



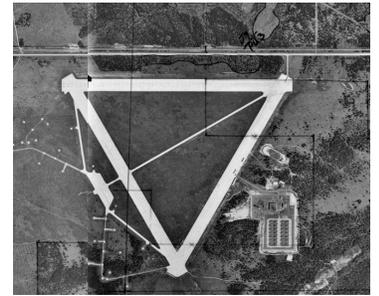
Raco Army Airfield and Missile Base

July 2021

U.S. ARMY CORPS OF ENGINEERS History

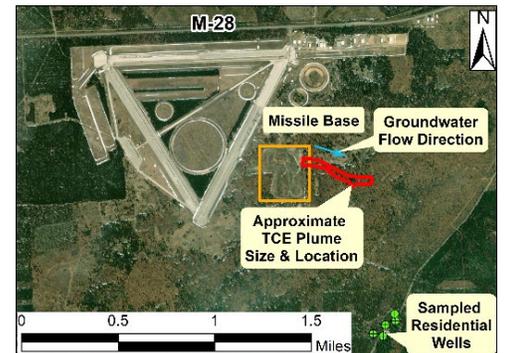
The Raco Army Airfield and Missile Base site (Raco) occupies approximately one square mile and is located southwest of Sault Ste. Marie, Mich., in the Hiawatha National Forest. The Department of Defense (DoD) used the site as an airfield for 21 years and as a missile base for approximately 13 years,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

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Environmental Investigations

Since 1986, we have conducted several investigations at Raco. In most of the earlier work, we focused on the investigation and removal of fuel storage tanks, transformers, and surrounding contaminated soil, and the demolition of structures. Low levels of TCE contamination in groundwater were also detected during our earlier investigations. The 2009 investigation specifically focused on the TCE groundwater plume and included the installation of 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 and 2015 over 400 groundwater samples were collected to better delineate the extent of the plume, and additional monitoring wells were also installed. The highest TCE concentrations measured in 2014 (50 $\mu\text{g/L}$) and 2015 (40 $\mu\text{g/L}$) were similar to the highest level measured in 2009. In 2015, 20 monitoring wells were sampled during two sampling events, and six residential wells located southeast of the site were also sampled. TCE was not detected in any of the residential well samples. Based on all the available information, we have no reason to suspect the plume is large enough to reach any private property. Additional soil sampling and exploratory excavations were performed in a potential source area in the demolished wastewater treatment structures in Oct. 2016 and Aug./Sept. 2017. Although contaminated sludge and soil was identified inside one of the vaults, there was no evidence of a release to the environment associated with the former wastewater treatment area vaults. A Remedial Investigation (RI) Report was prepared in 2018 to summarize the results of the field efforts to describe the extent of the TCE plume and determine the potential risk to human health and the environment. The RI Report was made available for public review at the Administrative Record housed at the Bayliss Public Library and the Bay Mills Community College Library.



Interim Response Action

Although the 2018 RI concluded that the contaminants in the sludge were not actively contributing to the dissolved TCE groundwater plume, a Non-Time Critical Removal Action (NTCRA) was performed to mitigate the risk associated with this vault and its contents. An Engineering Evaluation/Cost Analysis (EE/CA) for the vault was completed in 2018. A 30-day public comment period for the EE/CA was completed and a Public Meeting was held on Dec. 19, 2018. No public comments were received; the vault and contents were removed in October 2019.

Feasibility Study/Proposed Plan/Public Meeting

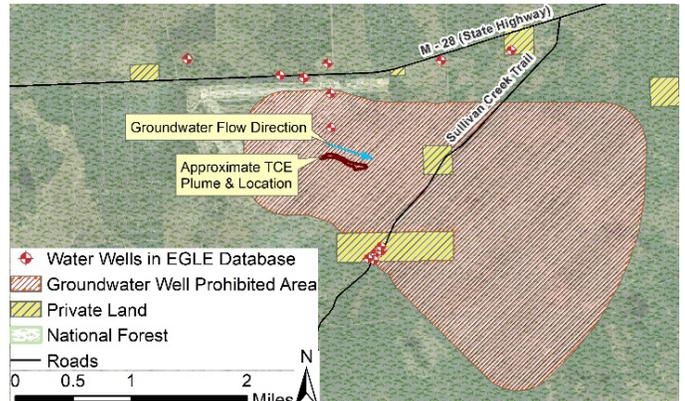
A Feasibility Study (FS) was prepared in November 2019 to develop and evaluate remedial action alternatives for the TCE groundwater plume. A Proposed Plan (PP) was prepared in February 2020 to identify the preferred cleanup alternative. The FS and PP were made available for public review at the Administrative Record housed at the Bayliss

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Public Library and the Bay Mills Community College Library. A 30-day public comment period was held for the PP and the Public Meeting was held on Feb. 4, 2020 at the Bay Mills Resort and Casino located in Brimley, Mich. Representatives from USACE and Michigan Department of Environment, Great Lakes, and Energy (EGLE) presented the preferred cleanup alternative to the public and answered questions about the preferred cleanup. No public comments were received.

Decision Document

A Decision Document was prepared to document the selected cleanup alternative, which consisted of long-term monitoring and sampling of the TCE groundwater plume, educational controls on private land, and voluntary private well sampling with permission of well owners within a 3,000-foot buffer of the likely pathway 2-miles beyond the known extent. During the development of the Decision Document, USDA – Forest Service implemented a land use control preventing the installation of new wells within the 3,000-foot buffer. The Decision Document was finalized in May 2021 by USACE and approved by USDA – Forest Service and EGLE. It was made available for the public at the Administrative Record in June 2021.



What's Next?

A Remedial Design (RD) will be prepared to achieve the goals described in the Decision Document. Questions or comments regarding the documents can be emailed to Aaron.B.Steele@usace.army.mil or mailed to USACE, Louisville District, PO Box 59, Louisville, KY 40201-0059. For more information visit <https://go.usa.gov/x6gSC> or contact the Louisville District Public Affairs Office at (502) 315-6766.

Frequently Asked Questions

What is the FUDS program?

Under the Formerly Used Defense Sites (FUDS) program, USACE cleans up 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 program is to reduce the risk to human health, public safety, and the environment from exposure to hazards from these sites.

What is a Non-Time Critical Removal Action, RI Report, Feasibility Study, Proposed Plan, and Decision Document?

NTCRAs are conducted when a removal action was found to be appropriate and a planning period of at least six-months is available for state or local government and other stakeholder commitment. The RI Report is a document that contains a review of data and describes a risk assessment to determine if there are unacceptable risks from site contamination. If unacceptable risks are present, remedial action alternatives are developed and screened in the FS. In the PP, USACE and regulators will describe the preferred remedial action alternative and why this was selected over the others considered in the FS. The public is provided a minimum of 30-days to review and comment on the PP and potentially change the proposed alternative. The chosen alternative is summarized in the Decision Document. All of these documents are available to the public at the Administrative Record housed at the Bayliss Public Library, the Bay Mills Community College Library, and the project website (<https://go.usa.gov/x6gSC>).

What is trichloroethene (TCE)?

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