene and trichlorethylene, as well as their breakdown products, dichlorethylene and vinyl chloride.

Perchlorethylene and trichlorethylene were used on base to degrease engine parts and entered the shallow groundwater as a result of spills and leaks.

The shallow groundwater lies 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 TNRCC must approve both cleanup proposals before they can be considered the final environmental cleanup remedies for these areas. The Air Force expects to have all cleanup systems in place and operating by 2004.

The Air Force will hold a 45-day public comment period this summer that will include three public meetings. The Zone 4 and Zone 5 corrective measures studies are available at the San Antonio Central Library in the government documents section. In addition, community members who want more information on these proposals can call the Kelly public information line at 925-0956.

#####

Media Contact:

Doug Karas

Public Affairs Officer

Air Force Base Conversion Agency

Mailing address: 143 Billy Mitchell Blvd. Ste 1

San Antonio, TX 78226-1816

Phone: (210) 925-0217

E-mail: [dkaras@afbda1.hq.af.mil](mailto:dkaras@afbda1.hq.af.mil)

