

# NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

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#### REVISION NOTE:

Document #10611, effective 6-1-14, readopted with amendments and renumbered former Part Env-Ws 374 under a new subtitle as Part Env-Dw 404. 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.

The former Part Env-Ws 374 had last been filed under Document #8478, effective 11-30-05. The rules in former Part Env-Ws 374 did not expire on 11-30-13 since they were extended pursuant to RSA 541-A:14-a until replaced by the rules in Document #10611, effective 6-1-14.

Document #10611 replaces all prior filings for the rules formerly in Env-Ws 374. The prior filings for rules in the former Env-Ws 374, beginning with Document #6521, effective 6-4-97, which had readopted with amendments the entire Chapter Env-Ws 300, include the following documents:

- #6521, eff 6-4-97 (as Env-Ws 375)
- #8360, INTERIM, eff 6-4-05 (as Env-Ws 375)
- #8478, eff 11-30-05

#### PART Env-Dw 404 DESIGN STANDARDS FOR LARGE PUBLIC WATER SYSTEMS

##### Env-Dw 404.01 Adoption by Reference.

(a) Except as otherwise required by these rules, treatment, distribution, and storage components and all other appurtenances of all public water systems serving over 1,000 people and those providing fire protection by means of street hydrants shall be designed in accordance with the practices and standards set forth in the 2003 edition of "Recommended Standards for Water Works," committee report of the Great Lakes - Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers, available as noted in Appendix B, with the following exceptions:

- (1) The forward;
- (2) The policy statements; and
- (3) The following sections related to well construction methods:
  - a. Section 3.2.6.2 d; and
  - b. Section 3.2.6.6.

##### (b) Treatment criteria for:

- (1) Surface water filtration shall be as specified in Env-Dw 716; and
- (2) Corrosion control shall be as specified in Env-Dw 714.

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(c) Site selection, yield and drawdown testing, and source water protection for wells for community water systems and water quality for new wells shall be as specified in Env-Dw 301 or Env-Dw 302, as applicable.

(d) Standards for well abandonment shall be as specified in We 600 as adopted by the New Hampshire water well board.

(e) Standards for submersible pumps shall be as specified in We 600 as adopted by the New Hampshire water well board.

(f) Standards for installation, maintenance, repair, or replacement of pumps shall be as specified in We 700 as adopted by the New Hampshire water well board.

(g) Standby power shall be required unless the water system has an adequate alternate backup supply of water meeting minimum pressure requirements.

(h) The total developed groundwater source capacity shall equal or exceed the design maximum day demand and equal or exceed the design average day demand with the largest producing well out of service.

Source. (See Revision Note at part heading for Env-Dw 404)  
#10611, eff 6-1-14

Env-Dw 404.02 Submission of Construction Proposals. Any person proposing to supply water for domestic uses as a public water system shall not construct any new system or enlarge any existing system without first submitting detailed plans of the proposed construction to the department and securing its approval in accordance with the applicable requirements of this chapter.

Source. (See Revision Note at part heading for Env-Dw 404)  
#10611, eff 6-1-14

Env-Dw 404.03 Proposals for Chemical Additive(s).

(a) No chemical shall be introduced into a public water system without the specific written approval of the department obtained pursuant to this section.

(b) A proposal to add one or more chemicals to a public water system shall be submitted to the department in writing, accompanied by:

(1) A report prepared in accordance with Env-Dw 404.04; and

(2) A proposed plan for the treatment program prepared in accordance with Env-Dw 404.05.

(c) A proposal to add one or more chemicals to a public water system shall be consistent with the design and testing criteria specified in Env-Dw 404.06 and the safety criteria specified in Env-Dw 404.07.

Source. (See Revision Note at part heading for Env-Dw 404)  
#10611, eff 6-1-14

Env-Dw 404.04 Report for Chemical Additive(s) Proposal. The report required by Env-Dw 404.03(b)(1) shall include:

(a) The name and concentration of each chemical proposed to be used;

(b) A description of the equipment proposed to be used to add the chemical(s) to the water, including as applicable:

(1) The name of the manufacturer;

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- (2) The manufacturer's model number; and
- (3) The upper and lower dose limits of the equipment;
- (c) The present concentration of that chemical in the water supply, if any;
- (d) The testing protocol for daily determination of that chemical content of the raw and treated water, including:
  - (1) The location of all sampling points; and
  - (2) The tests that will be run on the samples; and
- (e) A description of the safety equipment available for protection of operators.

Source. (See Revision Note at part heading for Env-Dw 404)  
#10611, eff 6-1-14

Env-Dw 404.05 Plan for Chemical Additive(s) Proposal. The plan required by Env-Dw 404.03(b)(2) shall include:

- (a) Engineering plans for the installation of the equipment;
- (b) The location of the equipment in relation to other equipment; and
- (c) The point in the treatment process where the chemical(s) will be applied.

Source. (See Revision Note at part heading for Env-Dw 404)  
#10611, eff 6-1-14

Env-Dw 404.06 Design and Testing Criteria for Chemical Additive(s) Proposal.

- (a) Design and testing criteria for chemical additive(s) proposals shall be as specified in this section.
- (b) The chemical(s) shall be applied under positive pressure conditions.
- (c) Equipment shall be protected from siphon action with an approved anti-siphon device.
- (d) A sampling point shall be provided that is at least 75 feet downstream of the point of injection and piped back to the injection station.
- (e) Samples also shall be taken at locations throughout the distribution systems, as specified in the testing protocol submitted pursuant to Env-Dw 404.04(d).
- (f) In addition to tests performed by the operator, samples from the system shall be submitted as required by Env-Dw 700.

(g) Daily records of testing and dosage shall be:

- (1) Maintained as specified by the department pursuant to Env-Dw 700; and
- (2) Submitted to the department on a monthly basis, no later than the 15th day of the month following the month for which the report is submitted.

Source. (See Revision Note at part heading for Env-Dw 404)  
#10611, eff 6-1-14

Env-Dw 404.07 Safety Criteria for Chemical Additive(s) Proposal.

- (a) Safety criteria shall be as specified in this section.

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(b) Treatment systems that add a chemical on a continuous basis shall have at least 2 of the methods identified in (c), below, to prevent a chemical overfeed.

(c) The following methods to prevent chemical overfeed shall be acceptable:

- (1) Connection of the electrical circuit of the chemical feed pump to the electrical circuit of the main water pump;
- (2) Installation of a flow-measuring device with a common disconnect interfaced to the circuit powering the chemical feed pump;
- (3) Installation of a continuous-reading analytical device for that particular chemical feed with a disconnect interfaced to the chemical feed pump; or
- (4) Any other method for which there is an industry standard.

Source. (See Revision Note at part heading for Env-Dw 404)  
#10611, eff 6-1-14

Env-Dw 404.08 Inspection of Treatment Facilities.

(a) The department shall inspect treatment facilities at reasonable times.

(b) The supplier of water shall, upon request of the department:

- (1) Allow or provide access to all parts of the treatment facilities; and
- (2) Furnish all information and records necessary to complete the inspection.

Source. (See Revision Note at part heading for Env-Dw 404)  
#10611, eff 6-1-14

Env-Dw 404.09 Quality of Products and Workmanship. Where applicable, devices, products, and methods used in the installation, construction, and operation of treatment, distribution, and storage facilities and all other appurtenances to a public water system shall meet the specification criteria of the American Water Works Association, as required by Env-Dw 407.

Source. (See Revision Note at part heading for Env-Dw 404)  
#10611, eff 6-1-14

**Appendix A: State Statutes and Federal /Regulations Implemented**

Rule Section(s)	State Statute(s) Implemented	Federal Requirement(s) Implemented
Env-Dw 404.01 – 404.09	RSA 485:3, I; RSA 485:8	

**Appendix B: Incorporation By Reference Information**

Rule Section(s)	Title	Dated	Obtain at:
Env-Dw 404.01(a)	“Recommended Standards for Water Works”, Committee Report of the Great Lakes – Upper Mississippi River Board of State and Provincial Public Health and Environmental Managers and Sanitary Engineers.	2003	NH Department of Environmental Services office or <a href="http://www.leafocean.com/test/10st_atepreface.html#IDH_Title">http://www.leafocean.com/test/10st_atepreface.html#IDH_Title</a>