Cleanup ongoing at former Air Force base gas station

Pollutants at former air base being removed

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It's labeled Site ST035 on an environmental-cleanup map.

But more people know it as the location of the former Williams Air Force Base gas station, where leaking fuel contaminated the soil and groundwater with benzene and other pollutants for decades.

Today even more people know the site as Arizona State University Polytechnic's new Academic Complex, which stands as a symbol of how far the massive environmental-recovery effort has come and how far it still has to go.

The private contractors hired to conduct the recovery estimate that all of the sites will be ready for removal from the EPA list by the end of the decade.

"In environmental years that's a huge success story," said Len Fuchs, community co-chairman of the Former Williams Air Force Base Restoration Advisory Board, which has monitored the project for the past 18 years. "It took 50 years to create the mess, and now it will take 10 more years to clean it up."

"It's a good thing that the government is guaranteeing that it will be cleaned up," he said. "It's not like a situation in which an oil company moved out and went bankrupt. And if we find new things the government will clean that up, too."

The restoration is part of an Air Force initiative that began in 1983 to restore 13 potentially contaminated sites, a total of 180 acres, and remove them from the Environmental Protection Agency's National Priorities List.

The cleanup progressed through the base's closure in 1993 and continued as most of the 4,034-acre military installation eventually became Phoenix -Mesa Gateway Airport and campuses for ASU Poly and Chandler-Gilbert Community College.

Over the years, millions of pounds of contaminants from aviation fuel, munitions, explosives and household waste have been removed, along with more than 200 pieces of Native American artifacts that will be turned over to Arizona museums.

Since the base closed, the federal government has funded \$112 million in environmental-cleanup efforts as the military installation transitioned into a reliever airport and education and jobs center. Recovery costs prior to base closure in 1993 were not immediately available.

The 16-member advisory board is made up of private citizens, stakeholders, regulators and Air Force representatives. Last week, it awarded a new nine-year contract to Georgia-based AMEC consulting and engineering company to continue the cleanup.

Company officials vowed to take a more aggressive approach to finish the cleanup and use new technologies to extract contaminants from the soil and groundwater, said Amber Cargile, a Valley-based communications consultant who assists the Air Force with public outreach for the project.

For example, the company will employ a thermal-enhanced extraction process never used in Arizona to remove petroleum hydrocarbons and benzene from the soil and groundwater.

"It's one of the most challenging sites," said Donald Smallbeck, AMEC's senior program manager for the project.

Scientists estimate that the 1 million to 2 million gallons of aviation fuel leaked into the soil and groundwater from the underground tanks between 1942, about a year after construction of the base began to train pilots for World War II, and 1990.

The site has undergone a series of restoration attempts over the years, and between 1997 and 2003 a soil-vapor extraction system removed more than 2 million pounds of petroleum hydrocarbons, the equivalent of 343,000 gallons, according to advisory-board records.

In 2008, the Air Force allocated additional funding for the site's cleanup and intensified checks on the rising groundwater beneath the surface.

The site poses no danger to a deepwater aquifer that provides drinking water in the area, and it is a mile from the nearest well, said Jay Harbin, a geologist and project manager for URS Corp., a San Francisco-based engineering- and technical-services organization that has conducted testing and cleanup of the former Air Force base for several years.

Smallbeck said the site is expected to be restored by 2018 and ready to be taken off the EPA list.

There is no estimate of the amount of fuel that leaked from the former gas-station tanks into the soil and groundwater that are now beneath part of the ASU Poly complex, Cargile said. The leak occurred in one of five 10,000-gallon tanks and its connector piping, she said.

The tanks were removed in 1993, and the piping was removed a year later. The site has been deemed safe for school, work and living conditions.

Three years ago the Air Force and contractors worked out a strategy with university officials to install 15 soil-vapor extraction wells on the site and surround them with a noise dampening, Cargile said.

"When we do groundwater cleanups, in particular, it takes a lot of time to get that last bit out of water out," said Linda Geissinger, public-affairs officer for the Western Region of the Air Force Real Property Agency.

Philip Mook, the agency's senior representative, said the Air Force wants to get the sites off of the EPA's National Priorities List as quickly as possible.

"It can be a stigma for the property owners or users," he said. "We need to restore the property to a condition where it's productive to human health and the environment in perpetuity. We're addressing it in a systematic way that applies to the best available technologies, engineering and expertise."

Cargile said the cleanup has moved forward quickly because of the cooperation from the airport authority and the university.

"In a time when we hear about government not working well together, the Williams project is a real success story," she said. "It's a great example of federal government, state and local governments, regulators, stakeholders and private citizens coming together to lead a project that not only significantly improves the environment but Valley economic growth as well."