

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

PART Env-Dw 301 SMALL PRODUCTION WELLS FOR SMALL COMMUNITY WATER SYSTEMS

- Section Env-Dw 301.01 Purpose
- Section Env-Dw 301.02 Applicability
- Section Env-Dw 301.03 Definitions
- Section Env-Dw 301.04 Requirements for New Small Production Wells
- Section Env-Dw 301.05 Well Location Relative to Surface Water
- Section Env-Dw 301.06 Sanitary Protective Area
- Section Env-Dw 301.07 Preliminary Estimate of the Wellhead Protection Area and Proposed Refinement
- Section Env-Dw 301.08 Preliminary Contamination Source and Water Use Inventories
- Section Env-Dw 301.09 Known Contamination Source Evaluation
- Section Env-Dw 301.10 Proposal for Pumping Test and Water Quality Sampling Program
- Section Env-Dw 301.11 Preliminary Report
- Section Env-Dw 301.12 Criteria and Procedures for Approval of the Preliminary Report
- Section Env-Dw 301.13 Performing the Pumping Test and Water Quality Sampling
- Section Env-Dw 301.14 Establishing the Permitted Production Volume
- Section Env-Dw 301.15 Wellhead Protection Area Refinement
- Section Env-Dw 301.16 Contamination Source and Water Withdrawal Inventory Update and Revision
- Section Env-Dw 301.17 Contamination Control Program
- Section Env-Dw 301.18 Wellhead Protection Program
- Section Env-Dw 301.19 Construction Design
- Section Env-Dw 301.20 Final Report
- Section Env-Dw 301.21 Criteria for Approval of New Small Community Production Wells
- Section Env-Dw 301.22 On-Going Compliance with Wellhead Protection Program
- Section Env-Dw 301.23 Increasing the Permitted Production Volume
- Section Env-Dw 301.24 Reducing the Wellhead Protection Area
- Section Env-Dw 301.25 Hydrofracturing or Deepening an Existing Small Bedrock Production Well to Regain Lost Well Capacity
- Section Env-Dw 301.26 Replacing an Existing Small Community Production Well
- Section Env-Dw 301.27 Procedure and Criteria for Approval of Replacement Wells
- Section Env-Dw 301.28 Waivers

CHAPTER Env-Dw 300 WELL SITING

PART Env-Dw 301 SMALL PRODUCTION WELLS FOR SMALL COMMUNITY WATER SYSTEMS

Statutory Authority: RSA 485:8 and RSA 485:48

REVISION NOTE:

Document #9007, effective 10-19-07, readopted with amendments and renumbered former Part Env-Ws 378, entitled Site Selection of Small Production Wells for Community Water Systems, under a new subtitle as Part Env-Dw 301 entitled Small Production Wells for Small Community Water Systems. 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.

Document #9007 replaces all prior filings for rules formerly in Env-Ws 378. The prior filings for rules in former Env-Ws 378 include the following documents:

- #5541, eff 12-24-92
- #6521, eff 6-4-97
- #6920, INTERIM, eff 12-24-98, EXPIRES, 4-23-99;
- #6978, eff 4-21-99
- #8870, INTERIM, eff 4-21-07, EXPIRES: 10-18-07

Env-Dw 301.01 Purpose. The purpose of these rules is to establish procedures and standards for the development of new small production wells for small community water systems in order to ensure that these wells will be capable of consistently producing an adequate supply of water that meets drinking water quality standards.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.02 Applicability.

(a) These rules shall apply to small community water systems that:

- (1) Develop new small production wells;
- (2) Replace existing small production wells with new small production wells;
- (3) Hydrofracture existing small production wells; or
- (4) Deepen existing small production wells.

(b) An applicant for a new source of water for a new small community water system with a design flow and source capacity requirement established in accordance with Env-Ws 372.10 and Env-Ws 372.12, or successor rules in Env-Dw, that exceeds 57,600 gallons per day shall comply with the requirements of Env-Dw 302, Env-Ws 387, and Env-Ws 388, or successor rules in subtitle Env-Wq.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.03 Definitions.

(a) "Acceptable water quality" means water that does not violate ambient groundwater quality standards established by RSA 485-C:6 or rules adopted pursuant thereto.

- (b) "Applicant" means the supplier of water or the supplier's agent.
- (c) "Aquifer parameter values" means values of parameters which describe the physical properties of the aquifer such as transmissivity and hydraulic boundary conditions.
- (d) "Available drawdown" means the distance between the water level in the well casing and the uppermost productive water bearing zone, the pump intake, or the top of the screen, whichever distance is least.
- (e) "Community water system (CWS)" means "community water system" as defined in 485:1-a, I, namely "a public water system which serves at least 15 service connections used by year-round residents or regularly serves at least 25 year-round residents."
- (f) "Confined aquifer" means an aquifer in which groundwater is under pressures greater than the atmospheric pressure, which results in groundwater within a borehole rising to a level which is higher than the level at which water is first encountered, and which receives negligible recharge from overlying deposits during pumping.
- (g) "Conservative assumption" means an assumption made during analyses required for a new well siting which results in a larger wellhead protection area or lower permitted production volume, or both.
- (h) "Constant pumping rate" means a pumping rate that does not vary by greater than 5% after the first 6 hours of pumping.
- (i) "Contaminants" means substances that degrade the natural water quality as a result of human activities.
- (j) "Contamination" means the degradation of natural water quality as a result of human activities.
- (k) "Contributing area" means "contributing area" as defined in RSA 485-C:2, IV, namely "the land above a class of groundwater, which is the vertical projection of the defined class on the land surface." The term includes the area of land surface above the subsurface volume from which groundwater flows to a pumping well.
- (l) "Department" means the department of environmental services.
- (m) "Final report" means the report submitted to the department after the pumping test and water quality testing program is conducted at the proposed well site.
- (n) "Groundwater" means "groundwater" as defined in RSA 485-C:2, VIII, namely "subsurface water that occurs beneath the water table in soil and geologic formations."
- (o) "Known contamination source" means a land use from which contaminants are known to emanate and degrade groundwater quality.
- (p) "New small community production well" means a well that produces a permitted production volume of less than 57,600 gallons in any 24-hour period and can be described by any of the following:
- (1) Any newly constructed well for a small community water system.
 - (2) Any existing well that is not an active well for a small community water system, where approval in accordance with Env-Ws 372, or successor rules in Env-Dw, was not obtained;
 - (3) Any existing well for a small community water system where design approval has expired in accordance with Env-Ws 372.02(f) or successor rules in Env-Dw;

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

(4) Any existing well that has been removed from monitoring responsibility in accordance with Env-Ws 321.17 or successor rules in Env-Dw; or

(5) Any existing bedrock well that has been hydrofractured or deepened to increase its approved well capacity or to expand the water system.

(q) "Permitted production volume" means the maximum volume of groundwater allowed by the department to be withdrawn or pumped from a public water supply production well in a 24-hour period.

(r) "Porous media assumption" means groundwater flow that conforms to Darcy's Law, mainly flow through porous media which is laminar and of low velocity.

(s) "Potential contamination source" means human activities or operations that pose a risk that regulated contaminants might be introduced into the environment in such quantities as to degrade the natural groundwater quality. The term includes those land uses listed in RSA 485-C:7, II.

(t) "Preliminary report" means the report submitted to the department prior to conducting the pumping test and water quality program at the proposed well site.

(u) "Production well" means a well designed and constructed to withdraw groundwater for a community water system.

(v) "Pumping test and water quality sampling program" means the well testing program which includes conducting the pumping test and water quality sampling and analysis.

(w) "Pumping test production rate" means the constant pumping rate that is maintained throughout a pumping test which is used to establish the permitted production volume.

(x) "Regulated contaminant" means "regulated contaminant" as defined in RSA 485-C:2, XIII namely "any physical, chemical, biological, radiological substance or other matter, other than naturally occurring substances at naturally occurring levels, in water which adversely affects human health or the environment."

(y) "Replacement well" means "replacement well" as defined in RSA 485-C:2, XIII-a, namely "a new well installed to replace or back-up an existing well that operates and impacts water users and water resources in substantially the same manner as the well that is being replaced."

(z) "Small bedrock production well" means a production well with a permitted production volume of less than 57,600 gallons in any 24-hour period and which is exposed to and draws water from any type of consolidated material.

(aa) "Small community water system" means a public water system serving a population of 25-1,000 persons without street hydrant fire protection.

(ab) "Small overburden production well" means a production well with a permitted production volume of less than 57,600 gallons in any 24-hour period which is exposed to and draws water from any type of unconsolidated material, including but not limited to sand and gravel deposits. The term includes, but is not limited to, dug wells, tubular wells, well points, and gravel wells.

(ac) "Small production well" means a well that produces a permitted production volume of less than 57,600 gallons in any 24-hour period which is installed in either bedrock or overburden.

(ad) "Supplier of water" means a "supplier of water" as defined under RSA 485:1-a, XVI, namely "any person who controls, owns or generally manages a public water system."

(ae) "Surface water" means "surface waters of the state" as defined in RSA 485-A:2, XIV, namely "perennial and seasonal streams, lakes, ponds, and tidal waters within the jurisdiction of the state, including

all streams, lakes, or ponds bordering on the state, marshes, water courses, and other bodies of water, natural or artificial."

(af) "Test well" means a well used during a pumping test from which groundwater is withdrawn or pumped, which might or might not become the production well.

(ag) "Well" means any conveyance used to capture or withdraw water from the ground.

(ah) "Well capacity" means a well's contribution to the total design flow under system design approval in accordance with Env-Ws 372 or successor rules in Env-Dw.

(ai) "Wellhead protection area" means "wellhead protection area" as defined in RSA 485-C:2, XVIII, namely "the surface and subsurface area surrounding a water well or wellfield, supplying a public water system, through which contaminants are reasonably likely to move toward and reach such water well or wellfield." The term includes the contributing area for production wells which supply small community water systems.

(aj) "Wetlands" means "wetlands" as defined in RSA 482-A:2, X namely "an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal conditions does support, a prevalence of vegetation typically adapted for life in saturated soil conditions." Wetlands include swamps, marshes, bogs and similar areas.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.04 Requirements for New Small Production Wells.

(a) The applicant shall complete all of the following before connecting a newly constructed small production well to a small community water system (CWS):

- (1) Demonstrate that the well location complies with surface water and wetland related setbacks in accordance with Env-Dw 301.05;
- (2) Demonstrate that the land use within the sanitary protective area will be under the direct control of the supplier of water and that the area will be maintained in a natural state in accordance with Env-Dw 301.06;
- (3) Prepare a preliminary estimate of the wellhead protection area for the well and propose a method for refining the estimate in accordance with Env-Dw 301.07;
- (4) Prepare a preliminary contamination source and water use inventory in accordance with Env-Dw 301.08;
- (5) Identify and evaluate any known sources of contamination in accordance with Env-Dw 301.09;
- (6) Prepare a proposal for a pumping test and water quality sampling program in accordance with Env-Dw 301.10;
- (7) Submit a preliminary report prepared in accordance with Env-Dw 301.11 to provide, before significant resources are expended, an early assessment of the appropriateness of the site for a small community water supply well and to help ensure the work being proposed will be consistent with these and other department rules;
- (8) Submit a water conservation plan prepared in accordance with Env-Ws 390 or successor rules in subtitle Env-Wq;

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

- (9) Receive department approval of the preliminary report and water conservation plan in accordance with Env-Dw 301.12 and Env-Ws 390.12 or successor rules in subtitle Env-Wq;
 - (10) Upon receipt of department approval of the preliminary report, perform the pumping test and water quality sampling program in accordance with Env-Dw 301.13;
 - (11) Demonstrate that under existing land use and aquifer conditions, acceptable water quality can be continuously delivered to the small CWS provided that, for parameters which exceed secondary maximum contaminant levels under Env-Ws 310 through Env-Ws 316 or successor rules in subtitle Env-Dw, treatment or other management techniques may be used if approved by the department in accordance with Env-Ws 340 through Env-Ws 349 or successor rules in subtitle Env-Dw;
 - (12) Establish the permitted production volume in accordance with Env-Dw 301.14;
 - (13) Refine the wellhead protection area delineation in accordance with Env-Dw 301.15;
 - (14) Update and revise the contamination source and water use inventory in accordance with Env-Dw 301.16;
 - (15) Establish a contamination source control program in accordance with Env-Dw 301.17 for any known sources of contamination identified in accordance with Env-Dw 301.09;
 - (16) Establish a wellhead protection program in accordance with Env-Dw 301.18;
 - (17) Document that the construction of the well is in compliance with water well construction criteria in accordance with Env-Dw 301.19;
 - (18) Submit a final report to the department prepared in accordance with Env-Dw 301.20;
 - (19) Obtain approval of the new small production well in accordance with Env-Dw 301.21; and
 - (20) After new small production well approval has been obtained, obtain approval to connect the new small production well to the small CWS under Env-Ws 372 or successor rules in subtitle Env-Wq.
- (b) An applicant requesting an increase in the permitted production volume of an existing well currently connected to the water system shall comply with the requirements of (a), above.
- (c) Prior to hydrofracturing or deepening an existing small bedrock production well to regain lost well capacity, the applicant shall submit a request to the department in accordance with Env-Dw 301.25. This activity shall be exempt from the requirements described in (a), above, unless the department denies the request to hydrofracture or deepen the existing well in accordance with Env-Dw 301.25.
- (d) When a small CWS proposes to replace any previously-approved small production well, the applicant shall submit a request to the department in accordance with Env-Dw 301.26.
- (e) All work conducted to fulfill the requirements of Env-Dw 301 shall be completed by, or under the supervision of, an individual who can demonstrate compliance with the following:
- (1) By training and experience, is qualified to complete the work required by Env-Dw 301; and
 - (2) Possesses at least one of the following professional licenses:
 - a. Professional geologist license in accordance with RSA 310-A:130;

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

- b. Professional engineer license in accordance with RSA 310-A:18;
- c. Water system operator license in accordance with RSA 332-E:6;
- d. Water well driller license in accordance with RSA 482-B:5; or
- e. Pump installer license in accordance with RSA 482-B:5.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.05 Well Location Relative to Surface Water.

- (a) A well shall not be placed within 50 feet of the high water line of any surface water.
- (b) A well shall be located at least 50 feet from wetlands that are inundated with standing or flowing water for more than 30 continuous days.
- (c) A well shall not be subject to flooding at the 100-year recurrence interval. The applicant may fill to elevate the wellhead and pumping station for flood protection purposes, provided that all required permits for placing of fill within wetlands and flood plains have been obtained.
- (d) A copy of the Flood Insurance Rate Map, or a description of the elevation of the well in reference to the 100-year floodplain depicted on the nearest adjacent Flood Insurance Rate Map, shall be submitted in the preliminary report required by Env-Dw 301.11 depicting:
 - (1) The location of the proposed wells; and
 - (2) The land area within 1000 feet of the proposed well site.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.06 Sanitary Protective Area.

- (a) The purpose of the sanitary protective area is to provide an area in the immediate vicinity of the well within which there is minimal risk of groundwater contamination.
- (b) The sanitary radius area shall be a circle, centered on the well, with a radius based on the permitted production volume of the well as set forth in Table 301-1:

Table 301-1 Sanitary Protective Area Radii

<u>Permitted Production Volume</u> <u>(gallons in a 24-hour period)</u>	<u>Radius</u>
less than 14,400	150 feet
14,401 to 28,800	175 feet
28,801 to less than 57,600	200 feet

- (c) When more than one well is inside a sanitary protective area, then the individual sanitary protective areas for these wells shall be based on the combined permitted production volume of the wells.
- (d) The supplier of water shall own the land within the sanitary protective area, provided however, that

if the supplier does not own the land, the supplier shall control the land by perpetual easement, covenant, or similarly legally binding means.

(e) The sanitary protective area shall be maintained in a natural state at all times except for:

- (1) Limited land clearing and terrain alteration required for well access and construction of a pump house or other structure(s); and
- (2) Activities necessary for the maintenance of the well that do not pose a contamination risk to groundwater.

(f) The discharge of collected drainage from areas where fertilizer and pesticide have been applied or from roadways or developed areas to detention and retention ponds, infiltration strips, drainage swales, or any similar structure shall be prohibited in the sanitary protective area.

(g) No underground utilities shall be installed in the sanitary protective area except for potable water and electrical or communications conduits.

(h) A description of land use activities and how the sanitary protective area is, or will be, controlled by the supplier of water shall be presented in the preliminary and final reports.

(i) The description required by (h), above, shall include:

- (1) A municipal tax map or a survey map that identifies lot lines and the owner of each lot into which the radius extends and any public or private water supply wells located within 1,000 feet of the well, as required by Env-Dw 301.08;
- (2) The existing and proposed land uses and activities associated with the area;
- (3) The means by which the small CWS will obtain and maintain control of land uses in the sanitary protective area; and
- (4) A sketch of the well site within 500 feet of the well at a scale of one inch equals 100 feet or less, which shows:
 - a. The proposed well location;
 - b. All property lines and any easements;
 - c. All land uses, including any paths, trails, structures, storage, landscaping, or other alteration of the natural terrain;
 - d. Any surface water or wetlands, as required by Env-Dw 301.08;
 - e. The sanitary protective area; and
 - f. All stormwater discharge areas and drainage structures.

(j) Documentation of legal control of the sanitary protective area shall be provided in the final report.

Source. (See Revision Note at part heading for Env-Dw 301) #9007, eff 10-19-07

Env-Dw 301.07 Preliminary Estimate of the Wellhead Protection Area and Proposed Refinement.

(a) The purpose of estimating the wellhead protection area is to identify an area within which potential and known contamination sources shall be evaluated to determine the appropriateness of the well site.

(b) An estimate of the wellhead protection area, submitted with the preliminary report, shall be derived as follows:

(1) For small overburden production wells, except those in confined aquifers, by drawing a circle with a 4,000 foot radius around the well or, when sufficient data is available, by using the refinement method as specified in (e), below; and

(2) For small bedrock production wells and small overburden production wells in confined aquifers, by drawing a circle with a radius around the well based on the proposed permitted production volume as set forth in Table 301-2:

Table 301-2 Wellhead Protection Area Radii

<u>Permitted Production Volume (gallons)</u>	<u>Radius (feet)</u>
0 to 7,200	1,300
7,201 to 14,400	1,500
14,401 to 28,800	2,050
28,801 to 43,200	2,850
43,201 to less than 57,600	3,600

(c) A map of the well location and estimated wellhead protection area, at a scale of 1:24,000 or 1:25,000, which is an original or a color copy of a United States Geologic Survey (USGS) topographic map, or a copy of the map provided by the department as part of the contamination source and water use inventory described in Env-Dw 301.08, shall be presented in the preliminary report. The title, scale, and date of the quadrangle shall be included on the map.

(d) The applicant shall propose, in the preliminary report, to perform a refinement of the estimated wellhead protection area for inclusion in the final report.

(e) The wellhead protection area refinement method shall be as follows:

(1) For small overburden wells, except those in confined aquifers, the method shall be an analytical or numerical model which identifies the zone of contribution of the well under 180 days of continuous pumping without recharge from precipitation providing that the model's assumptions are not violated and that conservative estimates of aquifer parameters are used and the zone of contribution may be truncated at 4,000 feet; and

(2) For small bedrock production wells and small overburden production wells in confined aquifers, the refinement method shall be the same methodology used in (b)(2), above, to estimate the preliminary wellhead protection area and employing the permitted production volume produced by the pumping test performed in accordance with Env-Dw 301.13.

Source. (See Revision Note at part heading for Env-Dw 301) #9007, eff 10-19-07

Env-Dw 301.08 Preliminary Contamination Source and Water Use Inventories.

- (a) Preliminary contamination source and water use inventories of the wellhead protection area shall be:
- (1) Completed before the pumping test and water quality sampling program proposal required in accordance with Env-Dw 301.10 is developed;
 - (2) Included in the preliminary report;
 - (3) Revised and updated for the final report in accordance with Env-Dw 301.16; and
 - (4) Compiled from a search of the following information sources:
 - a. Records at the department;
 - b. Records at the municipality; and
 - c. A windshield survey of all properties within the wellhead protection area.
- (b) The contamination source inventory shall:
- (1) Identify and describe known and potential contamination sources in the wellhead protection area; and
 - (2) Include the following information for each known and potential source of contamination:
 - a. The site name and address;
 - b. The property owner's or operator's name, mailing address, and daytime telephone number;
 - c. For each known source of contamination, a description of the nature, extent and investigation, and remedial action status of the contamination; and
 - d. For each potential source of contamination, the type of potential contamination sources at the facility as described in RSA 485-C:7, II.
- (c) The water use inventory shall:
- (1) Identify water resources and uses within 1,000 feet of the proposed well, including:
 - a. Private wells;
 - b. Public wells; and
 - c. All surface water bodies and wetlands;
 - (2) Identify registered water withdrawals in the estimated wellhead protection area; and
 - (3) Include the following information:
 - a. A description of each private well, assuming that all developed lots not served by a public water system have private wells, including:
 1. The property address; and

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

2. The water uses observed during the windshield survey;
- b. A description of each public well including:
 1. The water system name and address;
 2. The well's federal identification number; and
 3. The average water use, in gallons per day; and
- c. A description of each water withdrawal registered in accordance with RSA 488, including:
 1. The name and address of the withdrawer;
 2. The type of use; and
 3. The average water use; and
- d. A description of each surface water body or wetlands, including:
 1. Name and type of water body or type of wetland;
 2. Location of the surface water or wetlands in relation to the proposed well; and
 3. Estimated size of the surface water or wetlands in square feet, acres, or acre-feet.

(d) A map, prepared in accordance with Env-Dw 301.06(i), showing the location of the contamination sources, water resources, and water uses inventoried shall:

- (1) Be presented in the preliminary and final reports; and
- (2) Include the following information:
 - a. The wellhead protection area estimated for the proposed well;
 - b. An original or clear color copy of the USGS topographic quadrangle map at a scale of 1:24,000 or 1:25,000;
 - c. The title of the quadrangle;
 - d. The scale of the quadrangle; and
 - e. The date of the quadrangle.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.09 Known Contamination Source Evaluation.

(a) The applicant shall review the applicable department site file(s) on each known contamination source identified in accordance with Env-Dw 301.08 and evaluate its potential to degrade water quality at the wellhead.

(b) The applicant shall collect additional water quality samples and increase the duration of the pumping test to address contamination sources with the potential to degrade water quality at the wellhead.

(c) The applicant shall present, in the preliminary report, a description of how these sites will be addressed by the pumping test and water quality sampling proposal required in accordance with Env-Dw

301.10.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.10 Proposal for Pumping Test and Water Quality Sampling Program.

- (a) The applicant shall present, in the preliminary report, a detailed proposal for:
- (1) Performing water quality sampling; and
 - (2) Conducting either a standard pumping test or an alternate pumping test.
- (b) The pumping test and water quality sampling program shall be conducted to gather the information necessary to:
- (1) Demonstrate that the proposed permitted production volume is sustainable;
 - (2) Demonstrate that acceptable water quality is attainable;
 - (3) Assess impacts; and
 - (4) Demonstrate the small CWS well capacity required by Env-Ws 372 or successor rules in subtitle Env-Dw.
- (c) An applicant for a new source of water for a new small CWS with a design flow requirement below 57,600 gallons per day, but with a source capacity requirement that exceeds 57,600 gallons per day, shall comply with the wellhead protection area refinement, pumping test and water quality testing requirements of Env-Dw 302.08, Env-Dw 302.11, and Env-Dw 302.12.
- (d) Unless subject to (c), above, a standard pumping test that meets the following criteria shall be completed:
- (1) The pumping of and discharge from the system's wells shall be conducted as follows:
 - a. The new well and any other well being pumped as part of this test shall be operated continuously at a discharge rate that does not vary more than $\pm 5\%$ after the first 6 hours of pumping;
 - b. The system's other wells shall be operated as necessary to demonstrate system capacity requirements under Env-Ws 372 or successor rules in subtitle Env-Dw;
 - c. The pumping test production rate shall produce at least the proposed permitted production volume for each new well;
 - d. The discharge rate shall be:
 1. Measured using a device capable of providing measurements accurate to within 5% of the discharge rate; and
 2. Measured every 15 minutes for the first 2 hours and at least once every hour thereafter;
 - e. Discharge measurements shall:
 1. Not be averaged over a period greater than one minute; and
 2. Include at least two readings collected and recorded for each measurement; and

- f. Pumped water shall be discharged outside the contributing area of operating wells so there is no effect on the aquifer's response to pumping;
- (2) The pumping test shall be conducted for at least 48 hours;
 - (3) Cessation of the pumping test after 48 hours may occur under the following circumstances:
 - a. The water level in the pumping well fluctuates less than one inch in any 2 hours for a period of 12 hours; or
 - b. A theoretical 180-day drawdown does not exceed 90% of the total available drawdown at the time of the test or 5 feet above the pump, whichever is less and is derived using the following methodology:
 - 1. Water level data shall be plotted as a semi-logarithmic plot of drawdown versus elapsed time, expressed in minutes elapsed since pumping began, presented on the logarithmic axis; and
 - 2. A straight line shall be:
 - (i) Drawn through the data on the semi-logarithmic plot with a slope based on the data points from the end of the pumping period; and
 - (ii) Used to extrapolate the drawdown for a time of 180 days, or 259,200 minutes, which shall be the theoretical 180-day drawdown;
 - (4) Water levels shall be measured as follows:
 - a. For each proposed new small community well, water level measurements and time shall be recorded:
 - 1. Just before pumping begins;
 - 2. After pumping starts, every 5 minutes for the first hour, and at least once every hour thereafter; and
 - 3. During the recovery period, so that at least 10 data points are recorded for the test well over a period of 24 hours or until the water level in the pumping well has recovered to 95% of the pre-pumping water level.
 - b. Water level measurements shall be made using equipment capable of measuring to the nearest 0.01 foot;
 - (5) Water levels in any surface water within 150 feet of the operating wells shall be measured using a water level staff gauge with gauge readings being taken just before pumping starts and at least every 12 hours thereafter;
 - (6) The operating schedule and water levels in private and public wells within 1,000 feet of the proposed new source well or wells shall be monitored, if permission has been obtained from the owner, to estimate the effect on these wells as required under Env-Dw 301.20(f);
 - (7) Requests to monitor wells pursuant to (6), above, shall be sent via certified mail with return receipts requested;
 - (8) On-site precipitation data shall be collected for the period beginning one week preceding

pumping through the recovery period; and

(9) On-site weather condition observations shall be recorded at least twice daily during pumping and recovery.

(e) When a standard pumping test is proposed, the proposal shall include the following:

- (1) The proposed pumping test production rate;
- (2) The methods, locations, and schedule for water level measurements;
- (3) A site sketch showing, and text justifying, the discharge location;
- (4) A site sketch showing the location of any surface water staff gauges and a description of their construction;
- (5) A description of the method and equipment that will be used to ensure a constant pumping rate is maintained;
- (6) A description of the discharge measurement method and schedule;
- (7) A description of how the system's other wells, if any, will be operated while the new well is being tested;
- (8) The anticipated operating schedule for nearby wells identified in Env-Dw 301.08(c);
- (9) Copies of notification letter which extend an offer to monitor water levels in nearby wells identified in (d)(7), above;
- (10) The anticipated pumping test duration and criteria for pump shut down; and
- (11) The name, telephone number, and mailing address of the person responsible for making the determination to cease pumping;

(f) When an alternate pumping test is proposed, the proposal shall include:

- (1) The information required pursuant to (b), above, for the standard pumping test; and
- (2) Information demonstrating that the program will meet or exceed the requirements for the standard pumping test; and

(g) The water quality sampling proposal shall include a description of how the applicant will:

- (1) Obtain one water sample from the well immediately prior to the cessation of pumping;
- (2) Store and transport the sample bottles to the laboratory;
- (3) Ensure that the water sample is analyzed for:
 - a. Those parameters required to be monitored in groundwater systems per Env-Ws 310 through 316 or successor rules in Env-Dw;
 - b. Radon; and
 - c. Microscopic particulate analysis as specified in (h), below, if the location of the proposed new source well meets one of the following criteria, unless exempted by (i), below:
 1. For overburden wells, if the source is placed within 100 feet of the normal high

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

water line of any surface water; or

2. For bedrock wells, if the source is placed within 200 feet of the normal high water line of any surface water;

(4) Ensure that the water sample is analyzed by a laboratory which:

- a. Has a current New Hampshire accreditation for all applicable drinking water categories;
- b. Uses approved drinking water methods; and
- c. Achieves all required method detection limits in accordance with Env-C 300; and

(5) For well sites with specific water quality concerns, including those related to known or potential contamination sources, perform additional sampling and analyses to ensure acceptable water quality.

(h) Samples for microscopic particulate analysis pursuant to (g)(3)c., above, shall:

(1) Be collected only after hourly screening of discharge water for a period of no less than 10 hours for pH, specific conductance, and temperature shows that the values do not vary by:

- a. More than 0.2 standard units for pH;
- b. More than 3 percent for specific conductance;
- c. More than 2 degrees Celsius for temperature; and

(2) Be analyzed in accordance with the USEPA 2004 Consensus Method for Determining Groundwaters Under the Direct Influence of Surface Water Using Microscopic Particulate analysis (MPA), MiC004B;

(3) Be screened for pH, specific conductance and temperature throughout the duration of sample collection once stabilization as determined pursuant to (1), above, has been achieved; and

(4) Be collected for analysis of pH, specific conductance, and temperature in the surface water closest to the proposed new source well at the same monitoring frequency as the discharge water.

(i) New source wells shall be exempt from sampling for microscopic particulates if the applicant demonstrates through site-specific observations and monitoring that:

(1) A continuous confining unit is present between the proposed new source well and the surface water; and

(2) Through water level monitoring performed during the pumping test in accordance with Env-Dw 302.11, a direct hydraulic connection does not appear to exist between the proposed new source well and the surface water.

(j) For any new source well that meets the criteria in (g)(3)c., above, and is not exempt from sampling under (i), above, the applicant shall collect a second sample for analysis for microscopic particulates during the first spring or fall that the source is on-line.

(k) The sample collected pursuant to (j), above, shall be collected as specified in (h), above.

Source. (See Revision Note at part heading for Env-Dw 301) #9007, eff 10-19-07

Env-Dw 301.11 Preliminary Report.

(a) A preliminary report, which shall provide a preliminary assessment of the appropriateness of the well site, shall be prepared and submitted to the department in writing.

(b) The preliminary report shall contain the following:

(1) The information and materials required in accordance with Env-Dw 301.05 through Env-Dw 301.10;

(2) The name of the project and a project description that includes:

a. The names, mailing addresses, and daytime telephone numbers of the following individuals:

1. The water system owner;
2. The owner of the well site;
3. The person responsible for responding to questions from the department regarding the preliminary report; and
4. The person responsible for performing the pumping test and water quality sampling program; and

b. A description of:

1. Who is or will be served by the system, including residences restricted by deed or covenant to seniors and designated as senior housing; and
2. Why a new well is being sited;

(3) The source capacity requirements for the CWS established in accordance with Env-Ws 372, or successor rules in subtitle Env-Dw, including:

- a. A description of the landscaping for the development;
- b. Irrigation water use requirements; and
- c. Estimated water use based on the water use categories specified by Env-Ws 372 or successor rules in subtitle Env-Dw;

(4) A description of the current use and 50 year history of the property where the new well is to be located.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.12 Criteria and Procedures for Approval of the Preliminary Report.

(a) The department shall approve or deny the preliminary report in writing within 30 days.

(b) The department shall approve the preliminary report upon determining that the following criteria are met:

- (1) The report contains all information required in Env-Dw 301.11;
- (2) The information contained in the report is complete and correct;

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

(3) The water conservation plan required by Env-Ws 390.10(a), or successor rules in subtitle Env-Wq, has been submitted to the department; and

(4) Public notification requirements required by Env-Ws 390.11, or successor rules in subtitle Env-Wq, have been completed.

(c) The department shall advise the applicant not to proceed further in the well siting process if information concerning known contamination sources evaluated in accordance with Env-Dw 301.09 indicates that an adequate contamination control program can not be implemented to prevent degradation of water quality at the well.

(d) The department shall advise the applicant if a waiver will be required from specific requirements based on the preliminary report information.

(e) Preliminary report approval shall expire 4 years from the date of approval if a final report has not been received by the department.

(f) Development of a new small production well following expiration of a preliminary report shall require the submission of the same information necessary for preliminary approval of a new small production well, and compliance with this part.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.13 Performing the Pumping Test and Water Quality Sampling.

(a) The pumping test shall be performed in accordance with the pumping test proposal approved in the preliminary report unless department approval is obtained to alter the pumping test program.

(b) The department shall be notified of the anticipated start date of the pumping test, at least one week prior to the start of testing, so that department personnel may conduct a site visit during the pumping test.

(c) The pumping test shall be postponed or prolonged if high recharge conditions prohibit the ability to use test data to meet the intent of this rule. This determination shall be made based on site specific conditions at the time of testing. Where postponing or prolonging the test is not feasible, justification shall be provided to the department and data adjusted using conservative assumptions to reflect average conditions.

(d) The pumping test shall not be performed if open pits used during well construction or any other depressions within 20 feet of the well contain standing water, or if the wellhead is flooded.

(e) The water quality sampling shall be performed in accordance with the proposal contained in the preliminary report, including any additional sampling required by the department due to the proximity of contamination sources, unless department approval to alter the proposal is obtained.

(f) The pumping test and water quality sampling performed shall be described in the final report.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.14 Establishing the Permitted Production Volume.

(a) The permitted production volume shall be demonstrated by the constant rate pumping test completed in accordance with Env-Dw 301.13.

(b) The permitted production volume shall be the volume produced by pumping at a constant

production rate for at least 24 continuous hours.

(c) The actual rate at which water is withdrawn from an approved well may vary provided the permitted production volume shall not be exceeded.

(d) The permitted production volume shall correspond with the sanitary protective area for the well.

(e) The combined permitted production volumes of all new sources for a new small CWS shall equal at least the source capacity requirements for the water system as established by Env-Ws 372.12 or successor rules in subtitle Env-Dw.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.15 Wellhead Protection Area Refinement.

(a) The estimated wellhead protection area presented in the preliminary report shall be refined by the method described in the preliminary report unless department approval to alter the proposal is obtained.

(b) A proposal to alter the method of wellhead protection area refinement shall be approved by the department if the method used results in a wellhead protection area that is technically equal to, or better than, the wellhead protection area that the original method would have produced.

(c) The refinement performed shall be documented in the final report.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.16 Contamination Source and Water Withdrawal Inventory Update and Revision.

(a) The preliminary inventories of contamination sources and water withdrawals shall be updated and revised in the following manner:

(1) If less than 90 days has elapsed since the preliminary inventories were completed, the applicant shall contact the department to determine if there are any new sites located in the refined wellhead protection area and, if there are, shall add these sites to the inventory in the final report; or

(2) If 90 days or more have elapsed since the preliminary inventory was completed, the applicant shall repeat all the same procedures performed for the preliminary inventory in accordance with Env-Dw 301.08.

(b) The updated inventory shall be included in the final report.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.17 Contamination Control Program.

(a) The applicant shall establish a contamination control program which minimizes the risk of contamination from known sources of contamination.

(b) The program shall include provisions and a schedule for remediation and/or monitoring of residual contamination from all known contamination sources in the wellhead protection area to ensure that contamination will not reach the well. A known contamination source in compliance with the conditions of a groundwater management permit issued in accordance with Env-Or 600 shall constitute an adequate control program.

(c) A description of the contamination control program and supporting evaluations and documentation shall be provided in the final report.

Source. (See Revision Note at part heading for Env-Dw 301) #9007, eff 10-19-07

Env-Dw 301.18 Wellhead Protection Program.

(a) The applicant shall establish a wellhead protection program that includes:

(1) Updating the contamination source inventory required in accordance with Env-Dw 301.16 at intervals no greater than 3 years;

(2) Sending groundwater protection educational material that the department has developed or approved to all persons residing in the wellhead protection area within 90 days of department approval of a well for existing small CWS or within 90 days of system start up for new small CWS and at intervals no greater than 3 years thereafter; and

(3) Sending the following information to each municipality in the wellhead protection area:

a. A description of the program and its purpose;

b. A copy of the wellhead protection area map;

c. An explanation and identification of the material being distributed pursuant to (2) above; and

d. The name and telephone number of the supplier of water, and a contact at the department, to whom questions can be referred.

(b) A description of the wellhead protection program shall be presented in the final report, including:

(1) A statement of who is responsible for implementing the wellhead protection program including the following:

a. Name and title;

b. Mailing address; and

c. Daytime telephone number;

(2) A statement as to whom the educational materials will be sent; and

(3) A copy of the education materials.

Source. (See Revision Note at part heading for Env-Dw 301) #9007, eff 10-19-07

Env-Dw 301.19 Construction Design. The construction of the wellhead shall comply with the standards established by the New Hampshire water well board pursuant to RSA 482-B. A copy of the well completion report prepared in accordance with We 800 shall be included in the final report.

Source. (See Revision Note at part heading for Env-Dw 301) #9007, eff 10-19-07

Env-Dw 301.20 Final Report. The final report shall contain all of the following information:

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

- (a) All information required by work conducted in accordance with Env-Dw 301.05 through 301.19;
- (b) The project description required in the preliminary report in accordance with Env-Dw 301.11, with updates and revisions that reflect changes in the project;
- (c) A description of the pumping test including the following:
 - (1) The data collected;
 - (2) A description of how each of the pumping test requirements in Env-Dw 301.10 were met;
 - (3) Identification and description of pumping test cessation in accordance with Env-Dw 301.10; and
 - (4) If an alternate pumping test was performed, all data and analyses as proposed in the preliminary report;
- (d) A description of the water quality sampling including the following:
 - (1) A report of the laboratory results for water quality;
 - (2) A description of water quality sample collection and transport methods, dates and times;
 - (3) A copy of current State of NH laboratory accreditation certificate issued to the laboratory(s) performing the analysis; and
 - (4) Identification of any subcontracted analyses, subcontracted laboratories and a copy of their state accreditation certificate;
- (e) A permitted production volume and a description of the means by which it was established in accordance with Env-Dw 301.14;
- (f) An estimate of the effect that pumping the permitted production volume from the well will have on the following:
 - (1) Water levels in private and public wells within 1,000 feet;
 - (2) Water levels in nearby surface waters;
 - (3) Existing groundwater contamination plumes; and
 - (4) Saltwater intrusion into the freshwater aquifer; and
- (g) Where a secondary maximum contaminant level is exceeded, a description of the proposed treatment or other management plan including the method and location of the treatment system in accordance with Env-Ws 310 through Env-Ws 330 or successor rules in Env-Dw.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.21 Criteria for Approval of New Small Community Production Wells.

- (a) Subject to (c) and (d), below, upon determining that the report required by Env-Dw 301.20 contains all the required information, that it is complete and correct and that all specified requirements of Env-Dw 301 and We 600 have been met, the department shall approve the new source well or wells and notify the applicant in writing within 30 days of receiving the final report.

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

(b) Within one week of the new small production well being connected to the water system and operational, the applicant shall submit a written request for a chemical monitoring program for conducting ongoing monitoring and reporting in accordance with Env-Ws 330-339 or successor rules in subtitle Env-Dw.

(c) If the final report is deficient in any of the criteria in (a), above, the applicant shall be so notified in writing within 30 days of receiving the final report.

(d) Approval of the proposed new small community production well shall be denied under the following conditions:

(1) One or more contamination source(s) is present in the wellhead protection area and the contamination control program prepared in accordance with Env-Dw 301.17 does not ensure that contamination will not degrade water quality at the well;

(2) The applicant failed to construct the wellhead in accordance with We 600;

(3) The applicant failed to obtain legal control of the sanitary protective area pursuant to Env-Dw 301.06 or obtain a waiver to the requirements of Env-Dw 301.06;

(4) The applicant failed to perform any activity or meet any of the requirements contained in these rules; or

(5) The applicant failed to obtain approval for the water conservation plan required by Env-Ws 390.12(c) or successor rules in Env-Wq.

(e) Approval for new wells shall lapse 4 years after issuance if the well is not connected to a water system approved in accordance with Env-Ws 372 or successor rules in Env-Dw.

(f) When approval for a new well has lapsed in accordance with (e), above, the applicant shall complete the following to regain approval to use the well:

(1) Provide information demonstrating the new well still meets the well siting requirements of Env-Dw 301.05 and Env-Dw 301.06;

(2) Provide a contamination source and water withdrawal inventory update revision in accordance with Env-Dw 301.16 to determine if there are any new potential sources of contamination;

(3) Establish a contamination control program in accordance with Env-Dw 301.17 if necessary, using information obtained pursuant to (2), above;

(4) Update the wellhead protection program in accordance Env-Dw 301.18 using information obtained pursuant to (2), above;

(5) Provide a water quality sample of the new well demonstrating compliance with Env-Ws 310 through Env-Ws 316, or successor rules in Env-Dw, which was collected within the last 6 months; and

(6) Provide an analysis using the information provided in (1) - (5), above, that demonstrates the new well will be able to meet the following requirements:

a. Source capacity requirements of Env-Ws 372 or successor rules in Env-Dw; and

b. Water quality requirements of Env-Ws 310 through 316 or successor rules in Env-Dw.

(g) The department shall reinstate approval for a new well for a period of 4 years within 30 days of

receiving information that demonstrates compliance with the requirements of (f), above.

(h) An approval for a new well issued pursuant to (f), above, shall be subject to expiration as provided in (e), above.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.22 On-Going Compliance with Wellhead Protection Program. The small CWS owner or owner's representative shall provide the following information on a form supplied by the department once every 3 years in accordance with Env-Dw 301.18:

- (a) Signature of the small CWS owner or owner's representative;
- (b) CWS federal identification number;
- (c) CWS name;
- (d) Town where the CWS is located; and
- (e) Date educational materials were distributed.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.23 Increasing the Permitted Production Volume.

(a) A well shall not be pumped at a rate which results in exceeding the permitted production volume determined in accordance with Env-Dw 301.14 without prior written approval from the department.

(b) A request to increase the permitted production volume shall require the submission of the same information necessary for approval of a new well, and compliance with this part.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.24 Reducing the Wellhead Protection Area.

(a) A wellhead protection area determined in accordance with Env-Dw 301.15 shall not be reduced in size without prior department approval.

(b) A request to reduce the wellhead protection area shall be based on data analysis from a pumping test that meets the intent of the alternate pumping test program in accordance with Env-Dw 301.10 or other appropriate site specific data.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.25 Hydrofracturing or Deepening an Existing Small Bedrock Production Well to Regain Lost Well Capacity.

(a) Subject to (b), below, an applicant proposing to hydrofracture or deepen an existing bedrock well to regain lost well capacity and meet the water supply requirements previously established pursuant to Env-Ws 372 or successor rules in subtitle Env-Dw shall comply with this section.

(b) An applicant proposing to hydrofracture or deepen a well to regain lost well capacity in order to expand the water system or increase the yield beyond that previously established pursuant to Env-Ws 372 or

successor rules in subtitle Env-Dw shall comply with all requirements for new wells as specified in Env-Dw 301.04(a).

(c) The applicant shall submit a request, in writing, to the department which contains the following information:

- (1) A description of the project including:
 - a. The applicant(s) name, mailing address, and daytime phone number;
 - b. The consultant(s) name, mailing address, and daytime phone number, if applicable;
 - c. The water system's name;
 - d. The federal identification number for the well; and
 - e. The water supply requirements for the system established during design approval in accordance with Env-Ws 372 or successor rules in subtitle Env-Dw;
- (2) A description of the sanitary protective area and any measures to be taken to achieve compliance with Env-Dw 301.06;
- (3) A description of the well in relation to the 100-year flood plain and any measures, if applicable, to be taken to elevate the wellhead;
- (4) A description of current water quality; and
- (5) A proposal for determining a sustainable yield from the well after hydrofracture or deepening.

(d) The department shall approve or deny a request to hydrofracture or deepen a small bedrock production well to replace lost well capacity within 30 days of receiving a complete request.

(e) The department shall approve the request to hydrofracture or deepen an existing small bedrock production well provided:

- (1) The information submitted is complete and correct; and
- (2) The applicant demonstrates all of the following:
 - a. The project is necessary to meet approved well capacity and will not be used to expand the water system or for water use beyond the approved well capacity;
 - b. The well will not be subject to flooding at the 100-year recurrence interval;
 - c. The sanitary protective area requirements established in Env-Dw 301.06 are met or improvements shall be made that will reduce the risk of contamination at the wellhead; and
 - d. There is no contamination in the vicinity of the well that is likely to reach the wellhead as a result of the increase in withdrawal.

(f) If the department denies a request to hydrofracture or deepen a an existing small bedrock production well because the applicant fails to demonstrate conditions listed in (e), above, the applicant shall meet all requirements for new small community production wells described in Env-Dw 301.04(a) prior to hydrofracturing or deepening the well.

(g) Upon deepening a small bedrock production well in accordance with the requirements of this

section, the applicant shall:

- (1) Purge the well for a period of at least 6 hours at maximum capacity of the well, but not in excess of the capacity previously established or permitted for the well;
- (2) After purging the well in accordance with (1), above, collect a water quality sample in accordance with Env-Dw 301.10(g)(3) and (4); and
- (3) Submit the results of the water quality samples collected in accordance with (2), above, to the department within 60 days of deepening the well.

(h) If necessary to comply with the water quality standards set forth in Env-Ws 310 through Env-Ws 316 or successor rules in subtitle Env-Dw, install water treatment in accordance with Env-Ws 375 or successor rules in subtitle Env-Dw within 60 days of obtaining the results of the water quality sampling results obtained in accordance with (g), above.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.26 Replacing an Existing Small Community Production Well.

(a) A small CWS siting a new well as a replacement to an existing small production well to regain lost well capacity and meet the source capacity requirements established in Env-Ws 372 or successor rules in subtitle Env-Dw, or to meet current water quality requirements established by Env-Ws 310 through Env-Ws 316 or successor rules in subtitle Env-Dw, shall comply with this section.

(b) A small CWS proposing to replace an existing small production well with a new well because of a decline in yield from the existing well or a failure of the water from the existing well to meet current water quality standards may do so in accordance with Env-Dw 301.27 if:

- (1) If applicable, the supplier of water submits supporting documentation which demonstrates that a decline in yield from an existing small production well prevents the system from maintaining the water supply source capacity requirements of existing customers;
- (2) If applicable, the supplier of water submits supporting documentation which demonstrates that treatment to meet current drinking water standards is not possible, feasible, or cost-effective;
- (3) The replacement well will not be used to expand the water system or for water use beyond the approved or established capacity of the well to be replaced;
- (4) The replacement well is placed in the same aquifer as that of the well being replaced;
- (5) The replacement well meets all setback requirements specified in Env-Dw 301.05; and
- (6) There is no contamination in the vicinity of the replacement well that is likely to reach the wellhead as a result of the change in the location of the well.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

Env-Dw 301.27 Procedure and Criteria for Approval of Replacement Wells.

(a) A small CWS proposing to replace any active small production well shall submit a request to the department that contains the following information:

- (1) A description of the project including:

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

- a. The applicant's name, mailing address, and daytime telephone number;
 - b. The consultant's name, mailing address, and daytime telephone number, if applicable;
 - c. The name of the water system and town in which the small CWS is located;
 - d. The federal identification number for the existing small production well being replaced;
and
 - e. The source capacity requirements for the system established during design approval in accordance with Env-Ws 372 or successor rules in subtitle Env-Dw;
- (2) A site plan and description of all land uses in the sanitary protective area of the replacement well and any measures taken to achieve compliance with Env-Dw 301.06;
 - (3) A description of the replacement well in relation to surface water, wetlands and the 100-year floodplain and any department-approved measures, if applicable, taken to elevate the wellhead;
 - (4) A description of current water quality in the existing well, as available;
 - (5) A plan for completing the following tasks:
 - a. Collection and analysis of water quality samples from the replacement well including the name of the state of New Hampshire accredited laboratory performing the analysis; and
 - b. Performance of a constant rate pumping test of the replacement well for at least 12 hours;
and
 - (6) A plan for abandonment of the well that is to be replaced in accordance with We 600.
- (b) The department shall approve the replacement of an active small community production well with a new small community production well, provided the supporting documentation and data submitted by the applicant demonstrates the following:
- (1) The applicant has provided water quality analysis results that indicate the water withdrawn from the replacement well meets all current drinking water standards in accordance with Env-Ws 310 through Env-Ws 316 or successor rules in subtitle Env-Dw;
 - (2) The applicant has demonstrated a sustainable yield for the replacement well and documented the total drawdown at the end of the test;
 - (3) A statement has been provided by a licensed well contractor that the existing well has been abandoned in accordance with We 600;
 - (4) The applicant has provided the department with a copy of the well completion report for the replacement well filed in accordance with We 800;
 - (5) The applicant has documented that sanitary protective area requirements, in accordance with Env-Dw 301.06, have been met, or improvements have been made to minimize the risk of contamination; and
 - (6) The replacement well shall be permitted for the approved capacity of the well being replaced or the sustainable yield as tested, whichever is less.

Source. (See Revision Note at part heading for Env-Dw 301)
#9007, eff 10-19-07

NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES

Env-Dw 301.28 Waivers.

(a) Env-Dw 301 applies to a variety of conditions and circumstances. It is recognized that strict compliance with all rules prescribed herein might not fit every conceivable situation.

(b) Suppliers of water may request a waiver of specific rules outlined in this part in accordance with (c) through (f), below.

(c) The person requesting a waiver shall submit the following information in writing to the department:

- (1) A description of the site to which the waiver request relates;
- (2) A reference to the specific section of the rules for which a waiver is being sought;
- (3) A full explanation of why a waiver is necessary;
- (4) Whether the waiver is needed for a limited duration and, if so, an estimate of when the waiver will no longer be needed;
- (5) A full explanation with supporting data of the alternatives, if any, proposed to be implemented or used in lieu of the section's requirements; and
- (6) A full explanation of how the waiver, including any proposed alternatives:
 - a. Would be consistent with the intent of RSA 485, and in particular with RSA 485:8 and RSA 485:48; and
 - b. Would adequately protect human health and the environment.

(d) The department shall grant a waiver if it determines that the intent of RSA 485 will be met and human health and the environment will be protected. In granting the waiver, the department shall impose such conditions, including time limitations, as the department deems necessary to ensure that the activities conducted pursuant to the waiver will be consistent with the intent of RSA 485 and protective of human health and the environment.

(e) No waiver shall be granted to any requirement specified in statute unless the statute expressly allows such requirement to be waived.

(f) The department shall issue a written response to a request for a waiver within 30 days of receiving a complete request. If the waiver is denied, the denial shall specifically set forth the reason(s) for the denial.

Source. (See Revision Note at part heading for Env-Dw 301) #9007, eff 10-19-07

APPENDIX

Rule Section(s)	State Statute(s) Implemented
Env-Dw 301.01 - 301.27	RSA 485:2,V; RSA 485:3, IX and XII; RSA 485:8; RSA 485:48
Env-Dw 301.28	RSA 541-A:22, IV