Criteria for a CWS to be Fully Sampled for PFAS

STATEWIDE PFAS MONITORING PROJECT

Minnesota Department of Health (MDH) has a goal to sample all community water systems (CWSs) in the state for per- and polyfluoroalkyl substances (PFAS), to determine if CWS customers at any system are exposed to PFAS above guidance values. To fully make this determination:

1. All entry points (EPs) in the system must be sampled. In general, water from all EP sources should be flowing through the EP at the time of sampling.
2. Samples from a system must be analyzed using an analytical method with sufficiently low reporting limits.

Below are the criteria used to determine the PFAS sampling status of systems on the PFAS dashboard.

EPs/Wells Running at Time of Sampling

CWSs shown on the PFAS dashboard will be shown in one of three sampling statuses: Yes, In-Progress, or No.

For a system to be shown in 'Yes' status, the following sampling criteria regarding EPs/wells must be met:

- All primary and seasonal EPs have been sampled with all associated wells/sources running.
- An EP was sampled without all wells running, but all wells that were not running through the EP were sampled individually.
- If an EP was sampled without all its associated wells running, or not all wells were sampled individually, the system could still be in 'Yes' status if the following conditions are met:
  - Wells that were not running or sampled individually are in the same wellfield as other wells that were sampled. (Determined by MDH Source Water Protection (SWP) staff, in consultation with CWS staff if needed), and;
  - Unsampled wells are also in the same aquifer as wells that were sampled and have the same or lesser 'vulnerability' status as determined by SWP. (Determined by SWP staff, in consultation with CWS staff if needed), and;
  - Sample results from sampled EPs/wells are either non-detect (ND) for PFAS, or only PFBA was detected at a concentration below the laboratory reporting limit.

If not all EPs for a system meet the above 'Yes' criteria, the PFAS sampling status of the system will be considered 'In-Progress'.

If none of the EPs for a system have been sampled, the sampling status of the system will be 'No'.

Analytical Method

If samples from a CWS have been analyzed by one of the following methods, results will be considered to have sufficiently low reporting limits to meet our criteria:

- Method 533
- SGS AXYS METHOD MLA-110 Rev 02
- MDH Method 555, if sampled after January 1, 2020

For additional information on methods used, please contact pfas@state.mn.us.

PFAS analyzed in drinking water samples

The following PFAS are analyzed under each of these methods:

PFAS	Method 533	SGS AXYS METHOD MLA-110 Rev 02	MDH Method 555
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	✓	✓	
9-Chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9Cl-PF3ONS)	✓	✓	
4,8-Dioxa-3H-perfluorononanoic acid (ADONA)	✓	✓	
3:3 Fluorotelomer carboxylic acid (3:3 FTCA)		✓	
5:3 Fluorotelomer carboxylic acid (5:3 FTCA)		✓	
7:3 Fluorotelomer carboxylic acid (7:3 FTCA)		✓	
Hexafluoropropylene oxide dimer acid (HFPO-DA)	✓	✓	
N-Ethylperfluorooctanesulfonamide (N-EtFOSA)		✓	
N-ethylperfluorooctane sulfonamidoacetic acid (EtFOSAA)		✓	
N-Ethylperfluorooctanesulfonamidoethanol (N-EtFOSE)		✓	
N-Methylperfluorooctane sulfonamide (N-MeFOSA)		✓	

PFAS	Method 533	SGS AXYS METHOD MLA-110 Rev 02	MDH Method 555
N-methylperfluorooctane sulfonamidoacetic acid (MeFOSAA)		✓	
N-Methylperfluorooctane sulfonamidoethanol (N-MeFOSE)		✓	
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	✓	✓	
Perfluorobutane sulfonic acid (PFBS)	✓	✓	✓
Perfluorobutanoic acid (PFBA)	✓	✓	✓
1H,1H,2H,2H-Perfluorodecane sulfonic acid (8:2FTS)	✓	✓	
Perfluorodecanesulfonate (PFDS)		✓	
Perfluorodecanoic acid (PFDA)	✓	✓	
Perfluorododecanoic acid (PFDoA)	✓	✓	
Perfluorododecanesulfonate (PFDoS)		✓	
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	✓	✓	
Perfluoroheptanesulfonic acid (PFHpS)	✓	✓	
Perfluoroheptanoic acid (PFHpA)	✓	✓	
1H,1H,2H,2H-Perfluorohexane sulfonic acid (4:2FTS)	✓	✓	
Perfluorohexane sulfonic acid (PFHxS)	✓	✓	✓
Perfluorohexanoic acid (PFHxA)	✓	✓	✓
Perfluoro-4-methoxybutanoic acid (PFMBA)	✓	✓	
Perfluoro-3-methoxypropanoic acid (PFMPA)	✓		
Perfluorononanoic acid (PFNA)	✓	✓	
Perfluorooctanesulfonamide (PFOSA)		✓	
Perfluorononanesulfonate (PFNS)		✓	

PFAS	Method 533	SGS AXYS METHOD MLA-110 Rev 02	MDH Method 555
1H,1H,2H,2H-Perfluorooctane sulfonic acid (6:2FTS)	✓	✓	
Perfluorooctanesulfonic acid (PFOS)	✓	✓	✓
Perfluorooctanoic acid (PFOA)	✓	✓	✓
Perfluoropentanesulfonic acid (PFPeS)	✓	✓	
Perfluoropentanoic acid (PFPeA)	✓	✓	✓
Perfluorotetradecanoate (PFTeDA)		✓	
Perfluorotridecanoate (PFTrDA)		✓	
Perfluoroundecanoic acid (PFUnA)	✓	✓	

Minnesota Department of Health
PO Box 64975
St. Paul, MN 55164-0975
651-201-4700
health.drinkingwater@state.mn.us
www.health.state.mn.us

5/2022

To obtain this information in a different format, call: 651-201-4700.