



# Raco Army Airfield and Missile Base

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U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

## History

The Raco Army Airfield and Missile Base site (Raco) occupies approximately one square mile and is located southwest of Sault Ste. Marie, Michigan in the Hiawatha National Forest. The Department of Defense (DoD) used the site as an airfield for 21 years and as a missile base for approximately 13 years, ending in 1972. The airfield was constructed between 1942 and 1943. Around 1960, the missile base was constructed southeast of the airfield. The Air Force released the air field portion of the property to the U.S. Forest Service (USFS) from 1962-1964 and released the missile base portion of the property from 1973-1976. The property remains under USFS jurisdiction. The U.S. Army Corps of Engineers (USACE), Louisville District is currently conducting an investigation of a trichloroethene (TCE) groundwater plume at the site under the Defense Environmental Restoration Program-Formerly Used Defense Sites (DERP-FUDS). As a part of this investigation, we mailed a community survey in February 2014 to local residents to determine public knowledge, concerns, and preferences for receiving information about the project.



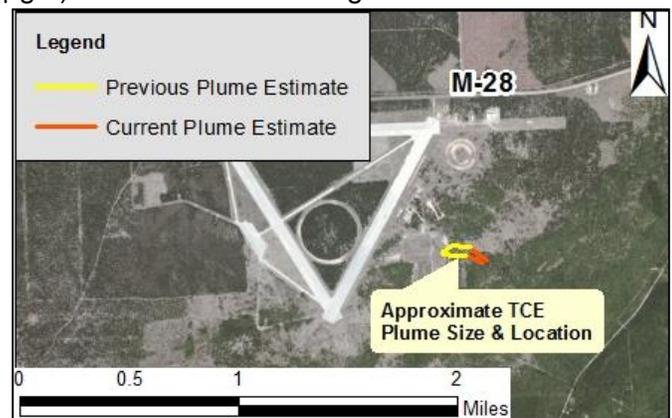
## Environmental Investigations

Since 1986, we have conducted several investigations and completed several tasks at Raco. In most of the earlier work, we focused on the investigation and removal of contaminated soil from fuel storage tanks and transformers, and the demolition and removal of structures including the Raco missile launcher. Low levels of TCE contamination in groundwater were also detected during our earlier investigations. The investigation in 2009 specifically focused on the TCE groundwater plume and included the installation of five new monitoring wells. During 2009, we detected TCE in nine monitoring wells. Seven of these wells had detectable TCE concentrations which ranged from 6 to 51 micrograms per liter ( $\mu\text{g/L}$ ). The Environmental Protection Agency (EPA) Maximum Contaminant Level (MCL) is 5  $\mu\text{g/L}$ . The EPA MCL is the maximum safe amount of TCE allowed in drinking water. In 2014, over 200 groundwater samples were collected to better delineate the extent of the plume, and additional monitoring wells were also installed. The highest TCE concentration measured in 2014 (50  $\mu\text{g/L}$ ) was similar to the highest level measured in 2009. However, the investigation has indicated that the plume is longer than initially anticipated (see Figure) and additional work is required. Yet, based on all the information we have, we have no reason to suspect the plume is large enough to reach any private property.

## What's Next?

USACE and its contractors will be performing additional field work in 2015; this field work will include resampling of existing groundwater monitoring wells, and the drilling, installation, and sampling of additional wells. We will install the additional wells to determine how far southeast the plume has traveled. A Remedial Investigation (RI) Report will be prepared to summarize the results of all the field efforts, describe the extent of the TCE plume, and determine the potential risk (if any) to human health and the environment. The RI Report will be made available for public review at the Administrative Record housed at the Bayliss Public Library and the Bay Mills Community College Library.

For more information visit <http://bit.ly/RacoArmyAirfield> or contact the Louisville District Public Affairs Office at (502) 315-6773 or [katelyn.c.newton@usace.army.mil](mailto:katelyn.c.newton@usace.army.mil).



# Raco Army Airfield and Missile Base

## Frequently Asked Questions

### **What is the FUDS program?**

Under the Formerly Used Defense Sites (FUDS) program, the U.S. Army Corps of Engineers (USACE) cleans up Department of Defense (DoD)-related contamination on properties that were formerly owned, leased, possessed or used by the Army, Navy, Air Force or other defense agencies. The purpose of the FUDS program is to reduce the risk to human health, public safety and the environment from exposure to hazards from these sites.

### **What is trichloroethene (TCE)?**

Pure TCE, a volatile (i.e., it readily evaporates) chemical, is a colorless or blue non-flammable liquid with a sweet odor. It was historically used as a metal parts degreaser and industrial solvent/cleaner. The Environmental Protection Agency (EPA) classifies TCE as carcinogenic (cancer-causing) to humans if they are exposed to high enough levels over a long period of time.

### **How big is the TCE groundwater plume, and what direction is it going?**

Based on current knowledge from existing monitoring wells, the plume is estimated to be within an area of 1000 feet west to east and 500 feet north to south. It appears to extend further to the southeast from the site in the direction of groundwater flow. The full extent has not yet been determined, but based on all the information we have, we have no reason to suspect the plume is large enough to reach any private property.

### **How soon will USACE be on site?**

Our contractors will be on site in spring 2015, and field work will include drilling, installation, and sampling of additional wells to further delineate the TCE plume to the south and east. After that, two rounds of sampling the existing monitoring wells will take place approximately 4-8 months apart.

### **How long does it take to clean up a FUDS property? Why so long?**

It depends on the type of project. Constraints related to regulations, funding and schedules control the pace of cleanup activities. Most projects take several years to complete, and no two projects are ever quite the same.

### **How much is 5 micrograms per liter ( $\mu\text{g/L}$ )?**

The EPA Maximum Contaminant Level (MCL) of 5 micrograms per liter ( $\mu\text{g/L}$ ) is the maximum allowable level of TCE in drinking water. To help you understand the TCE MCL, 5  $\mu\text{g/L}$  is equivalent to about 1 tablespoon in an Olympic-sized swimming pool of 660,000 gallons.

### **Why am I just now hearing about this?**

Investigation of environmental concerns is a phased process. USACE has conducted several investigations at the site, all providing information that advances our knowledge on the nature and extent of the TCE contamination. The current investigation is expected to be the final phase of the investigation after which we will evaluate options for addressing the contamination. Following this evaluation, a cleanup plan for the site will be publicized for community input. In advance of this, keeping the community informed is important to USACE. Our February 2014 survey to community members helped us to gauge the needs of the community and how you want information presented as the project continues. USACE works hard to keep all interested parties informed and offers opportunities for dialogue throughout all cleanup phases.