

# Frequently Asked Questions about the PFOS Contamination at the Former Wurtsmith Air Force Base

### What does "PFOS" stand for?

"PFOS" stands for perfluorooctane sulfonate.

#### What are the health effects of PFOS?

Studies on research animals have shown that, over time, PFOS can cause liver, thyroid, developmental, and immune system damage.

### Why should I be concerned now? I've been eating the fish for years and I'm fine.

The chemicals build up in the body over time. Some people may become ill, and some may not. It depends on many factors, including your age, whether you smoke, and having existing health problems such as cancer, immune system disorders, and diabetes. The Michigan Department of Community Health (MDCH) can only identify what the risks are and cannot predict whether illness might actually occur. MDCH sets fish consumption guidelines so that people can make safe choices and lower their risk of illness.

Why is MDCH saying "do not eat" for resident Au Sable River fish when the amount of PFOS is low? MDCH is required by the Michigan Public Health Code to issue public health advisories. The Michigan Fish Consumption Advisory Program guidance document says the status of the contaminant - if it is uncontrolled or not well understood - is to be considered when setting guidelines. It is necessary to understand where the contamination is, how it moves through the environment, and how it affects the fish. Much of the information about PFOS in the Au Sable River is still unknown. Also, several resident river fish had much higher levels of PFOS than other fish sampled from the river, and the reason has not been determined. When faced with these uncertainties, MDCH must act with caution to protect the public's health.

### Do fish caught during ice-fishing have PFOS, or just during the warm weather?

The temperature of the water has no effect on environmental chemicals in fish. Fish caught during cold weather can also have high levels of PFOS.

## Can I soak the filet in something before cooking it, so the PFOS comes out of it?

No. Soaking your fish in liquids such as milk, vinegar, or lemon juice will not remove the chemicals from your fish. PFOS is stored in the meat of the fish and can't be cleaned or cooked away.

## When will the advisory be lifted?

First, the source of the PFOS contamination must be controlled and cleaned up. Then, MDCH typically requires two years of sampling data that show levels of the contaminant in the fish have decreased. MDCH will follow its Michigan Fish Consumption Advisory Program guidance as it makes future decisions about the guidelines for this area. Go to "Reports and Science" at <a href="https://www.michigan.gov/eatsafefish">www.michigan.gov/eatsafefish</a> to read the guidance.

#### What is being done?

MDCH is evaluating more fish data and educating people about the issue, so that residents and visitors to the area can make informed decisions about the fish they choose to eat. MDCH is also reviewing the scientific information about PFOS and other PFCs to ensure that the Eat Safe Fish guidelines are upto-date with the best available science. The U.S. Air Force, with MDEQ and EPA oversight, is working to stop the PFCs from entering area waterbodies and determining how best to address the contamination at the base.

## Does this mean we should stay out of and off of the river completely? Is contact with the water in the ponds and rivers okay?

Use the river like you always have. It's a great place to fish and have fun. Touching the water or swimming in it will not harm you. Swallowing a small amount of water is okay too. Follow the guidelines on eating fish from the river, and don't eat any fish from the Clark's Marsh ponds.

## Are dogs that drink from the ponds or river going to be harmed by PFOS in the water?

Dogs and other pets or domestic animals (such as horses) can occasionally drink from area waterbodies and not be harmed by the PFOS. There can be other water quality issues, such as algal blooms, that might harm your animal's health. Pets should be given drinking water from the tap rather than from the river or the marsh.

## Are wildlife and waterfowl that use the ponds also contaminated? What does this mean for game animals?

Although area wildlife and waterfowl have not been tested, it is possible that they have higher amounts of PFOS in their bodies. Smaller animals that cannot travel far, such as raccoons and turtles, may only be able to get water from the river or the Clark's Marsh ponds. Animals that roam farther, like deer and bear, can drink water from areas that are not affected by the contamination from the Air Force base. Migratory birds are likely to be less affected by the contaminated water than birds using the ponds year-round. Animals and birds that eat a regular diet of area fish are more likely to have higher amounts of PFOS in their bodies than grazers and seedeaters.

### Will garden plants take up PFOS from contaminated water?

A study in Minnesota showed hardly any PFC in plants when PFC-containing water was used on vegetable gardens. In the study, the amount of PFOS found in the plants was much less than that found in the fish that have been sampled near the Wurtsmith Air Force Base.

## What other ways, besides eating fish, could I be exposed to PFOS and other PFCs?

PFCs are used in many consumer products. They are used in food packaging, such as fast-food wrappers and microwave popcorn bags; waterproof and stain-resistant fabrics, such as outdoor clothing, upholstery, and carpeting; nonstick coatings on cookware; and cleaning supplies, including some soaps and shampoos. People can be exposed to these chemicals in house dust, indoor and outdoor air, food, and drinking water. Usually the amounts of PFCs a person may be exposed to are quite small. However, the exposure can be quite high when eating fish contaminated with PFCs.