



# Environmental Update

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## Air Force Removes Radiation Contamination from Kelly AFB

Air Force investigators discovered radiation above naturally occurring (background) levels in Buildings 324, 326 and 375 at the former Kelly Air Force Base. The Air Force Base Conversion Agency is responsible for the cleanup of contaminated areas on and off the former base, and is working with agencies such as the Air Force Institute of Environmental Safety and Occupational Risk Analysis, the San Antonio Water System, the Nuclear Regulatory Commission, the U.S. Environmental Protection Agency, and the Texas Department of Health to effectively clean up the area.

An Air Force contractor finished removing depleted uranium (a radioactive and dense material) from floor cracks and joints in building 375 on September 28. Building 375 contained a flight controls shop that repaired and replaced aircraft counterweights made of depleted uranium between 1977 and 1994.

Buildings 324 and 326 were the sites of two radium paint shops from the 1920s to the 1950s. Radium is a naturally occurring radioactive element. In the early to mid-1900s, it was mixed with other substances to make "glow-in-the-dark" paint for clocks, watches and aircraft parts.

From 1999 through 2000, Air Force contractors did radiological surveys that identified contamination types and levels in these two buildings. Initial results indicated radiation contamination on floors, walls

and drain line surfaces from small spills. Last March, the Texas Department of Health conducted an independent survey of Buildings 324 and 326 and found that the radiation levels were not a threat to human health and the environment.

Further investigation of Building 326 revealed that the plumbing crawlspace beneath the floor showed the greatest level of contamination in and around that building. Radiation levels above what would occur naturally were also found in soil within 20 feet of the building.

The Air Force expanded the investigation and found radiation levels higher than normal in three sanitary sewer manholes nearby.

AFBCA took immediate action to control access to these manholes and recommended suspension of maintenance and remodeling of the exterior utility systems. "The safety of the workers and the surrounding community is our top priority," said Jack Shipman, Kelly AFBCA radiation program manager.

Of about 80 nearby manholes surveyed, only the three manholes and a portion of sewer pipe near the building were moderately affected. The investigation also found a small portion of radium above naturally occurring levels near the site of an old sludge drying bed on base. Prior to 1953, the Air Force operated a sewage treatment plant on base near the drying bed.

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While radiation levels in the manholes are above naturally occurring levels, concentrations are low and pose no threat to the health of current and former Kelly workers. The average radiation exposure per year in the United States from natural sources is about 300 millirems per year (mrem/yr). A person working in the manhole with the highest level of radiation for a work year (2,000 hours) would receive only 100 mrem/yr. Neither KellyUSA workers nor the public have access to the contaminated areas.

A cleanup plan for radium related to Building 326 is being developed, and in December the Air Force will award a contract for an in-depth investigation of Building 324.

For more information on this project, please call the Public Information Line at 210-925-0956.

## Project Update

AFBCA made progress this summer cleaning up the former Kelly AFB. From breaking up and removing concrete flooring and steel reinforcements to planting grass, AFBCA is working to clean up and restore contaminated areas on and off the former base. The following is an update on the status of current projects.

### Quintana Road

The network of streets enclosed by Quintana, McLaughlin and Bynum roads is getting a makeover as the City of San Antonio and the AFBCA carry out construction activities. In September, AFBCA drilled holes at approximately 20 locations along Prospect, Fenfield and McLaughlin streets off Quintana Road to install groundwater monitoring wells. Meanwhile, the City of San Antonio completed installation of a stormwater drainage system to prevent flooding along Quintana Road and surrounding streets, and is rapidly completing reconstruction of roads. Having laid the base layer of asphalt, City officials estimate that road construction will be completed this December when they finish laying asphalt and constructing driveway approaches, retaining walls, curbs and sidewalks.

In June 1988, City of San Antonio workers found JP-4 jet fuel in shallow groundwater during construction of the Quintana Road drainage system, and the City halted the stormwater drainage project. The shallow groundwater is not used as a source of drinking water, and is separated from the Edwards Aquifer by approximately 1,000 feet of shale and clay, which prevents shallow groundwater from moving into the aquifer. When notified of the incident, the Air Force installed an interim system to clean up the discharged fuel according to applicable environmental regulations. They then discovered contaminated shallow groundwater south of the

base with relatively low levels of industrial cleaners known as solvents. AFBCA began an interim cleanup system to clean up the solvent contamination. AFBCA will use the data collected from the newly drilled wells to begin designing the final piece of the off-base shallow groundwater collection system in the Quintana Road Area. The purpose of this system is to capture and prevent movement of contaminated groundwater originating from the former Kelly AFB.

“Through cooperation with the City of San Antonio, we were able to react quickly to the discovery of shallow groundwater contamination and prevent it from spreading,” stated William Ryan, Acting Chief of the Kelly AFBCA Environmental Program. “We look forward to continued cooperation with the City and other agencies as we continue with our mission to clean up and restore the former Kelly AFB.”

### Former Metal Plating Shop

On August 6, AFBCA began removing Buildings 301, 302 and 316, which housed the former Kelly AFB Metal Plating Shop. Shop operations ceased in December 1999. First concentrating on Buildings 301 and 316, AFBCA decontaminated and removed process equipment. The inside of Building 301 was power-washed to rinse off chemical residues that may have remained on the

walls and in the rafters. Wall insulation was taken down to reduce dust emissions.

The former Metal Plating Shop is located between Industrial Park Drive and Airlift Drive on the former Kelly AFB. AFBCA has taken precautions to protect workers and the neighboring community, such as installing a six-foot fence around the work area and measuring air quality.

From 1975 through 1999, the Air Force conducted electroplating operations in Building 301. Electroplating is a process used to put a thin layer of metal on an object. The Air Force electroplated aircraft parts used for engine maintenance.

The AFBCA anticipates the removal of Buildings 301, 302, and 316 as early as February 2002. Before tearing down the outer walls of Building 301, the concrete foundation is being removed. AFBCA will then refill the basement with approximately two feet of clean clay and an interim cleanup system will be installed by December 2002 to clean up soil and groundwater contamination beneath the building.

Concrete flooring and steel structures inside the buildings will be removed. Contractors will use large scissor-like equipment to tear down the outer walls in late September/early October. More than 300 samples of building debris will be taken before it is either recycled or sent to a state-approved landfill. This area will be the site of a future parking lot for KellyUSA workers.

### Zone 4 Shallow Groundwater Cleanup

The San Antonio City Council asked the environmental consulting firm Zephyr Environmental Corporation to evaluate Air Force options to clean up shallow groundwater contamination that migrated beyond the boundaries of the



*Large chunks of concrete flooring and steel structures have already been removed from inside Building 301.*

(contined on page 3)



# Interview with Robert Silvas

The Kelly Restoration Advisory Board (RAB) recently elected a new board member, Mr. Robert Silvas. Born and raised in San Antonio, Mr. Silvas joined the Kelly RAB on July 17 to learn more about cleanup activities at the former base, as well as share community concerns on the cleanup process.

Mr. Silvas is a structural mechanic by trade. He joined the Air Force in 1986, where he learned aircraft maintenance and served overseas in the Philippines. Over the past ten years, Mr. Silvas has worked in San Antonio at Randolph Air Force Base, and at companies such as Lear Seigler and Lockheed Martin. For the past four years he worked for the Boeing Aerospace Support Center located at the former Kelly AFB. At Boeing, Mr. Silvas became acquainted with environmental restoration work at Kelly.

When asked about his goals for the RAB, Mr. Silvas immediately said that he

would like to see the former base properly cleaned up and that he wanted to ensure that past mistakes are not repeated. "The government needs to continue addressing the concerns of local residents regarding the welfare of their health, homes and the environment, and through the RAB, I'll work to ensure that their voices are heard."

Mr. Silvas notes that as a RAB member he represents his fellow coworkers at Boeing, family members, the Southwest Workers Union and the community at large. By talking to parents at his children's school events and networking with local community members at public meetings, Mr. Silvas shares information on upcoming issues concerning Kelly. "We need to raise public participation in the decision-making process, and I aim to bring the surrounding community to the table so that they can begin making an impact on cleanup activities that will affect them."



Robert Silvas was elected to the Kelly RAB on July 17.

## Project Update (continued from page 2)

former Kelly AFB from an area called Zone 4. The Air Force Base Conversion Agency (AFBCA) provided Zephyr with technical details on six potential cleanup options the Air Force identified for consideration. Following a thorough review of the alternatives, Zephyr will present their recommendations for a cleanup technology at a City Council meeting in October 2001.

AFBCA proposed six options following extensive research and public input. "AFBCA has worked hard to identify technologies and get feedback from stakeholders on cleanup alternatives," said Adam Antwine, AFBCA Senior Representative.

In its efforts to include public participation in the decision-making process, AFBCA held seven public information workshops and a public comment period. The AF also held meetings and made presentations to neighborhood civic groups, as well as to

government and elected officials. More than 400 questions and comments have been received from the public. Replies to each will be provided to the public when the Zone 4 Draft Corrective Measures Study (CMS) is issued for public review.

The Zone 4 Draft CMS is a report that describes the cleanup options identified, provides an evaluation of each cleanup option, and presents a preferred cleanup option. This winter the AFBCA will submit the Zone 4 Draft CMS to the Texas Natural Resource Conservation Commission, the U.S. Environmental Protection Agency and the public for review. The AFBCA will then hold a 45-day public comment period. Comments received during that time will be used to help select a final cleanup option. AFBCA will also provide written responses to comments and questions received.

## Have Questions About the Kelly Environmental Cleanup?

**We've got answers!**  
Call us at our public information line  
**(210) 925-0956.**

Visit our Web site at  
**<http://kelly.ch2m.com>**

Drop us a line at our new mailing address:  
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