

**STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH
DRINKING WATER SECTION**

GENERAL TERMS FOR WELL USE APPROVAL

Effective Date: 02/01/2009

This document outlines requirements that must be followed after a Well Site Suitability Certification has been issued by the Department of Public Health (DPH) in order for the DPH to consider a Well Use Approval.

General Terms

(1) A groundwater diversion permit from the State of Connecticut Department of Environmental Protection (DEP) may be required for any well that will increase a public water system's potential maximum withdrawal rate, including irrigation, in excess of 50,000 gallons during any 24-hour period or is part of a system that already exceeds this withdrawal rate. The well owner must contact the DEP in writing with a copy to the DPH regarding this requirement. New wells replacing existing wells already registered with the DEP may be exempt.

- (2) Immediately upon completion of drilling, the following must be done:
- a. The well must be flushed to sufficiently clear the water of cuttings in accordance with Section 19-13-B51k(a) of the Regulations of Connecticut State Agencies (RCSA),
 - b. The well must be disinfected in accordance with Section 19-13-B51k(c) of the RCSA, and
 - c. The well casing must be sealed in a sanitary manner to protect the well from the entrance of surface water and foreign matter in accordance with Section 19-13-B51f(e) of the RCSA.

(3) Prior to the DPH issuing a Well Use Approval, a yield test must be performed by a well contractor in accordance with Section 19-13-B51k(b) of the RCSA. Section 19-13-B51b(2) of the RCSA defines well contractor as "any person, firm or corporation drilling or constructing a water supply well." The minimum well yield test duration shall be in accordance with the table below:

Anticipated Withdrawal Rate of Well (gpm)	Minimum Duration of Yield Test
a.) Less Than 10	Minimum time necessary to achieve drawdown stabilization for the final 12 hours of the yield test ¹
b.) 10 to 50	36 hours ¹
c.) Greater Than 50	72 hours ¹
d.) All CPCN ³ Community Wells	72 hours ²
e.) All CPCN ³ Non-Community Wells	Refer to a.) through c.) above

1. Pursuant to Section 19-13-B51k(b) of the RCSA

**STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH
DRINKING WATER SECTION**

GENERAL TERMS FOR WELL USE APPROVAL

2. Pursuant to Section 16-262m of the RCSA
3. Certificate of Public Convenience and Necessity for Small Water Companies

Section 19-13-B51k of the RCSA requires that pumping be continuous during the yield test at a constant rate with a stable drawdown for at least a 12-hour period prior to the completion of the test. A community public water system well constructed as part of a Certificate of Public Convenience and Necessity for Small Water Companies pursuant to Section 16-262m of the RCSA must be pumped at a constant rate with a stable drawdown for at least a 24-hour period.

Stabilization as defined in Section 25-32d-1a(32) of the RCSA means a condition measured during a pumping test when no more than a total of 0.25 feet of drawdown occurs over the last twelve hours prior to completion of the test or, where drawdown cannot be determined to that accuracy due to equipment inadequacy, no more than a total of 1.0 foot. If these criteria cannot be met, additional information will need to be provided to justify why the drawdown is considered stable. If stabilization cannot be achieved for gravel wells, then the alternative procedure outlined in Section 25-32d-4(b)(3)(C) of the RCSA should be followed.

Public water systems which are required to submit a water supply plan in accordance with Section 25-32d-2 of the RCSA must conduct simultaneous yield tests for all wells located in a wellfield in accordance with Sections 25-32d-4(b) and 25-32d-4(b)(3) of the RCSA. In accordance with Sections 16-262m-8(d)(3)(D) and 16-262m-8(d)(4) of the RCSA, simultaneous yield tests will be required in certain cases for wells which are constructed as part of a Certificate of Public Convenience and Necessity for Small Water Companies and which are located in close proximity of each other and subject to interference. For all other new wells, simultaneous yield tests should be performed between the new well(s) and any existing wells with sanitary radii that overlap the sanitary radius of the new well(s) and any existing well which is demonstrated to be hydraulically connected with the new well(s).

(4) Water quality samples must be collected and analyzed for the parameters listed in Section D of the DPH's *Well Water Quality and Quantity Suitability Application*. Sampling for water quality testing should be conducted near or at the end of the yield test.

(5) Upon completion of yield and water quality testing, the following completed documents and information must be submitted to the DPH for review:

- a. *Public Water System General Application for Approval or Permit* (available at www.ct.gov/dph),
- b. *Well Water Quality and Quantity Suitability Application* (available at www.ct.gov/dph),
- c. Well Drilling Permit,
- d. Well Drilling Completion Report,
- e. DPH Well Yield Test Log (available at www.ct.gov/dph) or equivalent,
- f. Any pertinent hydrogeologic data and information regarding any water production impacts on other wells in the proximity of the proposed well,

**STATE OF CONNECTICUT DEPARTMENT OF PUBLIC HEALTH
DRINKING WATER SECTION**

GENERAL TERMS FOR WELL USE APPROVAL

- g. Well discharge piping and appurtenant information including, at a minimum, the following:
1. make and model of well cap or schematic/detail of sanitary seal (Note: only well caps meeting or equivalent to the Water Systems Council's PAS97 (04) Standard should be used),
 2. make and model of pitless adapter if applicable (Note: only red brass or stainless steel pitless adapters meeting or equivalent to the Water Systems Council's PAS97 (04) Standard should be used. Any below grade pipe fittings (i.e. nipples) connected to the pitless adapter should be of the same material.),
 3. type and size of well discharge piping (Note: discharge piping should be continuous from the pitless adapter to the well house or first building served. Suitable provisions should be made for accessibility and location of any below grade fittings that may fail/leak such as unions and reducers.),
 4. plans of well house/pit structure including location of any floor drains if applicable, and
 5. plan/schematic showing well discharge piping and connection to distribution system and locations of sample taps, valves, meters, etc.
- h. Plans and specifications for proposed treatment (if any). Note: Section 19-13-B102(d)(2) of the RCSA requires approval of plans and specifications by the DPH prior to construction or installation of any treatment system.

Note: for CPCN projects items g. and h. shall be included with the Phase II application.

(6) Upon installation and prior to making the well water available for use, the DPH must be contacted to make arrangements for an inspection to review the well construction, piping and appurtenant arrangement, and treatment equipment (if any). The inspection must be completed in order for the DPH to consider issuing a Well Use Approval as required per Section 19-13-B51I of the RCSA.