

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

PART Env-Dw 707 GENERAL MONITORING REQUIREMENTS; LABORATORY ANALYTICAL METHODS

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**SEE ENV-DW 700 TABLE OF CONTENTS AND REVISION NOTES FOR COMPLETE REVISION NOTES**

**REVISION NOTE #1:**

Document #9700, effective 5-1-10, readopted with amendments and renumbered many former rules in Env-Ws 300 under a new subtitle in Env-Dw 700 as follows:

<u>Former Rule</u>	<u>New Rule</u>
Env-Ws 321.01	Env-Dw 707.01
Env-Ws 310.02	Env-Dw 707.02
Env-Ws 321.02	Env-Dw 707.03
Env-Ws 321.03	Env-Dw 707.04
Env-Ws 321.04(a) & (b)	Env-Dw 707.05
Env-Ws 330.01 & 330.02	Env-Dw 707.06-707.08

The redesignation from subtitle Env-Ws to subtitle Env-Dw was done pursuant to a rules reorganization plan for Department rules approved by the Director of the Office of Legislative Services on 9-7-05.

Documents #9699, #9670, and #9671 replaced all prior filings for the former rules as cited above. The prior filings for these former rules, beginning with Document #6521, eff 6-4-97, which had readopted with amendments the entire Chapter Env-Ws 300, include the following documents:

<u>Env-Ws 310</u>	<u>Env-Ws 321</u>	<u>Env-Ws 329 and 330</u>
#6521, eff 6-4-97 #8360, INTERIM, eff 6-4-05 #8474, eff 11-30-05	#6521, eff 6-4-97 #7352, eff 8-24-00 #7501, eff 6-5-01 #8040, eff 2-14-04 #9473, Interim, eff 6-5-09 #9606, Emergency, eff 12-1-09	#6521, eff 6-4-97 #7501, eff 6-5-01 #9473, Interim, eff 6-5-09 #9606, Emergency, eff 12-1-09

CHAPTER Env-Dw 700 WATER QUALITY: STANDARDS, MONITORING, TREATMENT, COMPLIANCE,  
AND REPORTING

Statutory Authority: RSA 485:2, V; RSA 485:41, IV

PART Env-Dw 707 GENERAL MONITORING REQUIREMENTS; LABORATORY ANALYTICAL  
METHODS

Env-Dw 707.01 Purpose. The purpose of this part is to establish generally-applicable requirements for monitoring by public water systems (PWS) and privately owned redistribution systems (PORS), collectively “systems”, including sampling and analysis, reporting, and compliance with water quality standards.

Source. (See Revision Note (RN) #1 at p. i) #9700, eff 5-1-10; ss by #12666, eff 1-1-19

Env-Dw 707.02 Adjustments to Monitoring Requirements.

(a) The department shall require more frequent monitoring than that specified in Env-Dw 708 through Env-Dw 713 if the department determines that additional monitoring is necessary to confirm that a water source is capable of consistently producing an adequate supply of water that meets drinking water quality standards, because:

- (1) The data submitted for any given parameter is inconsistent with the preponderance of data elements submitted for that water source for the same parameter;
- (2) The data submitted for the water source exhibits constituents from known or unknown sources of contamination;
- (3) Potential or known sources of contamination are located in the source water protection area of the water source;
- (4) Treatment installed to treat water that exceeds an MCL has not consistently met design standards; or
- (5) The data submitted after treatment indicates inconsistent contaminant removal is occurring.

(b) If sample results indicate the presence of contaminants for which MCLs are not listed in Env-Dw 702 through Env-Dw 706 but which are included in the ambient groundwater quality standards (AGQS) specified in Env-Or 603.03, the system shall comply with the AGQS specified in Env-Or 603.03.

(c) The department shall review the monitoring requirements during each inspection or sanitary survey to determine whether the sampling point(s) and frequency meet all monitoring requirements. If the sampling point(s) and frequency do not meet all monitoring requirements, the department shall adjust the sampling point(s) and frequency to meet them.

Source. (See RN #1 at p. i) #9700, eff 5-1-10; amd by #10771, eff 2-1-15; ss by #12666, eff 1-1-19

Env-Dw 707.03 Monitoring of Consecutive Public Water Systems.

(a) Subject to (b), below, if a PWS supplies water to one or more other PWS or to a PORS, the department shall eliminate the requirements imposed on the consecutive systems by Env-Dw 710 through Env-Dw 713.

(b) Each consecutive system shall monitor for bacterial contaminants as specified in Env-Dw 709 and for corrosion control parameters as specified in Env-Dw 714, in accordance with the schedule issued by the department pursuant to Env-Dw 708.

Source. (See RN #1 at p. i) #9700, eff 5-1-10; amd by #10771, eff 2-1-15; ss by #12666, eff 1-1-19

Env-Dw 707.04 Validity of Laboratory Results.

(a) The department shall not use sampling or laboratory results if the department determines that the data is:

- (1) From an obvious sampling or laboratory error from known errors in collection, processing, or transcription;
- (2) A technical impossibility;
- (3) Inconsistent with the preponderance of data elements for the same parameter from the same source or system; or
- (4) From a laboratory not accredited in accordance with Env-C 300 when such accreditation is required for the particular analysis.

(b) Unless otherwise noted, any result that is below the detection limit of a test method approved for use pursuant to Env-Dw 707.07 shall be calculated as zero for the purpose of determining compliance.

(c) All chemical concentration data submitted to the department for compliance purposes shall be reported in the same units used for the specified MCL, MCLG, SMCL, or MRDL, as applicable.

(d) If sample results are not acceptable based on the criteria in (a), above, the O/O shall collect a replacement sample within 7 days of notification.

Source. (See RN #1 at p. i) #9700, eff 5-1-10; amd by #10771, eff 2-1-15; ss by #12666, eff 1-1-19

Env-Dw 707.05 Additional Sampling. The department shall require additional samples to be collected for:

(a) Any samples exceeding the applicable MCL, SMCL, or MRDL specified in Env-Dw 702 through Env-Dw 706; and

(b) Any samples for which the results are invalid as specified in Env-Dw 707.04(a).

Source. (See RN #1 at p. i) #9700, eff 5-1-10; ss by #12666, eff 1-1-19

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.

(f) The use of an alternative analytical technique shall not decrease the frequency of monitoring required by this chapter.

Source. (See RN #1 at p. i) #9700, eff 5-1-10; amd by #10771, eff 2-1-15; ss by #12666, eff 1-1-19; amd by #12838, eff 9-30-19

Env-Dw 707.07 Accredited Laboratory Required.

(a) Subject to (c) and (d), below, compliance determinations for the contaminant categories listed in (b), below, shall be based on data provided by a laboratory accredited pursuant to Env-C 300 for the test being conducted.

(b) The contaminant categories covered by (a), above, shall be as follows:

- (1) Microbiological, as specified in Env-Dw 702;
- (2) Radiological, as specified in Env-Dw 703;
- (3) Inorganics, as specified in Env-Dw 704;
- (4) Organics, as specified in Env-Dw 705;
- (5) Secondaries, as specified in Env-Dw 706;
- (6) Lead and copper, as specified in Env-Dw 714;
- (7) Disinfection residuals, byproducts, and byproduct precursors, as specified in Env-Dw 715;
- (8) Filtration, disinfection, and waste recycling, as specified in Env-Dw 716; and
- (9) Groundwater monitoring, as specified in Env-Dw 717.

(c) Samples for turbidity, chlorine residual, temperature, and pH may be performed by any individual qualified to perform the test.

Source. (See RN #1 at p. i) #9700, eff 5-1-10; amd by #10771, eff 2-1-15; ss by #12666, eff 1-1-19

Env-Dw 707.08 Additional Sampling by Department. Nothing in this chapter shall be construed to preclude the department, or any duly designated representative of the department, from:

(a) Collecting samples; or

(b) Using the results from such samples to determine compliance by a system with the applicable requirements of this chapter.

Source. (See RN #1 at p. i) #9700, eff 5-1-10; ss by #12666, eff 1-1-19

## APPENDIX A - STATUTES/REGULATIONS IMPLEMENTED

Rule Section(s)	State Statute(s) Implemented	Federal Regulation(s) Implemented
Env-Dw 707 (also see additional details below)	RSA 485:3, I	40 CFR 141, 142, & 143
Env-Dw 707.02(a)	RSA 485:3, I(c)	40 CFR 141 Subpart C
Env-Dw 707.02(b)	RSA 485:3, I(c); 485:35	40 CFR 141.101
Env-Dw 707.02(c)	RSA 485:3, I	40 CFR 141 Subparts C & Y
Env-Dw 707.03	RSA 485:3, I	40 CFR 141.29
Env-Dw 707.06(a), (d) intro & (1)	RSA 485:3, I	40 CFR 141, 142, & 143; 40 CFR 141.852(a) & (c)
Env-Dw 707.06(d)-(e)	RSA 485:3, I; RSA 485:16-e	Env-Dw 707.06(d)-(e)
Env-Dw 707.07	RSA 485:3, I	40 CFR 141.28; 40 CFR 141.852(b)

## APPENDIX B - FEDERAL DEFINITIONS

**40 CFR §141.2**

*Compliance cycle* means the nine-year calendar year cycle during which public water systems must monitor. Each compliance cycle consists of three three-year compliance periods. The first calendar year cycle begins January 1, 1993 and ends December 31, 2001; the second begins January 1, 2002 and ends December 31, 2010; the third begins January 1, 2011 and ends December 31, 2019.

*Compliance period* means a three-year calendar period within a compliance cycle. Each compliance cycle has three three-year compliance periods. Within the first compliance cycle, the first compliance period runs from January 1, 1993 to December 31, 1995; the second from January 1, 1996 to December 31, 1998, the third from January 1, 1999 to December 31, 2001.

*Corrosion inhibitor* means a substance capable of reducing the corrosivity of water toward metal plumbing materials, especially lead and copper, by forming a protective film on the interior surface of those materials.

*Domestic or other non-distribution system plumbing problem* means a coliform contamination problem in a public water system with more than one service connection that is limited to the specific service connection from which a coliform-positive sample was taken.

*Dose equivalent* means the product of the absorbed dose from ionizing radiation and such factors as account for differences in biological effectiveness due to the type of radiation and its distribution in the body as specified the International Commission on Radiological Units and Measurements (ICRU).

*Initial compliance period* means the first full three-year compliance period which begins at least 18 months after promulgation, except for contaminants listed at §141.61(a)(19)-(21), (c) (19)-(33), and § 141.62(b)(11)-(15), initial compliance period means the first full three-year compliance period after promulgation for systems with 150 or more service connections (January 1993-December 1995), and first full three-year compliance period after the effective date of the regulation (January 1996-December 1998) for systems having fewer than 150 service connections.

*Lead service line* means a service line made of lead which connects the water main to the building inlet and any lead pigtail, gooseneck or other fitting which is connected to such lead line.

*Level 1 assessment* is an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment. It is conducted by the system operator or owner. Minimum elements include review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g. whether a ground water system is disinfected); existing water quality monitoring data; and inadequacies in sample sites, sampling protocol, and sample processing. The system must conduct the

assessment consistent with any State directives that tailor specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system.

*Level 2 assessment* is an evaluation to identify the possible presence of sanitary defects, defects in distribution system coliform monitoring practices, and (when possible) the likely reason that the system triggered the assessment. A Level 2 assessment provides a more detailed examination of the system (including the system's monitoring and operational practices) than does a Level 1 assessment through the use of more comprehensive investigation and review of available information, additional internal and external resources, and other relevant practices. It is conducted by an individual approved by the State, which may include the system operator. Minimum elements include review and identification of atypical events that could affect distributed water quality or indicate that distributed water quality was impaired; changes in distribution system maintenance and operation that could affect distributed water quality (including water storage); source and treatment considerations that bear on distributed water quality, where appropriate (e.g., whether a ground water system is disinfected); existing water quality monitoring data; and inadequacies in sample sites, sampling protocol, and sample processing. The system must conduct the assessment consistent with any State directives that tailor specific assessment elements with respect to the size and type of the system and the size, type, and characteristics of the distribution system. The system must comply with any expedited actions or additional actions required by the State in the case of an *E. coli* MCL violation.

*Man-made beta particle and photon emitters* mean all radionuclides emitting beta particles and/or photons listed in Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure, NBS Handbook 69, except the daughter products of thorium-232, uranium-235 and uranium-238.

*Near the first service connection* means at one of the 20 percent of all service connections in the entire system that are nearest the water supply treatment facility, as measured by water transport time within the distribution system.

*Point-of-entry treatment device* (POE) means a treatment device applied to the drinking water entering a house or building for the purpose of reducing contaminants in the drinking water distributed throughout the house or building.

*Point-of-use treatment device* (POU) means a treatment device applied to a single tap used for the purpose of reducing contaminants in drinking water at that one tap.

*Repeat compliance period* means any subsequent compliance period after the initial compliance period.

*Residual disinfectant concentration* ("C" in CT calculations) means the concentration of disinfectant measured in mg/l in a representative sample of water.

*Too numerous to count* means that the total number of bacterial colonies exceeds 200 on a 47-mm diameter membrane filter used for coliform detection.

#### **40 CFR §141.91 Recordkeeping requirements:**

"Any system subject to the requirements of this subpart shall retain on its premises original records of all sampling data and analyses, reports, surveys, letters, evaluations, schedules, State determinations, and any other information required by §§141.81 through 141.88. Each water system shall retain the records required by this section for no fewer than 12 years."

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

Pes 101.21 "Pesticide" means:

(a) Any chemical or biological agent used to control a pest including but not limited to the following materials:

- (1) Acaricides or miticides;
- (2) Insecticides;
- (3) Nematocides;

- (4) Herbicides;
- (5) Desiccants;
- (6) Defoliant;
- (7) Fungicides;
- (8) Molluscides;
- (9) Repellents;
- (10) Algaecides;
- (11) Rodenticides;
- (12) Disinfectants; and
- (13) Fumigants; and

(b) Any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any insects, rodents, fungi, weeds or other forms of plant or animal life or viruses which the board declares to be a pest, except viruses on or in living man or other animals, and any substances or mixture of substances intended for use as a plant regulator, defoliant or desiccant.

**APPENDIX D: MONITORING FREQUENCY FOR PFAS CONTAMINANTS BASED ON SPECIFIED MCL**

**Perfluorohexane sulfonic acid (PFHxS); MCL = 18 ng/L**

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

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

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

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

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

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

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