Environmental News September 2011 UPDATE



Mather RAB Adjourns - What Now?

The Mather Restoration Advisory Board (RAB) has adjourned, ending nearly two decades of public discussion regarding environmental cleanup of soil and groundwater contamination at the former Mather Air Force Base resulting from years of military use. The Air Force set up the RAB after Mather AFB closed in

1993, so RAB members could offer opinions, ask questions, and represent the community.

RAB adjournment will have no effect on the continuing cleanup at Mather. The Air Force is required by law to complete the cleanup at the former base.

Updated information regarding the cleanup can

be found at the Mather website, at http://www. safie.hq.af.mil/afrpa/legacybrac/mather/index. asp Questions can be directed to the Air Force Real Property Agency Public Affairs Officer at (916) 643-6420, ext. 257.

The only real change is that RAB members will have more free time on their calendars as they will no longer get together for meetings several times a year.

Background

The RAB was created in 1994 to provide public input on the environmental restoration of the former Mather AFB. The RAB met two or more times a year for the past 17 years. Philip H. Mook, Jr., Senior Representative of AFRPA's Western Region Execution Center, praised RAB members for their volunteerism. "Seventeen years of meetings adds up to countless hours of time. These meetings involve a lot of scientific explanation and technical language. Our RAB members were very dedicated to persevere over such a long span," Mr. Mook said.

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At RAB meetings, representatives of the Air Force Real Property Agency, which oversees the environmental cleanup of the former base, provided news updates and answered questions about the cleanup. Regulators from the U.S. Environmental Protection Agency, the Central Valley Regional Water Qual-

> ity Control Board, and the Department of Toxic Substances Control were also on hand to field questions and provide expertise.

> In the time period shortly after the base closed, the Mather RAB meetings attracted many curious members of the community. Newspaper reporters attended and wrote articles about environmental

contamination and the proposed remedies for cleaning the soil and groundwater.

Why Adjourn?

Reasons cited by Mook for adjourning the RAB included the following: all major cleanup decisions have been made and lack of community interest has caused attendance at meetings to dwindle. Also, the primary property recipient, Sacramento County, is well-informed and pleased with the progress to date.

Current Status

Presently, 75 of 89 contaminated sites have been cleaned up. The 14 remaining sites are being cleaned or awaiting official closure documentation.

The former Mather AFB now offers jobs, housing, and many recreational amenities to the community. "We are proud of the part the Air Force has played in managing the environmental cleanup that enabled this impressive transformation," Mook said.

EPA Signs Mather Paperwork Allowing Land Transfer to Sac County

The U.S. Environmental Protection Agency (EPA) has made a determination that clears the way for transferring more than 4,000 acres of the former Mather Air Force Base property to the public.

EPA's determination found that the required groundwater and soil remedial actions are operating properly and successfully at Mather, a condition known as OPS.

"This is a big deal," said Phil Mook, senior representative of the Air Force Real Property Agency, Western Region. The Agency has overseen Mather's environmental cleanup since the former base closed in 1993. "OPS is a significant milestone in transferring more than 4,000 acres, including the airfield, to Sacramento County," Mook said.

The Air Force, which is financially and legally responsible for the cleanup, has spent more than \$162 million to clean up Mather. More will be spent for ongoing monitoring and operation of groundwater treatment and soil cleanup systems, and maintenance and monitoring of landfill sites. Of the 89 sites identified at Mather, 75 sites require no further cleanup. Fourteen of the remaining sites are being cleaned or awaiting final closure documentation.

Background

Mather Air Force Base, earlier called Mather Field, operated from 1918 to 1993, although there were breaks in service prior to World War II. To perform its mission, Mather's military workforce used chemicals, including fuels, solvents and oils. Over the years while the base was open, some chemicals leaked into the ground from storage tanks. Some were



washed down drains or spilled during transportation and use. Chemical disposal also contributed to soil and groundwater contamination. Such disposal practices, legal in the past, are now known to cause environmental contamination and are no longer used.

In 1979, contamination was detected at some water supply wells at Mather. The primary source was solvents such as perchloroethene (PCE), tetrachloroethene (TCE) and carbon tetrachloride, and petroleum hydrocarbons (fuels and oils). More extensive testing followed in the 1980s, and 89 sites were identified as needing further study or cleanup. These included former landfills and sites with contaminated soil, groundwater, or both.

Environmental cleanup began in the 1980s, years before Mather closed. The cleanup primarily involves removing contaminants from the soil and groundwater beneath the land surface. Part of Mather was added to the EPA's National Priorities List (NPL) in July of 1987 and the remainder was added in June of 1989. Adding Mather to the NPL ensured that the appropriate parties are involved in the cleanup effort, including the U.S. EPA, the Department of Toxic Substances Control, the Central Valley Regional Water Quality Control Board, and the Integrated Waste Management Board. Community members have provided input through the Mather Restoration Advisory Board since 1994.

The contaminated water is not used for drinking water. Drinking water is supplied by municipal water purveyors. Their wells providing drinking water are

tested regularly, and annual water quality reports are provided to water customers as required by law. In addition, the Air Force samples the water from hundreds of monitoring wells and several drinking water wells to ensure that the contaminated water doesn't impact water drinking supplies.

Remediation

To date, more than 12 billion gallons of groundwater have been pumped out of the ground and treated at Mather. Some 4,050 pounds of solvents have been removed from the water and the cleaned water is injected back into the ground, discharged to Morrison Creek, or used to maintain the level of Mather Lake during the dry season.

Soil vapor extraction, which vacuums chemical vapors from the spaces between the grains of soil above the water table, has removed an estimated 1,118,200 pounds of petroleum products from the soil. Soil vapor extraction has also removed some 7,410 pounds of solvents from the soil.

Bioventing pumps air underground so oxygen moves through the soil to promote the destruction of contamination by indigenous microorganisms such as bacteria.

More than 600 monitoring and treatment wells are in use at Mather as part of the groundwater cleanup. Thirty-four wells extract water for treatment, eight are injection wells that return cleaned water back into

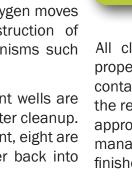
the ground, and the rest are monitoring wells, used to track and measure contamination.

Former landfills at several sites were dug up and their

waste was consolidated in a single landfill. That landfill and two other landfills were covered with impervious barriers. Such barriers keep rainwater from percolating through the waste and transporting it into the groundwater. Landfills are monitored to make sure the waste is contained.

All cleanup systems are in place and operating properly. Much progress has been made removing contaminants from the groundwater. However, getting the remaining amount out of groundwater could take approximately 50 years. The Air Force will continue managing the cleanup process until the cleanup is finished.

Dont forget to visit us at www.afrpa.hq.af.mil or for Mather AFB http://www.safie.hq.af.mil/afrpa/legacybrac/mather/index.asp



MATHER GOLF COURSE

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The drinking water on and around Mather is SAFE

http://www.safie.hq.af.mil/afrpa/legacybrac/mather/index.asp



For cleanup information, the latest news about the former Mather AFB, Frequently Asked Questions, or a review of past history of the base, visit the Air Force Real Property Agency's newly expanded Mather website at:

http://www.safie.hq.af.mil/afrpa/legacybrac/mather/index.asp

If you have a question about Mather, or need more information,

contact AFRPA Public Affairs at (916) 643-1250, ext. 257.

Updated Mather Information Available on the Web or by Phone