



STATE OF MICHIGAN  
DEPARTMENT OF HEALTH AND HUMAN SERVICES  
LANSING

RICK SNYDER  
GOVERNOR

NICK LYON  
DIRECTOR

February 26, 2016



Oscoda, MI 48750-9418

Dear Property Owner/Resident:

This letter is a follow-up to the notification letters sent to you from the United States Air Force (USAF) and the Michigan Department of Environmental Quality (MDEQ) regarding your recent well test results. Your well was tested for the presence of perfluorinated compounds (PFCs), which were released during activities at the former Wurtsmith Air Force Base (WAFB) when the base was active.

Your well test results indicate that PFCs are present in your drinking water. Currently, there are no federal or State of Michigan drinking water standards for these chemicals, but the U.S. Environmental Protection Agency (EPA) has Provisional Health Advisory levels for two PFCs: PFOA and PFOS. The Provisional Health Advisory levels are for short-term, not lifetime, exposure. **Your results for PFOA and PFOS were lower than the EPA values.**

The contamination at WAFB is not yet fully understood or controlled. It is not known how long PFCs have been in area drinking water wells or at what levels. Although animal research and human studies have suggested that PFC exposure can affect public health, the Michigan Department of Health and Human Services (MDHHS) cannot predict who may be affected. Therefore, **as a precautionary measure, MDHHS recommends that you avoid drinking your well water or using it for cooking.** Touching the water is not harmful; you can do dishes, launder, and bathe with the water.

The enclosed fact sheet is an update to the one included in the notification letters sent by the USAF and MDEQ. MDHHS staff will be available at a public open house and meeting in Oscoda to discuss the contamination and status of clean-up efforts and respond to questions and concerns the community may have.

**Date and location: Wednesday, March 23, 2016 at Oscoda Methodist Church at  
120 West Dwight Avenue in Oscoda  
Open house is 2-4 PM; public meeting starts at 6 PM**

MDHHS has been involved in public health outreach and response at WAFB since issuing a “do not eat” fish consumption advisory in 2012 for the Clark’s Marsh ponds, Allen Lake, and the non-migratory fish in the lower Au Sable River, downstream of Foote Dam. Since then, MDHHS staff have led public meetings; developed fact sheets, brochures, and signs; and evaluated other information regarding the PFC contamination.

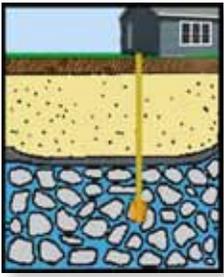
MDHHS is committed to promoting a healthy Michigan and protecting public health from environmental contamination that can enter drinking water, locally-caught fish, and other media with which people may have contact. For more information about MDHHS activities at WAFB, please contact Ms. Christina Bush in the Division of Environmental Health at [bushc6@mi.gov](mailto:bushc6@mi.gov) or 1-800-648-6942.

Sincerely,

A handwritten signature in black ink, appearing to read "Tim Becker". The signature is written in a cursive style with a long horizontal stroke at the end.

Tim Becker, Chief Deputy Director

Enclosure



# Understanding Your Well Test Results

(Former Wurtsmith Air Force Base area)

Updated fact sheet sent with MDHHS recommendation letter and delivered with local health department advisory.

The U.S. Air Force tested your well water for a group of chemicals called perfluorinated chemicals (PFCs). PFCs were in fire-fighting foams used at Wurtsmith Air Force Base when the base was in operation. PFCs are very persistent, meaning they stay in the environment for a very long time. They have been found in groundwater, surface water, fish and birds near the former Air Force Base. Health and regulatory agencies want to know if PFCs are in drinking water wells in the area. That is why the Air Force tested your well. The Michigan Department of Health and Human Services (MDHHS) has prepared this fact sheet to help you understand your drinking water test results from the well survey.

To help you understand your test results, an example of a water test results table is shown below. We added notes to the table below to further explain the information you received.

The PFCs are measured in units called micrograms per liter, or  $\mu\text{g/L}$ . This is the same as parts per billion, ppb.

Sample Date – 12/3/2015	
PFC	Sample Result
N-Ethyl perfluorooctanesulfonamidoacetic acid (EtFOSAA)	ND
N-Methyl perfluorooctanesulfonamidoacetic acid (MeFOSAA)	ND
Perfluorobutane sulfonic acid (PFBS)	ND
Perfluorodecanoic acid (PFDA)	ND
Perfluorododecanoic acid (PFDoA)	ND
Perfluoroheptanoic acid (PFHpA)	ND
Perfluorohexane sulfonic acid (PFHxS)	0.032
Perfluorohexanoic acid (PFHxA)	ND
Perfluorooctanoic acid (PFOA)	ND
Perfluorononanoic acid (PFNA)	ND
Perfluorooctane sulfonic acid (PFOS)	0.0096 J
Perfluorotetradecanoic acid (PFTeDA)	ND
Perfluorotridecanoic acid (PFTrDA)	ND
Perfluoroundecanoic acid (PFUnDA)	ND

If the result is listed as “ND,” the lab did not detect, or find, that PFC in your water sample. This means the PFC was not in the sample, or the amount was so low the lab could not measure it.

If the result is listed as a number, it means the PFC was found in your water sample. The number is the amount of PFC that was found in the sample.

Sometimes the lab equipment detects the PFC but it’s difficult to accurately measure the amount in the sample. In that case, the lab puts the letter “J” next to the number, meaning that the amount is estimated.

## What do my results mean?

If a PFC was detected in your sample, there is a number in the table next to the specific PFC found. That means your well water has that PFC in it.

PFC drinking water standards have not been determined by the U.S. Environmental Protection Agency (EPA) or by the State of Michigan. The EPA does have Provisional Health Advisories for two of the PFCs: PFOA and PFOS. Provisional Health Advisories are developed for chemicals that do not have existing water quality standards. Provisional Health Advisory levels are the amount of a chemical in drinking water above which the EPA feels action should be taken to reduce exposure. The Provisional Health Advisory level for PFOA is 0.4 µg/L and for PFOS it is 0.2 µg/L.

## Can PFCs harm human health?

**As a precautionary measure, MDHHS recommends you avoid drinking your well water or using it for cooking.** The main ways to be exposed to PFCs is by eating food, or cooking with or drinking water with PFCs. It's important to note that touching the water is not harmful. Bathing, swimming, or doing dishes or laundry in water with PFCs will not harm you.

MDHHS cannot predict who may be affected by PFC exposure. Along with other factors, how much PFCs a person has been exposed to and for how long, determines if health could be harmed. Studies in humans have shown that certain PFCs can stay in the body a long time. They may affect fertility, the body's hormones, the immune system, and increase cholesterol levels and the risk of getting cancer. They may also affect the developing fetus and children, including possible changes in growth, learning, and behavior. More research is needed about the links between these health problems and PFCs.

## Where can I get more information?

An open house and public meeting will take place on Wednesday, March 23, 2016 at the Oscoda Methodist Church, 120 W. Dwight Ave., Oscoda. The open house will be held from 2-4pm and the public meeting will start at 6pm. Representatives from state and federal agencies will update the community on the data evaluation and on all public health and cleanup activities for the former Wurtsmith Air Force Base.

Visit the MDHHS website showing all documents related to the former Wurtsmith Air Force Base site at [www.michigan.gov/envirohealth](http://www.michigan.gov/envirohealth). Go to "Health Assessments and Related Documents," and scroll down to (Former) Wurtsmith Air Force Base.

Michigan's Eat Safe Fish guidelines are available at [www.michigan.gov/eatsafefish](http://www.michigan.gov/eatsafefish).

The federal Agency for Toxic Substances and Disease Registry, part of the U.S. Department of Health and Human Services, has more information about PFCs and your health at [www.atsdr.cdc.gov](http://www.atsdr.cdc.gov).

Visit the Air Force website showing the Administrative Record for Base Realignment and Closure activities at the former Wurtsmith Air Force Base at <http://afcec.publicadmin-record.us.af.mil/Search.aspx>. Go to the "BRAC" button, scroll down to Wurtsmith AFB.

Call Christina Bush, the MDHHS toxicologist assigned to this site, at 1-800-648-6942 or e-mail her at [bushc6@michigan.gov](mailto:bushc6@michigan.gov).