

Delivery alert until NaN

Experts: Kirtland's large jet fuel plume could be shrinking

By Maddy Hayden / Journal Staff Writer

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ALBUQUERQUE, N.M. — Officials working to clean up a decadeslong jet fuel leak that spread from Kirtland Air Force Base into Albuquerque's groundwater say data suggests their efforts may be succeeding in shrinking a vast plume of a toxic chemical.

Recent images of the 7,000-foot-long plume provided by the Air Force show a clear difference from 2015, just before a system to pump out and decontaminate water began operating.

"We still have data gaps ... so we're not ready to conclude that we are collapsing the plume just yet, but we do think this is very strong evidence that we're beginning to see the plume collapse," said Dennis McQuillen, the state Environment Department's chief scientist on the project, at a public meeting last week. "And after three years and more than 400 million gallons of water pulled out, it's about darn time we should be seeing this."

The footprint of the plume, which contains ethylene dibromide (EDB), is currently the smallest it has been since pumping and treating began in 2015, according to Scott Clark, restoration program manager for the Air Force Civil Engineer Center.

The leak was discovered in 1999 after jet fuel was found on the surface near a base fueling facility. It was eventually discovered that holes had worn in underground pipes used to carry jet fuel from delivery tankers to storage tanks and that millions of gallons had been slowly leaking undetected for decades.

EDB hasn't been used in jet fuel since 1975.

PLUME IN 2015

(before pump-and-treat system)



Source: Kirtland AFB

PLUME IN 2018



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The data gaps referenced by McQuillen were largely created by the rising water table, which has submerged some of the well screens used to detect EDB in groundwater.

The Air Force and NMED are currently working to drill additional monitoring wells to fill in those gaps.

McQuillen said he hopes they will have a more definitive idea of the plume's size by November.

A pilot project currently underway that aims to tackle the EDB problem in the source area of the leak is also showing promising signs of success, according to the team.

Tara Kunkel, a geologist with contractor APTIM, which is working on the pilot project, said they have seen decreases in EDB concentrations at several locations being used in the test after adding "food" for bacteria to stimulate them to consume the chemical earlier this year.

The next phase of the pilot test was to include adding additional bacteria to the water as well, but Kunkel said due to the success of stimulating already present bacteria, they're planning another round of that instead.

"That's very, very promising," McQuillen said.

The day after the largely positive news was delivered to the public, representatives of the Air Force and NMED spoke out against a resolution under consideration by the Water Protection Advisory Board, an advisory board to the city, county and Albuquerque Bernalillo County Water Utility Authority.

The resolution made several recommendations concerning the cleanup project, some of which Air Force and NMED officials found to be unnecessary or due to misunderstandings.

One of the recommendations was the drilling of a deep monitoring well at a location in the northern end of the plume.

Instead, that well was drilled near the Veterans Affairs hospital.

NMED Secretary Butch Tongate explained at a Friday meeting of the board that Veterans Affairs requested a shallow monitoring well be placed between the plume and its drinking water well.

"The budget only allows for so many wells to be drilled in a year," Tongate said. "We felt like putting the well there was the higher priority."

The board voted to pass the resolution despite the objections.

Other recommendations included the reassembly of technical working groups, additional transparency and an independent evaluation of the site, which was particularly exciting to some community members.

"There has been a real desire for an independent review from the beginning," said Dave McCoy, of Citizen Action New Mexico, who has followed the progress of the cleanup for years.

Eric Nuttall, a professor emeritus at the University of New Mexico, said an independent review is a common practice at sites such as Kirtland.

"The money-spending in the past is small compared to the money they're going to spend in this next phase, because they're actually going to be putting things in the ground on a big scale to see how they work," Nuttall said. "There's a national pattern of doing (independent reviews), so we're not following anything out of the norm, we're simply taking advantage of what others have found to be fruitful and useful."

Contact the writer.

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