



NEW YORK STATE DEPARTMENT OF HEALTH

Bureau of Water Supply Protection

Flanigan Square, 547 River Street, Troy, New York 12180-2216

INDIVIDUAL WATER SUPPLY WELLS - FACT SHEET #6 GUIDANCE FOR CODE ENFORCEMENT OFFICIALS

This fact sheet provides guidance for Code Enforcement Officials (CEO) to consider when issuing building permits and certificates of occupancy. In order to ensure that property owners have safe reliable drinking water, water wells must be constructed to ensure long term water yield and reduce the risk of contamination entering the water well. Improperly constructed wells can easily transport contaminants to the aquifer and are a health risk.

Residential Code - Section RP2602.1.1 Individual water supply sources: "Individual water supply sources (private wells) shall be installed by a well driller registered with the Department of Environmental Conservation in accordance with applicable Department of Health and Department of Environmental Conservation regulations."

Well Driller Registration - Environmental Conservation Law §15-1525: Requires persons engaged in the business of water well drilling to be registered with the Department of Environmental Conservation (DEC). Water well drilling includes any excavation for the purpose of obtaining water, which includes drilled wells, dug wells, springs, and "well points. An on-site supervisor of the water well installation activities shall be "certified" (i.e. has passed a two-part licensing exam by the National Ground Water Association or equivalent).

Well Construction - 10NYCRR Part 5, Appendix 5-B, "Standards for Water Wells": Serves as the reference standard for construction of all new and replacement individual water wells. Approvals for deviations from the standards can only be granted by and at the discretion of the county health department or NYS District Office (D.O.). Deviations may be approved under well permit programs in counties with such, and by specific waiver in other counties or D.O.'s. CEOs should not accept deviations from Appendix 5-B without county or D.O. approval. A complete version of Appendix 5-B can be found at: <http://www.health.state.ny.us/nysdoh/water/part5/appendix5b.htm>

COMPLIANCE WITH WELL REGULATIONS AND WELL DRILLER REQUIREMENTS

The following are key items for CEOs to verify regarding the well driller and well construction prior to issuing a building permit or certificate of occupancy. A checklist that CEOs may use when inspecting an individual water supply is also available at <http://www.health.state.ny.us/nysdoh/water/main.htm>.

Well Driller Regulations: The following DEC Well Driller Law requirements should be verified before a certificate of occupancy is issued for a new building.

1. The well driller is presently **registered** with the DEC.
2. A **Well Completion Report** is completed and available. This report is required to be submitted to DEC and the water well owner.

The DEC Division of Water may be contacted for questions on well driller requirements and compliance at 1-877-472-2619 or 518-402-8291. Well drillers that are not registered or otherwise not in compliance with these requirements can be referred to the DEC. A list of registered well drillers can be found at http://www.dec.state.ny.us/website/dow/driller_ext.html.

Well Location and Separation Distances: According to subsection RP2602.1.1.3 of the *Residential Code of New York State*, wells shall be located an appropriate distance from known sources of contamination. The table below is a list of required separation distances from wells to the most commonly encountered contaminant sources. For a full list of separation distances see Table 1 in Appendix 5-B. Proposed separation distances must meet Appendix 5-B requirements and should be verified before a building permit is issued for a new building. In addition, the well location must not be prone to flooding.

Contaminant Source	Distance (Feet)*
Wastewater treatment absorption systems located in coarse gravel or in the direct path of drainage to a well	200
Seepage pit (following septic tank)	150
Absorption field or bed	100
Septic tank, aerobic unit, watertight effluent line to distribution box	50
Stream, lake, watercourse, drainage ditch, or wetland	25

*Note: Separation distances from contaminant sources shall be increased by up to 50% if aquifer water enters the well at less than 50-feet below grade. If the increased separation distance is not available, additional protective measures should be provided as described in NYSDOH Fact Sheet #1 - "Use of 'Additional Measures' in Water Well Siting and Construction".

ADDITIONAL CONSIDERATIONS

Well Construction: These details may be verified during site inspection and/or upon review of the *NYSDEC Well Completion Report*:

1. **Well depth** and **well casing length**. Casing shall extend at least 1-foot above grade and 19 feet below grade.
2. Well is secured with a watertight and vermin proof **well cap**.
3. **Grout** is installed to fill the annular space around the casing (except in caving sand or gravel) to establish a watertight seal around the casing to the ground surface.
4. Well area is **graded** to eliminate ponding and direct surface water away from the well.
5. **Well yield** is determined and recorded before a new well is put into use.

Dug Wells and Well Points: The traditional stone and brick wells and driven point wells are not acceptable under Appendix 5-B. For more information on these types of sources refer to Fact Sheet #5 - "Dug Wells, Springs, and Points".

Abandoned Wells: It is recommended to check the site for previously constructed wells that have been abandoned due to inadequate or non-existent water production. These abandoned wells should be properly decommissioned as described in Fact Sheet #4 - "Decommissioning Abandoned Wells".

For questions concerning this Fact Sheet, a copy of Appendix 5-B, or other Fact Sheets:

Contact your Local Health Department

or

Residential Sanitation Section
Bureau of Water Supply Protection
New York State Department of Health
(518) 402-7650 or FAX (518) 402-7659
E-mail: bpwsp@health.state.ny.us

INDIVIDUAL WATER SUPPLY WELL CHECKLIST FOR CODE ENFORCEMENT OFFICIALS

This checklist is produced by the New York State Department of Health (NYSDOH) if Code Enforcement Officials wish to use it when inspecting an individual water supply and issuing a building permit or a certificate of occupancy. This checklist is for code enforcement use and does not need to be submitted to any agency. The regulation governing water well standards for individual water supply is 10 NYCRR Appendix 5-B. A complete version of Appendix 5-B can be found at <http://www.health.state.ny.us/nysdoh/water/part5/appendix5b.htm>. NYSDOH Fact Sheet 6 – “Guidance for Code Enforcement Officials”, should also be reviewed when using this checklist.

Name of property owner:	
Address:	
Phone:	Fax:
Date of inspection :	
Local or Town Permit Number:	

MANDATORY FOR COMPLIANCE WITH THE RESIDENTIAL BUILDING CODE

☐ **Department of Environmental Conservation (DEC)
Registered Well Driller:**

The well driller must be registered with the DEC. A current registration sticker, like that shown here, is to be located on the left front fender of the drill rig. The style and/or color of this sample sticker may change on a yearly basis.



☐ **Well Completion Report:**

The well completion report must be submitted to the DEC and the well owner. Details on the well completion report must include: well depth, casing length, depth and type of grout, screen type (if applicable), well yield, pump type, etc. On the reverse side is an example of a well completion report and where each item can be found.

☐ **Well Location and Separation Distances:** The separation distances from the water well to potential contaminant sources shall be adhered to. The table below is a list of required separation distances from wells to the most commonly encountered contaminant sources. Refer to Appendix 5-B for a full list of separation distances. In addition, the well shall not be prone to flooding or ponding of surface water.

Contaminant Source	Distance (Feet)
Wastewater treatment absorption systems located in coarse gravel or in the direct path of drainage to a well	200
Seepage pit (following septic tank)	150
Absorption field or bed	100
Septic tank, aerobic unit, watertight effluent line to distribution box	50
Stream, lake, watercourse, drainage ditch, or wetland	25

ITEMS RECOMMENDED FOR VERIFICATION

☐ On-Site Supervisor:

A certified on-site supervisor must be present onsite during the water well installation activities. The certified supervisor must carry documentation showing completion of the two-part licensing exam by the National Ground Water Association (or equivalent).

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION			
(1) COUNTY <u>Oneida</u>		(3) DEC Well Number	
(2) TOWN <u>Barneveld</u>			
WATER WELL COMPLETION REPORT			
(4) OWNER		LOG *	
(5) ADDRESS		Ground Surface EL. <u>810</u> ft. above sea level	
(6) LOCATION OF WELL (See Instructions On Reverse) Show Lat/Long if available and method used: <input checked="" type="checkbox"/> GPS <input type="checkbox"/> Map Interpolation		Top Of Casing is located <u>+2</u> ft. above (+) or below (-) ground surface	
(7) DEPTH OF WELL BELOW LAND SURFACE (feet) <u>234'</u>	(8) DEPTH TO GROUNDWATER BELOW LAND SURFACE (feet) <u>56'</u>	DATE MEASURED <u>3/31/03</u>	
CASINGS			
(9) DIAMETER <u>6</u> in.	(10) LENGTH <u>220</u> ft.	TOP OF WELL	
(11) GROUT TYPE / SEALING <u>Pentonite/Drive Shoe</u>	(12) GROUT / SEALING INTERVAL FROM <u>0</u> TO <u>20</u>	Topsoil	
SCREENS			
(13) MAKE & MATERIAL <u>na</u>	(14) OPENINGS	Grout	
(15) DIAMETER	(16) LENGTH	5'	
(17) DEPTH TO TOP OF SCREEN, FROM TOP OF CASING (feet)		Fine sand	
		25'	
		Gray Clay	
		50'	
YIELD TEST			
(18) DATE <u>3/31/03</u>	(19) DURATION OF TEST <u>2 hours</u>	Brown fine sand	
(20) LIFT METHOD <input type="checkbox"/> Pump <input checked="" type="checkbox"/> Lift <input type="checkbox"/> Bail	(21) STABILIZED DISCHARGE (GPM) <u>3.0</u>	162'	
(22) STATIC LEVEL PRIOR TO TEST (feet/inches below top of casing) <u>58'</u>	(23) MAXIMUM DRAWDOWN (stabilized) (feet/inches below top of casing) <u>63'</u>	Gray sand & Clay	
(24) RECOVERY (Time in hours/minutes) <u>1 hour</u>	(25) If any water produced during the test discharged away from immediate area? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	206'	
PUMP INSTALLATION			
(26) PUMP INSTALLED? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	(27) DATE <u>4/28/03</u>	(28) PUMP INSTALLER	
(29) TYPE <u>Submersible</u>	(30) MAKE <u>Gould</u>	(31) MODEL <u>5G305422</u>	
(32) MAXIMUM CAPACITY (GPM) <u>5.0</u>	(33) PUMP INSTALLATION LEVEL FROM TOP OF CASING (Feet) <u>232'</u>	Gray Sand	
(34) METHOD OF DRILLING <input type="checkbox"/> Rotary <input checked="" type="checkbox"/> Cable Tool <input type="checkbox"/> Other	(35) USE OF WATER (See Instructions for choices) <u>Domestic</u>	220'	
(36) DATE DRILLING WORK STARTED <u>3/16/03</u>	(37) DATE DRILLING WORK COMPLETED <u>3/31/03</u>	Gray Limestone	
(38) DATE REPORT FILED <u>5/23/03</u>	(39) REGISTERED COMPANY	234'	
(40) DEC REGISTRATION NO. <u>NYRD</u>	(41) CERTIFIED DRILLER (Print name)	BOTTOM OF HOLE	
(42) CERTIFIED DRILLER SIGNATURE			
* Show log of geologic materials encountered with depth below ground surface, water bearing beds and water levels in each; casings; screens; pump; additional pumping tests and other matters of interest, e.g., water quality (sulphur, salt, methane). Describe repair work. Attach separate sheet if necessary.			
NYSDEC COPY			
LOCATION SKETCH - Indicate north			

☐ Well Cap

All wells shall have a properly vented, watertight, vermin proof well cap. Appendix 5-B.5 (g)

☐ Well depth

☐ Grout

Appendix 5-B.3(b) and Table 2 (if applicable)

☐ Casing

Appendix 5-B.3(b) and Table 2

☐ Yield

Appendix 5-B.4

☐ Well Pump

Appendix 5-B.5

☐ Well Screen

Appendix 5-B.3(b)(19) and Table 2 (if applicable)

More electronic copies of this checklist and supporting fact sheets can be obtained at

<http://www.health.state.ny.us/nysdoh/water/main.htm>

or by contacting your Local Health Department or the Bureau of Water Supply Protection, Residential Sanitation Section at bpwsp@health.state.ny.us