



Landfill 004 Remediation Fact Sheet

Former Williams Air Force Base, Mesa Arizona

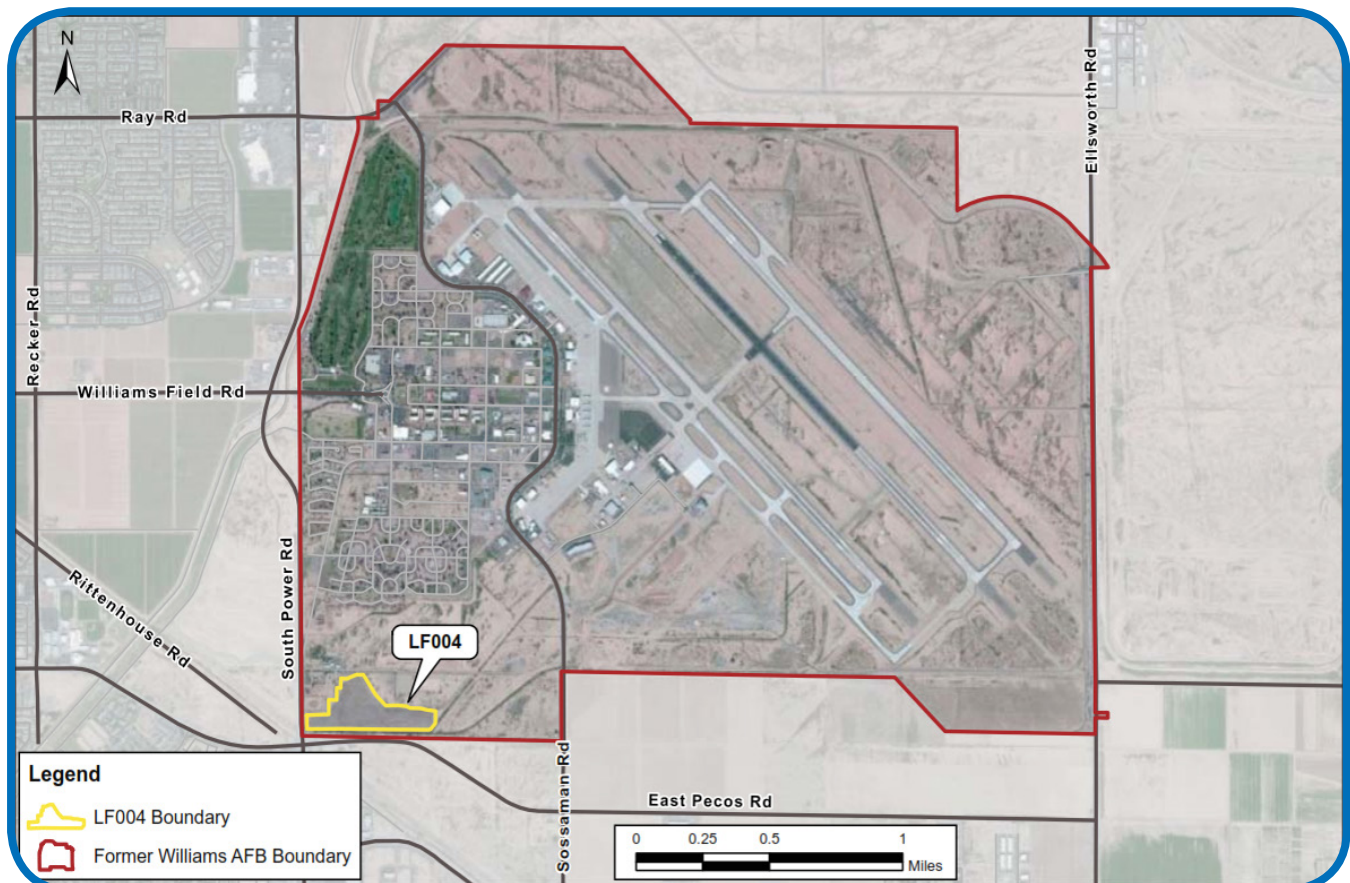
Air Force implements several technologies to clean groundwater soil and gas at landfill site

The Landfill 004 site, on former Williams Air Force Base, was operated as a landfill from 1941 through 1976.

In 1995, the landfill was capped to prevent exposure to contaminants in surface soils. During groundwater monitoring, tetrachloroethene (PCE) and trichloroethene (TCE) were reported at levels exceeding maximum contaminant levels due to rising groundwater contacting some volatile organic compounds, or VOCs. These are typically found in solvents and degreasers.

The 2011 five-year review for LF004 determined the existing remedy is currently protective. However, to protect human health and the environment in the long term, the extent of soil gas and groundwater contamination needed to be determined, and the original remedy modified as necessary.

Therefore, characterization of contamination was completed during a Supplemental Remedial Investigation and cleanup alternatives were evaluated in a Focused Feasibility Study. The Air Force issued an Amended Proposed Plan for Landfill 004 in May 2013 for public review and comment which was followed in May 2014 by a Record of Decision Amendment to select the modified groundwater and soil gas remedy. This summer (2014) the Air Force installed and began operating a remedy of in-well air stripping (IWAS), oxidation, and soil vapor extraction to clean the groundwater soil and gas at LF004.



Landfill 004 Site at Williams

Air stripping is the process of aerating groundwater to transfer contaminants from the dissolved water phase into the air. In-well air stripping is the process of aerating groundwater inside an extraction well to remediate groundwater around that well. Contaminants, captured in the well, are then extracted and treated by the soil vapor extraction system.

The soil vapor extraction system also removes contamination from soils and soil gas above the groundwater table. To shorten the time frame for operating the IWAS wells, oxidants such as ozone, hydrogen peroxide, and permanganate are added to either the in-well air stripping well or to a separate injection well to degrade the contaminants in place.

Williams History

The environmental cleanup at the former Williams Air Force Base in Mesa, Arizona is in its final stages. Cleanup decisions have been made and implemented at most of the sites.

The former base is located approximately 30 miles southeast of Phoenix. The 4,043 acre base served as a flight training school since its construction in 1941. In 1991, Congress established the Base Realignment and Closure (BRAC) Commission that identified Williams AFB for closure and the base was closed in 1993.

The Environmental Protection Agency (EPA) listed Williams AFB on its National Priorities List in 1989. Since then the Air Force has been cleaning up past hazardous substance releases at the former Williams AFB under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) with oversight from the EPA and the Arizona Department of Environmental Quality (ADEQ).



For more information on the environmental cleanup program at Williams:

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