

Per- and Polyfluoroalkyl Substances (PFASs) in Drinking Water Wells Near the Grayling Army Airfield

July 2017

Chemical contamination has entered some private drinking water wells near the Grayling Army Airfield in Grayling, Michigan. Drinking water wells have been sampled south and southwest of the Grayling Army Airfield.



The Grayling Army Airfield is located in Crawford County. Detailed map on back of this sheet.

What are per- or polyfluoroalkyl substances (PFASs)?

PFASs (sometimes known as perfluorinated chemicals or PFCs) are a group of chemicals that are fire resistant, and repel oil, stains, grease, and water. PFASs are used in fire-fighting foams, stain repellants, nonstick cookware, waterproof clothing, fast food wrappers, as well as in many other products. They are very persistent, which means they do not break down in the environment. PFASs are found in the environment worldwide.

Were any of the PFASs found in drinking water wells above health advisory levels?

- The U.S. Environmental Protection Agency (EPA) has set a lifetime health advisory (LTHA) level for two PFASs in drinking water: perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS). The PFOA and PFOS LTHA is the level, or amount, below which no harm is expected from these chemicals.
- The LTHA level for PFOA and PFOS combined is 70 parts per trillion (or 70 ppt), which is the same as 0.07 micrograms per liter (or 0.07 µg/L).
- Another PFAS, perfluorohexanesulfonic acid (or PFHxS), has also been found in fire-fighting foams. It can have similar concerns as PFOA and PFOS, but it does not have an LTHA.
- There were other PFASs (in addition to PFOA, PFOS, and PFHxS) found in some water well samples. The EPA has not set health advisory levels for these PFASs.
- Nearly all of the wells tested near the Airfield had combined PFOS and PFOA levels below the LTHA.

Are there PFASs in the municipal water?

- Initial testing of the municipal water did not report PFOA or PFOS present. The results of confirmation samples collected in June 2017 are expected later this summer.

Why is MDHHS providing this information?

- Groundwater with high levels of PFASs might be moving toward people's drinking water wells.
- We know that the PFASs were found at low levels in some private drinking water wells. We don't know if the PFASs in the drinking water wells will stay at low levels. Also, we do not know how long PFASs may have been in the drinking water wells.
- PFASs can build up in the human body.

Can PFASs harm my health?

- No one can say for sure if drinking water that has PFASs in it will harm you.
- Studies in people who were exposed to PFASs found links between the chemicals and increased cholesterol, changes in the body's hormones and immune system, decreased fertility, and increased risk of certain cancers.
- Animals given high levels of PFASs showed changes to the thyroid, liver, and immune system, and harmful effects in fetal and newborn animals. Animal studies help scientists understand what could happen in people.
- If you have medical questions, talk with your doctor. Information is available in the *PFAS Clinician Guidance* document available at www.atsdr.cdc.gov/pfc in the Additional Resources section of the webpage.

What should I do if I have PFASs in my well water?

- If you have been notified that PFASs were found in your drinking water well sample, the Michigan Department of Health and Human Services (MDHHS) and District Health Department #10 recommend:
 - Do not use your well water for drinking, cooking, making baby formula or food, washing fruits and vegetables, or brushing your teeth unless your water is filtered for PFOS and PFOA.
- If PFASs were found in your drinking water water sample, alternate water is available to you at no cost. For more information, call District Health Department #10 at 231-876-3823.
- Touching the water will not harm you. You can bathe, do your dishes, launder your clothes, and clean with your water.

What is being done about this issue?

- The Michigan Army National Guard and the Michigan Department of Environmental Quality (MDEQ) are working to sample more wells and learn about the affected area.
- MDHHS will continue to evaluate drinking water data as it is made available.
- Well owners will be notified of their drinking water results and any recommendations.
- As more information becomes available, MDHHS will share it with the community.

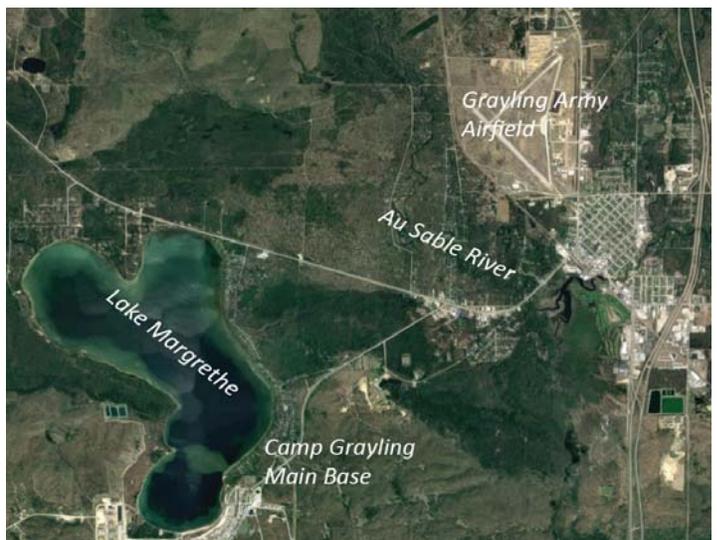


Image of area near the Grayling Army Airfield.
Map data: Google

For more information

- Agency for Toxic Substances and Disease Registry, has a website for these chemicals. Visit www.atsdr.cdc.gov/pfc/index.html
- The Michigan Department of Environmental Quality has a website with information about PFASs at Camp Grayling. Visit www.michigan.gov/campgrayling.
- Call MDHHS at 1-800-648-6942.