

PFAS REGULATION IN MASSACHUSETTS

What are PFAS?

- PFAS are a family of chemicals used since the 1950s to manufacture stain-resistant, water-resistant, and non-stick products.
- PFAS are widely used in common consumer products as coatings, on food packaging, outdoor clothing, carpets, leather goods, ski and snowboard waxes, and more.
- Certain types of firefighting foam—historically used by the U.S. military, local fire departments, and airports to fight oil and gasoline fires—may contain PFAS.
- PFAS stay in the environment for a long time and do not break down easily – informally referred to as “forever chemicals”.
- PFAS are prevalent in all media, but the highest risk exposure comes via drinking water.
- Studies indicate that exposure to sufficiently elevated levels of certain PFAS may cause a variety of health effects including developmental effects in fetuses and infants, effects on the thyroid, liver, kidneys, certain hormones and the immune system. Some studies suggest a cancer risk may also exist in people exposed to higher levels of some PFAS.

2005: An EPA advisory panel concludes that PFOA is a “likely” human carcinogen.

2009: The EPA issues a non-enforceable “lifetime drinking water health advisory,” recommending a maximum of 200 parts per trillion for PFOS and 400 ppt for PFOA.

2012: The EPA directs large public water systems to test for PFAS. The results suggest that as many as 110 million Americans are exposed to PFAS in their drinking water, the Environmental Working Group finds.

2016: The EPA issues a far stricter lifetime health advisory level for PFOA and PFOS in drinking water: 70 ppt.

2018 DEP issued Interim Guidance on Sampling and Analysis for PFAS at Disposal Sites Regulated under the Massachusetts Contingency Plan

MassDEP's PFAS6 Maximum Contaminant Levels (2020):

20 nanograms per liter (ng/L), or parts per trillion (ppt) applicable to community (COM) and non-transient non-community (NTNC) systems for the sum of the concentrations of these six PFAS compounds:

PFOS

PFOA

PFHxS

PFNA

PFHpA

PFDA

EPA's Maximum Contaminant Levels (2024)

PFOS	4 ppt
PFOA	4 ppt
PFHxS	10 ppt
PFNA	10 ppt
HFPO-DA (GenX chemicals)	10 ppt

Mixture of two or more:

PFHxS, PFNA, HFPO-DA, and **PFBS** Hazard Index of 1

Hazard Index = $\text{PFNA}/10 + \text{PFHxS}/10 + \text{GenX}/10 + \text{PFBS}/2000$

Implementation: Timeframes for Water Systems

Within **three years** of rule promulgation (2024 – 2027): Initial monitoring must be complete

Starting **three years** following rule promulgation (2027 – 2029):

- Results of initial monitoring must be included in Consumer Confidence Reports (i.e., Annual Water Quality Report)
- Regular monitoring for compliance must begin, and results of compliance monitoring must be included in Consumer Confidence Reports
- Public notification for monitoring and testing violations

Starting **five years** following rule promulgation (starting 2029)

- Comply with all MCLs
- Public notification for MCL violations