

**Effective September 30, 2019, Env-Dw 701.03 reads as follows [new paragraph (d), existing paragraphs (d) and (e) renumbered as (e) and (f)]:**

Env-Dw 701.03 Units of Measure for Maximum Contaminant Levels (MCLs) and Maximum Contaminant Level Goals (MCLGs). The units of measure for MCLs and MCLGs shall be as follows:

- (a) Picocuries per liter, abbreviated as pCi/L;
- (b) Milligrams per liter, abbreviated as mg/L;
- (c) Micrograms per liter, abbreviated as µg/L;
- (d) Nanograms per liter, abbreviated as ng/L;
- (e) Millirem per year, abbreviated as mrem/year; and
- (f) Fibers per liter, abbreviated as fibers/L.

**Effective September 30, 2019, Env-Dw 705.06 reads as follows:**

Env-Dw 705.06 MCLs and MCLGs for Per- and Polyfluoroalkyl Substances (PFAS) Contaminants.

- (a) The MCLs and MCLGs for the per- and polyfluoroalkyl substances contaminants specified in (b), below, shall apply to community water systems and non-transient non-community water systems.
- (b) The MCLs and MCLGs for PFAS contaminants shall be as specified in Table 705-7, below:

Table 705-7: PFAS Contaminant MCLs and MCLGs

PFAS Contaminant	MCL (mg/L)	MCLG (mg/L)
Perfluorohexane sulfonic acid (PFHxS)	0.000018	0
Perfluorononanoic acid (PFNA)	0.000011	0
Perfluorooctane sulfonic acid (PFOS)	0.000015	0
Perfluorooctanoic acid (PFOA)	0.000012	0

- (c) Monitoring and compliance for PFAS contaminants shall be as specified in Env-Dw 707, Env-Dw 708, and Env-Dw 712.

**Effective September 30, 2019, Env-Dw 707.06 reads as follows [changes to (d) and (e) only]:**

Env-Dw 707.06 Sample Analysis Methods; Sample Collection Protocol; Approval of Alternative Methods.

- (a) Acceptable laboratory methods, detection limits, and sample collection protocols shall be those specified in 40 CFR 141, 142, or 143, as applicable.
- (b) The O/O of a PWS having its own laboratory or the O/O of a laboratory used by one or more PWS who wishes to use a method other than one specified in (a), above, shall obtain written permission from the department as specified in (c) through (e), below, prior to using any alternative method.
- (c) The O/O shall submit a request to use an alternative method in writing to the program manager of the NH environmental laboratory accreditation program (NH ELAP) at the address specified in Env-C 303.01(a).
- (d) The request shall include all relevant information, including:
  - (1) The reason(s) for requesting approval of the alternate method; and
  - (2) Analytical data demonstrating the precision and accuracy of the alternative method as it relates to the determination of compliance with the applicable standard.
- (e) An alternative method shall be approved only if the NH ELAP program manager with the concurrence of the administrator of the U.S. EPA determines that the method is equivalent to or better than the prescribed test in both precision and accuracy as it relates to the determination of compliance with the applicable standard.

**Effective September 30, 2019, Env-Dw 712.23 through Env-Dw 712.30 read as follows [all new]:****Env-Dw 712.23 Initial Monitoring for Per- and Polyfluoroalkyl Substances (PFAS) Contaminants.**

(a) Beginning with the first quarter following the 2019 effective date of this section, the O/O of an existing community water system or existing non-transient, non-community water system shall collect 4 consecutive quarterly samples for the per- and polyfluoroalkyl substances contaminants listed in Env-Dw 705.06 at each sampling point identified in the sampling schedule established pursuant to Env-Dw 708.01.

(b) Beginning with the first quarter following the initiation of operations of a new community water system or new non-transient, non-community water system, the O/O shall collect 4 consecutive quarterly samples for the PFAS contaminants listed in Env-Dw 705.06 at each sampling point identified in the sampling schedule established pursuant to Env-Dw 708.01.

(c) If the results of the samples from the first 2 quarters are below the detection limits specified in Env-Dw 712.28(c), the O/O may submit a written request to the department for the monitoring frequency to be reduced.

(d) A written request submitted pursuant to (c), above, shall include the following:

- (1) The name of the PWS;
- (2) The PWS identifier for the PWS; and
- (3) A summary of the historical PFAS data from the system and nearby systems, when available.

(e) If the department determines that the results are all below the detection limits listed in Table 712-2, the final 2 quarters of the initial monitoring shall be waived and the monitoring frequency shall be as specified in Env-Dw 712.24.

**Env-Dw 712.24 Monitoring Frequency for PFAS Contaminants.**

(a) Subsequent to the initial monitoring required by Env-Dw 712.23 and subject to Env-Dw 712.26, the O/O shall monitor for all PFAS contaminants based on the PFAS contaminant with the most frequent monitoring period calculated from the average of the results of the initial monitoring required by Env-Dw 712.23, as specified in Table 712-1, below, and as demonstrated in Appendix D for specific PFAS contaminants:

**Table 712-1: Monitoring Frequency Based on PFAS Contaminant Concentrations**

Average Monitoring Result (ng/L)	Frequency
Greater than 50% of MCL to 100% of MCL	Annually
50% of MCL or less	Once every 3 years

(b) If the average monitoring result exceeds 100% of the MCL, the O/O shall monitor as specified in Env-Dw 712.27.

(c) The O/O shall monitor for PFAS contaminants during the quarter in which the highest analytical result was observed.

(d) Subsequent sample results shall be used to establish future PFAS contaminant sampling schedules using the shortest PFAS monitoring period specified in Table 712-1.

(e) Based on a review of the submitted results, the department shall:

- (1) Modify the system's schedule in accordance with Table 712-1 or (b), above, as applicable; and
- (2) Notify the O/O in writing of the new monitoring requirements.

Env-Dw 712.25 Monitoring Location for PFAS Contaminants.

- (a) The O/O of a PWS supplied by a groundwater source shall collect at least one sample to be analyzed for PFAS contaminants at every entry point to the distribution system. Each entry point shall be representative of each well after treatment, as specified in the sampling schedule established pursuant to Env-Dw 708.01.
- (b) The O/O of a PWS supplied by a surface water source or a combination of surface water and groundwater shall collect at least one sample to be analyzed for PFAS contaminants at points in the distribution system that are representative of each source or at each entry point to the distribution system after treatment, as specified in the sampling schedule established pursuant to Env-Dw 708.01.
- (c) If the O/O believes that conditions make another sampling point more representative of a source, treatment plant, or distribution system for purposes of sampling for PFAS contaminants, the O/O shall request a change in sampling location for such contaminants pursuant to Env-Dw 708.04.
- (d) If a PWS obtains water from more than one source and the sources are combined prior to entering the distribution system, the O/O shall collect the samples to be analyzed for PFAS contaminants at an entry point to the distribution system during periods of normal operating conditions, when water from all sources is being used.

Env-Dw 712.26 Confirmation Sampling for PFAS Contaminants.

- (a) Subject to (c), below, if a PFAS contaminant is detected in a representative sample at a level greater than 50% of the MCL, the O/O shall:
- (1) Collect a confirmation sample under the same contributing conditions within 14 days of being notified of the result; and
  - (2) Have the sample analyzed for the contaminant(s) detected.
- (b) If a confirmation sample is required pursuant to (a) above, the results of the initial and confirmation samples shall be averaged to determine compliance with the MCL specified in Env-Dw 705.06.
- (c) If results from the sampling point or the contributing sources have historically demonstrated the presence of that PFAS contaminant at a level greater than 50% of the MCL, then:
- (1) A confirmation sample shall not be required; and
  - (2) The monitoring frequency for the approved sampling point shall be determined pursuant to Env-Dw 712.24 or Env-Dw 712.27, as applicable.

Env-Dw 712.27 Increased Monitoring for PFAS Contaminants. The O/O shall collect and analyze quarterly PFAS samples at all sampling points if:

- (a) The running annual average for any PFAS contaminant at the sampling point is above the applicable MCL; or
- (b) The PWS is operating any type of treatment to reduce the amount of a PFAS contaminant.

Env-Dw 712.28 Laboratory Methods, Sampling Protocols, and Detection Limits for PFAS Contaminants.

- (a) Analysis for PFAS contaminants shall be conducted only by laboratories that are accredited by the department for such analyses pursuant to Env-C 300.
- (b) Samples to be analyzed for PFAS contaminants shall be collected in accordance with the protocol specified in the sample analysis method approved per Env-Dw 707.06.
- (c) Detection limits for PFAS contaminants shall not exceed those set forth in Table 712-2, below:

Table 712-2: Detection Limits for PFAS Contaminants

PFAS Contaminant	Detection Limit
Perfluorohexane sulfonic acid (PFHxS)	2 ng/L
Perfluorononanoic acid (PFNA)	2 ng/L
Perfluorooctane sulfonic acid (PFOS)	2 ng/L
Perfluorooctanoic acid (PFOA)	2 ng/L

Env-Dw 712.29 Compliance Determination for PFAS Contaminants; Limiting Public Notice.

(a) Compliance with Env-Dw 705.06 shall be determined using the analytical results obtained at each sampling point that is an entry point to the distribution system, as specified in the sampling schedule established pursuant to Env-Dw 708.01.

(b) For any PWS that conducts monitoring for PFAS contaminants at a frequency greater than annually, the department shall determine compliance by calculating a running annual average of all samples collected at each sampling point. If the annual average of any sampling point is greater than the MCL, then the department shall identify the PWS as out of compliance.

(c) If monitoring for PFAS contaminants is conducted annually or less frequently, then the department shall identify the PWS as being out of compliance if the level of a PFAS contaminant at any sampling point is greater than the MCL.

(d) If a PWS has a distribution system with portions that are hydraulically separate from other parts of the distribution system, the O/O may request approval from the department pursuant to Env-Dw 801 to limit the notice to only that portion that is out of compliance.

Env-Dw 712.30 Recordkeeping and Reporting for PFAS Contaminants. An O/O shall:

(a) Maintain records of PFAS contaminant analyses for not less than 10 years and as specified in Env-Dw 718; and

(b) Report monitoring results for PFAS contaminants as specified in Env-Dw 719.

**Effective September 30, 2019, Env-Dw 808.01 reads as follows:**

PART Env-Dw 808 HEALTH EFFECTS LANGUAGE FOR SYNTHETIC ORGANIC CHEMICAL (SOC) CONTAMINANTS AND PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) CONTAMINANTS

Env-Dw 808.01 Required Health Effects Language for Regulated Synthetic Organics Chemical (SOC) Contaminants and Per- and Polyfluoroalkyl Substances (PFAS) Contaminants. The O/O shall use the statements specified in this part, as applicable, as the statement required by Env-Dw 801.03(a)(3) to describe the adverse health effects for the synthetic organic chemical (SOC) contaminants specified in Env-Dw 705.02 and the per- and polyfluoroalkyl substances (PFAS) contaminants specified in Env-Dw 705.06.

**Effective September 30, 2019, new sections Env-Dw 808.27 through Env-Dw 808.30 read as follows [former sections Env-Dw 808.27 through Env-Dw 808.34 renumbered as Env-Dw 808.31 through Env-Dw 808.38]:**

Env-Dw 808.27 Perfluorohexane Sulfonic Acid (PFHxS). For perfluorohexane sulfonic acid (PFHxS) violations, the statement shall read as follows:

“Some people who drink water containing perfluorohexane sulfonic acid (PFHxS) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, or may experience increased cholesterol levels. It may also lower a women’s chance of getting pregnant.”

Env-Dw 808.28 Perfluorononanoic Acid (PFNA). For perfluorononanoic acid (PFNA) violations, the statement shall read as follows:

“Some people who drink water containing perfluorononanoic acid (PFNA) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, or may experience increased cholesterol levels.”

Env-Dw 808.29 Perfluorooctane Sulfonic Acid (PFOS). For perfluorooctane sulfonic acid (PFOS), violations, the statement shall read as follows:

“Some people who drink water containing perfluorooctane sulfonic acid (PFOS) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increased risk of getting certain types of cancer. It may also lower a women’s chance of getting pregnant.”

Env-Dw 808.30 Perfluorooctanoic Acid (PFOA). For perfluorooctanoic acid (PFOA) violations, the statement shall read as follows:

“Some people who drink water containing perfluorooctanoic acid (PFOA) in excess of the MCL over many years could experience problems with their liver, endocrine system, or immune system, may experience increased cholesterol levels, and may have an increased risk of getting certain types of cancer. It may also lower a women’s chance of getting pregnant.”

**Effective September 30, 2019, Env-Dw 811.02 reads as follows [only (d) revised]:**

Env-Dw 811.02 Definitions. For purposes of this part, the following definitions shall apply unless otherwise specified:

- (a) “Action level (AL)” means the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow;
- (b) “Consumer confidence report (CCR)” means an annual report supplied by a CWS O/O to customers which contains information on the quality of their drinking water;
- (c) “Customers” means billing units or service connections to which water is delivered by a CWS;
- (d) “Detected” means the presence of any primary or secondary drinking water contaminant including:
  - (1) Microbiological contaminants;
  - (2) Radiological contaminants;
  - (3) IOC contaminants;
  - (4) VOC contaminants;
  - (5) SOC contaminants;
  - (6) PFAS contaminants; and
  - (7) Disinfection by-products;
- (e) “Regulated contaminant” means a contaminant that is subject to a maximum contaminant level (MCL), action level (AL), maximum residual disinfectant level (MRDL), or treatment technique (TT); and
- (f) “Unregulated contaminant” means a contaminant specified in 40 CFR 141.40.

**Effective September 30, 2019, Env-Dw 811.07(c) reads as follows [no change to (a), (b), or (d)]:**

Env-Dw 811.07 Health Effects Language.

(c) Subject to (d), below, the CWS O/O shall use the following language to satisfy the requirements of (b), above:

“The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including per- and polyfluoroalkyl substances, synthetic organic chemicals, and volatile organic chemicals, which are byproducts of industrial processes, wastewater treatment, residuals from firefighting foams, and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

Radioactive contaminants, which can be naturally- occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA and the State of New Hampshire prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The United States Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.”

**Effective September 30, 2019, Env-Dw 811.22(b) intro and Table 811-1 as to per- and polyfluoroalkyl substances contaminants are cited and read as follows:**

Env-Dw 811.22 Contaminant Source Information.

(b) If the O/O lacks specific information on the likely source of the detected contaminant(s), the owner shall use the contaminant source information specified below in Table 811-1, as applicable:

Table 811-1: Contaminant Origin

<b>Contaminant</b>	<b>Common Source in Drinking Water</b>
<b>Per- and Polyfluoroalkyl Substances (PFAS) Contaminants</b>	
Perfluorohexane sulfonic acid (PFHxS)	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems
Perfluorononanoic acid (PFNA)	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems
Perfluorooctane sulfonic acid (PFOS)	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems
Perfluorooctanoic acid (PFOA)	Discharge from industrial processes, wastewater treatment, residuals from firefighting foam, runoff/leachate from landfills and septic systems

**Effective September 30, 2019, Env-Dw 811.25(a) intro and Table 811-2 as to per- and polyfluoroalkyl substances contaminants are cited and read as follows:**

Env-Dw 811.25 Converting MCL Water Quality Compliance Values.

(a) The MCL, MRDL, MCLG, and MRDLG for a contaminant shall be expressed in identical units as a number equal to or greater than 1.0, as specified in table 811-2, below, subject to the notes in (b), below:

Table 811-2: Converting MCL Water Quality Compliance Values

<b>Contaminant</b>	<b>Traditional MCL in compliance units (mg/L)</b>	<b>To convert to a whole number, Multiply by ...</b>	<b>MCL in CCR units</b>	<b>MCLG in Whole Numbers</b>
<b>Per- and Polyfluoroalkyl Substances (PFAS) Contaminants</b>				
Perfluorohexane sulfonic acid (PFHxS)	0.000018	1,000,000	18 ppt	0
Perfluorononanoic acid (PFNA)	0.000011	1,000,000	11 ppt	0
Perfluorooctane sulfonic acid (PFOS)	0.000015	1,000,000	15 ppt	0
Perfluorooctanoic acid (PFOA)	0.000012	1,000,000	12 ppt	0

#### **APPENDIX A - STATUTES/REGULATIONS IMPLEMENTED**

<b>Rule Section(s)</b>	<b>State Statute(s) Implemented</b>	<b>Federal Regulation(s) Implemented</b>
Env-Dw 701.03(d)-(f)	RSA 485:3, I; RSA 485:16-e	
Env-Dw 705.06	RSA 485:3, I; RSA 485:16-e	
Env-Dw 707.06(d)-(e)	RSA 485:3, I; RSA 485:16-e	
Env-Dw 708.01(e)	RSA 485:3, I; RSA 485:16-e	
Env-Dw 712.23 - 712.30	RSA 485:3, I; RSA 485:16-e	
Env-Dw 808.01; Env-Dw 808.27-808.30	RSA 485:43; RSA 485:16-e	
Env-Dw 811.02(d); Env-Dw 811.07(c); Env-Dw 811.22(b), Table 811-1; Env-Dw 811.25(a), Table 811-2	RSA 485:43; RSA 485:16-e	

#### **APPENDIX B - FEDERAL DEFINITIONS**

[No new definitions]

#### **APPENDIX C: DEFINITION OF PESTICIDE**

[Not applicable to this rulemaking]

**APPENDIX D: MONITORING FREQUENCY FOR PFAS CONTAMINANTS BASED ON SPECIFIED MCL****Perfluorohexane sulfonic acid (PFHxS); MCL = 18 ng/L**

<b>Average Monitoring Result (ng/L)</b>	<b>Frequency</b>
> 9 to 18	Annually
≤ 9	Every 3 years

**Perfluorononanoic acid (PFNA); MCL = 11 ng/L**

<b>Average Monitoring Result (ng/L)</b>	<b>Frequency</b>
> 5.5 to 11	Annually
≤ 5.5	Every 3 years

**Perfluorooctane sulfonic acid (PFOS); MCL = 15 ng/L**

<b>Average Monitoring Result (ng/L)</b>	<b>Frequency</b>
> 7.5 to 15	Annually
≤ 7.5	Every 3 years

**Perfluorooctanoic acid (PFOA); MCL = 12 ng/L**

<b>Average Monitoring Result (ng/L)</b>	<b>Frequency</b>
> 6 to 12	Annually
≤ 6	Every 3 years