

# Environmental Action UPDATE



AIR FORCE ENVIRONMENTAL ACTIVITIES AT MCCLELLAN • NOVEMBER 2019

## AIR FORCE COMPLETES FIFTH 5-YEAR REVIEW OF ENVIRONMENTAL CLEANUP AT MCCLELLAN

In September, the Air Force completed its fifth 5-Year Review of the environmental cleanup work being done at McClellan from 2013 to 2018. As a requirement under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 5-Year Reviews are designed to look closely at remedies implemented and ensure they remain protective of human health and the environment.

The 5-Year Review was completed by document reviews of operations, monitoring, and maintenance reports. Site inspections were conducted and community and stakeholder interviews were done as well as a review of updated regulatory requirements.

The document reviewed the protectiveness of remedies from 13 completed Record of Decisions (ROD) and 292 sites. The AF reviewed 24 sites managed under the Federal Facilities Agreement, while EPA reviewed 268 sites, which are privatized and managed under the Administrative Order on Consent. There were two issues identified in the AF's Protectiveness Summary Section: the presence of Per- and Polyfluoroalkyl Substances (PFAS) contaminants (attributed to historical use of aviation fire-fighting foam) in soil and groundwater, and the need to address the new State Maximum Contaminant Level for 1,2,3 Trichloropropane (attributed to agricultural fumigants and an ingredient in cleaning solvents). Both are emerging contaminants that the Air Force has plans to investigate and address.

Additionally, the 5-Year Review reinforced the need for annual monitoring and reporting at sites where final remedies included institutional controls as part of their overall protectiveness strategy. These controls include measures such as restrictions on land use and digging to be sure remedies in place are not disturbed, and future land use is compatible with potential risk due to residual contamination that may remain in place.

"We are addressing all issues identified in the 5-Year Review and will continue to keep our remedies operating effectively to address areas of concern. For McClellan as

a whole, we are working with federal and state regulatory agencies such as the U.S. Environmental Protection Agency and the State of California (Department of Toxic Substances Control and the California Regional Water Quality Control Board) to ensure our environmental cleanup work remains protective of human health and the environment," said Steve Mayer, BRAC Environmental Coordinator.

For those interested in reviewing this document it can be found on the Air Force's public administrative record site at <http://afcec.publicadmin-record.us.af.mil/>. Continue to the website and click the BRAC radio button; select McClellan AFB and type Final Five-Year Review to search for documents. The next 5-Year Review will be conducted in 2024.



**In 2018, The Air Force Civil Engineer Center's Installations Directorate, Base Realignment and Closure Division was awarded with the U.S. Environmental Protection Agency's first annual National Federal Facility Excellence in Site Reuse award for their work at the former McClellan Air Force Base. Today, McClellan Park supports 230 businesses and organizations, 18,000 jobs and has generated \$580 million in public and private investment.**

## SOIL VAPOR EXTRACTION PROGRAM UPDATE

The last remaining Soil Vapor Extraction (SVE) systems were shut down and prepared for decommissioning this field season. Three SVE systems, the Investigative Cluster 37 flameless thermal oxidizer (FTO), Operable Unit (OU) C1 FTO, and OU D Thermal Oxidizer, successfully reduced levels of volatile organic compounds (VOCs) in subsurface soils to protect underlying groundwater from further contamination. Air Force environmental engineers and environmental regulators determined the SVE remedy at these sites met the intended cleanup objectives, and their services were no longer required.

“The closure of these last SVE systems and now overall closure of the SVE program marks a significant cleanup milestone achieved at McClellan,” said Greg Gangnuss, AFCEC Western Region Execution Branch Chief. “We worked closely with our environmental contractors and regulators over the years to implement and monitor the appropriate remedies. We look forward to achieving more milestones like this as we set our sights on total site closure and property transfer in the near future.”

The historical use of fuels and solvents when McClellan was an active maintenance depot resulted in spills and/or direct releases into the ground and groundwater and contributed to the contamination. The first SVE system to remove these contaminants was installed in 1993 and since then a total of 20 systems were in operation at one time or another.

Trapped as VOCs in the subsurface soils, SVE systems were used to literally vacuum contaminants out of the ground through a network of extraction wells as deep as 110 feet, and then treat those vapors through a variety of treatment



**Investigative Cluster 37, one of the last Soil Vapor Extraction systems to be shut down and decommissioned this field season. Starting in 1993, 20 soil vapor extraction systems were in operation at McClellan, and removed more than 1.8 million pounds of contamination from the soil. This year, the Air Force shut down the last of these systems as their mission was complete. Gary Yuki (right) Air Force contractor conducts routine field inspections at all active remediation systems.**

systems. In addition, soil vapor monitoring wells were installed throughout the cleanup sites and sampled regularly to monitor cleanup progress. To date, more than 1.8 million pounds of solvent and fuel-related contamination have been removed from the soils at McClellan using SVE technology.

## PROPERTY TRANSFER UPDATE

Nine lots totaling 195 acres remain to be transferred at McClellan. The Air Force intends to transfer two of these remaining lots in 2019. As a whole, McClellan's acreage totals 3,458 acres with the majority already transferred through the County to McClellan Business Park for the redevelopment of the former military base.

Environmental cleanup is complete at Lot 159D and Lot 149E and both properties await California Department of Public Health issuance of letters for their unrestricted release.

The remaining seven lots are all impacted by ongoing radium cleanup actions, and will be transferred once the cleanup is completed and approved by regulators.



**Lots 159D and 149E (located on the west side of McClellan) will be transferred to Sacramento County and ultimately to McClellan Park once state regulators issue unrestricted release.**

## 2019 SUMMER CLEANUP SEASON WRAPPING UP AT THE FORMER MCCLELLAN AIR FORCE BASE

During the 2019 field season, the Air Force worked closely with its cleanup team of environmental engineers, contractors and government regulators to remediate sites at the former base.

Funding constraints this year limited the Air Force's fieldwork to sites already funded with prior year monies, including the ongoing groundwater cleanup effort and soil excavation.

On a national level, the Air Force is focusing available cleanup dollars on mitigating impacts on public water supplies and privately-owned drinking water wells contaminated by the Air Force's historical use of firefighting foam containing the Perfluorinated Compounds (PFCs): Perfluoroalkyl sulfonates (PFOS) and Perfluoroalkyl carbonates (PFOA). McClellan has restrictions in place that prevent use of the groundwater beneath the base, so there are no impacted drinking water wells, and therefore other bases are receiving the critical dollars they need at this time.

**Confirmed Site (CS) 043** – A former waste disposal and burn pit site went through final inspections which were completed in June. Remediation action completion reports are being developed.

**Potential Release Location (PRL) 020** – Is a former sludge/oil pit site. Final inspections were completed in June and remediation action completion reports are being developed.

**CS 052** and **CS 067** – Were landfill disposal sites. Radium was discovered during the initial excavation work and the project was put on hold pending receipt of additional funds needed to address the discovery. Additional soil samples were collected to better characterize the radium and a draft

scoping survey report was issued with the results. The Air Force is preparing responses to regulatory comments on the draft document. Excavation work will resume once the required funding is received.

**CS 069** – Is a former burn pit site. Excavation activities began last field season (2018) in the main disposal pit. Excavation of a secondary pit (adjacent to the main pit) has been proceeding and should be completed this field season. Confirmation soil sampling and radiological scanning (to confirm the radiological concerns have been addressed) are underway now. The Air Force plans to backfill the main pit this field season. The secondary pit will likely remain open over the winter, and this secondary pit excavation and backfilling should be completed in the 2020 field season.

**Area Of Concern 314** – Was a former ammunition storage area. This is a large site covering 133 acres. Radium contamination dispersed in surface soils is the concern at a portion of the site. Excavation has been ongoing for several years. Due to this season's funding shortfall, only limited excavation work has occurred.



The Consolidation Unit accepting excavated soil from 2019 field season activity. The CU will be closed and covered for the winter.

## EMERGING CONTAMINANTS

The Air Force has conducted site investigations for Perfluorinated (PFC) chemicals at McClellan and expects to report on the sampling data by the end of 2019. Fifty surface sites and 71 groundwater wells were sampled. PFC presence was found in soil and groundwater but at levels that do not present an immediate impact to drinking water. Additionally, restrictions are in place that prevents use of the groundwater beneath the former base, so there is no exposure pathway to workers or the public.

California recently established a new Maximum Contaminant Limit (MCL) of 5 parts per trillion (ppt) in groundwater for the solvent 1,2,3 -Trichloropropane (TCP). In response to this new standard, a groundwater investigation will be conducted at 31 key wells by the Air Force to assess presence of elevated concentrations of TCP. The results will determine whether changes are required to the existing groundwater remedial systems to capture any TCP which exceeds the new standard.

# PRIVATIZED CLEANUP PROGRESS

McClellan Park's Privatized Cleanup Program for the 2019 field season was successful. Under an established privatized process that transfers Air Force property and cleanup responsibilities to McClellan Park, along with funding to expedite cleanup, several privatized sites were completed this season. McClellan Park completed response actions at 56 sites (40 sites requiring implementation of institutional controls and 16 sites requiring excavation and disposal of contaminated soil). 14 sites remain to be completed and seven other sites require additional Air Force funding to complete the cleanup. Of the total 296 privatized cleanup sites, 275 sites have been completed.



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