

Contamination around Fort Story base is under control, Navy's five-year review says

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The Navy released recently a five-year review of an environmental restoration program at Virginia's Joint Expeditionary Base Fort Story,

finding that environmental contamination of industrial solvents and arsenic at two sites is under control.

"The Navy, in partnership with the Virginia Department of Environmental Quality, concluded the measures are protective to human health and the environment for all who train, work, and live on-base," a Navy spokesperson said in an email. "Similarly, there are no impacts to nearby communities or the environment from these two sites as groundwater and soil contamination is contained and restricted to the base."

Long-term management requirements were put in place by the Navy and the Environmental Protection Agency in 2009 to monitor for further contamination after chemicals were detected in the groundwater and soil at the Virginia Beach base, located near First Landing State Park.

Five-year reviews are required by federal law at locations where hazardous pollutants have been detected above the recommended level. The most recent five-year review of Fort Story is the third to be completed since 2013.

The review, which ran from October 2022 to October 2023, looked for [volatile organic compounds](#) and arsenic in groundwater near an amphibious resupply cargo maintenance area and a site where the 80th Division Reserve trained.

Volatile organic compounds—such as vinyl chloride, trichloroethylene and tetrachloroethylene—are human-made industrial solvents, according to the Environmental Protection Agency. The chemicals evaporate quickly in the air, where they continue to break down over time. They are also slow to break down once they enter water or soil.

Vinyl chloride is used to make [polyvinyl chloride](#), a material used to

manufacture a variety of plastic and vinyl products including pipes, wire and cable coatings and packaging materials. In the past, vinyl chloride has been used as a refrigerant. People typically are exposed to vinyl chloride by drinking water that had contact with polyvinyl pipes, the Agency for Toxic Substances and Disease Registry reported.

In 2009, vinyl chloride had been detected at the amphibious cargo maintenance area at 2.9 micrograms per liter—above the maximum of 2 micrograms per liter.

Trichloroethylene and tetrachloroethylene are metal degreasing solvents. Most exposure, the agency said, occurs when people drink contaminated groundwater. The maximum contaminant level for both chemicals is 5 micrograms per liter. The solvents were not identified as chemicals of concern in the recent report, but the Navy tested for both because 1995 samples of a well at the 80th Division Reserve site detected concentrations of trichloroethylene and tetrachloroethylene at 5.31 and 157.7 micrograms per liter, respectively.

Arsenic was another pollutant in the review. Inorganic arsenic, which is recognized as poisonous to people, can be found in wood that was pressure treated prior to 2003, or in copper, lead or pesticides, according to the Agency for Toxic Substances and Disease Registry. It cannot be destroyed in the environment but instead changes its form or attaches to particles. Arsenic within the amphibious cargo maintenance area had been detected above its maximum contaminant level of 10 micrograms per liter twice in 2009 and once in 2017.

The recently released report found the pollutants remain under control at both base locations and below each maximum contaminant level.

Additionally, the report found there were no new pathways for the chemicals to trickle into other areas of the environment.

Environmental cleanup activities at Fort Story began in 1980 under the United States Army Toxic and Hazardous Materials Agency. The Navy currently manages the environmental cleanup activities under the Installation Restoration Program.

Land use controls were put in place in 2009, the report said. Drinking or withdrawing the groundwater at those locations is prohibited. Potable water is provided to the installation by the city of Virginia Beach. Additionally, the controls recommend prohibiting residential development.

The amphibious maintenance area is currently used by the Navy for training and includes offices, classrooms, training spaces, conference rooms, gear lockers and shower facilities, the report said. The area previously used by the 80th Division Reserve now serves partially as a parking and storage area, with the remainder of the site lying within a fenced shooting range.

The next review of the Fort Story sites is scheduled for 2028.

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