



## PFAS IN DRINKING WATER

Perfluoroalkyls (PFAS) are a group of man-made chemicals that have been used in industrial and consumer products worldwide since the 1950s. Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) were manufactured for the longest amount of time, and are the most widespread in the environment. They have been used in non-stick cookware, water-repellant clothing, stain-resistant fabrics, some firefighting foams, pesticides, household cleaning products, as well as products that resist grease, water, and oil. This has resulted in PFAS being released into the air, water and soil. While many PFAS have been phased out of use in the US, they are considered “forever chemicals” because they persist in the environment.

Scientists are studying the impacts of these compounds on the environment and human health. Though typically found in minuscule amounts, PFAS are found nearly everywhere.

### PFAS REGULATION / GUIDANCE

The US Environmental Protection Agency (US EPA) regulates drinking water by setting limits, known as Maximum Contaminant Levels (MCLs). MCLs are numeric standards that have been established for more than 90 chemicals. The US EPA has not set MCL’s for any PFAS chemicals.

In 2016, USEPA issued drinking water health advisories for PFOA and PFOS at **70 parts per trillion (ppt)**. These standards are non-binding, non-regulatory, and meant to provide technical information to state agencies and other public health officials on health effects, analytical methodologies, and treatment technologies associated with drinking water contamination.

In 2021, the Illinois EPA issued statewide health advisories and started an ongoing sampling investigation of PFAS chemicals in community water supplies. As “forever chemicals,” trace amounts of PFAS are often detected in drinking water.

Both the US EPA Lifetime Health Advisory Levels and Illinois EPA Health-Based Guidance Levels are measured in parts per trillion (ppt), where many drinking water compounds are measured in parts per billion (ppb).

At this time, no enforceable federal or state drinking water standard exists for any of the more than 5,000 known PFAS chemicals. Illinois EPA is in the process of collecting data to develop a state MCL.

**PFAS IN WINNETKA**

Winnetka’s 2021 Illinois EPA testing results determined that one PFAS chemical was detected in the Village’s drinking water just above the Illinois EPA Health-Based Guidance Level.

It should be noted that Winnetka’s results are well below the US EPA Lifetime Health Advisory Level of 70 ppt. Communities along the west shore of Lake Michigan are seeing similar results at about 2 ppt on average.

| <b>Test Results - Village of Winnetka Drinking Water</b> |  |   |
|--|--|---|
| Date   | PFOS<br>IEPA Guidance Level 14.0 ppt<br>US EPA Guidance Level 70.0 ppt | PFOA<br>IEPA Guidance Level 2.0 ppt<br>US EPA Guidance Level 70.0 ppt |
| 09/03/2021   | 2.7  | 2.2   |
| 11/17/2021   | 2.3  | 2.2   |
| 01/03/2022   | 2.2  | < 2.0   |
| 05/13/2022   | 2.3  | <2.0  |

Ng/L or ppt = nanograms per liter or parts per trillion.  
The lowest concentration the laboratory can reliably detect is 2.0 ppt.

| <b>Guidance Level (ng/L)</b> | <b>PFAS Organics</b>                 | <b>Units</b> | <b>Jan. 3, 2022</b> | <b>May 13, 2022</b> |
|------------------------------|--------------------------------------|--------------|---------------------|---------------------|
| 2.0 (IEPA)<br>70 (USEPA)     | Perfluorooctanoic Acid (PFOA)        | ng/L         | <2.0                | <2.0                |
| 14.0 (IEPA)<br>70 (USEPA)    | Perfluorooctanesulfonic Acid (PFOS)  | ng/L         | 2.2                 | 2.3                 |
| 2,100                        | Perfluorobutanesulfonic Acid (PFBS)  | ng/L         | <2.0                | <2.0                |
| N/A                          | Perfluoroheptanoic Acid (PFHpA)      | ng/L         | <2.0                | <2.0                |
| 140                          | Perfluorohexanesulfonic Acid (PFHxS) | ng/L         | <2.0                | <2.0                |
| 21                           | Perfluorononanoic Acid (PFNA)        | ng/L         | <2.0                | <2.0                |
| N/A                          | Perfluorodecanoic Acid (PFDA)        | ng/L         | <2.0                | <2.0                |
| 560,000                      | Perfluorohexanoic Acid (PFHxA)       | ng/L         | <2.0                | <2.0                |
| N/A                          | Perfluorododecanoic Acid (PFDoA)     | ng/L         | <2.0                | <2.0                |

|     |  |      |      |      |
|-----|--|------|------|------|
| N/A | Perfluorotridecanoic Acid (PFTTrDA)                  | ng/L | <2.0 | <2.0 |
| N/A | Perfluoroundecanoic Acid (PFUnA)                     | ng/L | <2.0 | <2.0 |
| N/A | N-ethyl<br>Perfluorooctanesulfonamidoacetic<br>Acid  | ng/L | <2.0 | <2.0 |
| N/A | N-methyl<br>Perfluorooctanesulfonamidoacetic<br>Acid | ng/L | <2.0 | <2.0 |
| 560 | HFPO-DA  | ng/L | <2.0 | <2.0 |
| N/A | ADONA  | ng/L | <2.0 | <2.0 |
| N/A | PCI-PF3ONS   | ng/L | <2.0 | <2.0 |
| N/A | 11CI-PF3OUdS   | ng/L | <2.0 | <2.0 |
| N/A | Perfluorotetradecanoic Acid (PFTeDA)                 | ng/L | <2.0 | <2.0 |

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### **NEXT STEPS**

The Village is following guidance from the Illinois EPA and closely monitoring the latest health-based guidance. PFAS levels will be monitored quarterly in accordance with Illinois EPA. Once available, the most recent results will be posted to the Village's website.

### **MORE INFORMATION**

If you have questions, please contact Water Plant Superintendent Brian Curley at 847-716-3620 or [bcurley@winnetka.org](mailto:bcurley@winnetka.org). The Village's Water & Electric Department will continue to update the website with PFAS information.

The US Environmental Protection Agency and the Illinois Protection Agency provide information on PFAS and the latest research and regulatory developments. The Village is following the issue closely and will continue adhering to guidance from the Illinois EPA and US EPA.

### **RESOURCES**

[IEPA PFAS Info](#)

[DrinkTap.org PFAS Consumer Info](#)

[EPA's PFAs Information](#)

[EPA's PFAS Management Plan Website](#)