AFCEC achieves environmental milestone with startup of new treatment system at former March AFB

By Dante Gulle

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RIVERSIDE, Calif. – The Air Force Civil Engineer Center achieved another big milestone to combat impacts on drinking water from historical firefighting operations. AFCEC's Base Realignment and Closure team met this spring to celebrate the successful startup of a new granulated activated carbon treatment facility to remove Perfluoroalkyl Substances from a drinking supply well. Located near the former March Air Force Base, the municipal well is operated by the Eastern Municipal Water District. With the installation of the treatment system and an agreement with EMWD in California, the state's Division of Drinking Water approved operation of the well for potable use. GAC is a scientifically proven treatment process to remove PFAS from water supplies.

AFCEC's agreement with the Eastern Municipal Water District calls for the Air Force to provide treatment, operation and maintenance of the GAC system to remove PFAS from the well.

The municipal well was shut down in 2016 when perfluorinated compounds were found in concentrations above U.S. Environmental Protection Agency's Lifetime Health Advisory limit of 70 parts per trillion.

The primary source of these compounds was from historic use of firefighting foam at March. PFOS and PFOA are classified as emerging contaminants and identified as a potential risk to human health. These manmade chemicals were used for a wide variety of residential, commercial and industrial purposes including nonstick cookware, stain-resistant fabric and carpet, food packaging and firefighting foam.

"We're pleased with the treatment system coming on line after completing our technical and water quality testing. Despite the challenges of COVID-19, we were able to continue environmental cleanup activities around March while practicing safety protocols," said Robert Estrada, AFCEC's BRAC Environmental Coordinator for March. "The GAC treatment system processes approximately 1000 gallons of water per minute and provides potable water to the District and their users."

"The Air Force Civil Engineer Center and the leadership at March Air Reserve Base have been tremendous partners in this process," EMWD Board President Phil Paule said. "By working together to identify solutions to complicated problems, our organizations have built upon our longstanding partnership to restore Well 59 back to EMWD's high water quality standards."

Construction of the GAC system began in October 2019 with design and construction estimated at \$3.7 million. AFCEC worked closely with numerous agencies to complete the project, including the EMWD and regulatory agencies such as US EPA Region IX, California Department of Toxic Substances Control, and Regional Water Quality Control Board, Santa Ana Region. Samples are being collected monthly to confirm effective treatment, Estrada said.

March AFB was established in 1918 as March Field in Riverside, California, and supported flight training operations. In 1947 it was renamed March Air Force Base when the Air Force became a separate branch of the armed forces. Over the years, March AFB supported multiple missions from the 22nd Bombardment Wing with B-52 bombers to an air refueling wing using KC-135 Stratotankers. March consists of 6,610 acres and was closed in 1996 because of Base Realignment and Closure. Approximately 2,000 acres were retained as March Air Reserve Base today.

Whole base transfer was completed in 2007 with more than 4,500 acres transferred from the Air Force to the March Joint Powers Authority for redevelopment. Today, the former Air Force property provides a mix of housing, commercial and industrial development.

Companies such as UPS, Sysco, Kaiser Permanente and others are located at March and employ thousands from the greater Riverside area.