

Part 4
CONSTRUCTION OF WELLS AND THE WITHDRAWAL OF
GROUNDWATER

§ 26-401. Purpose. [Ord. 02-05-04, -/-/2002, § 1]

The purpose of this Part is to ensure that new wells constructed in New Britain Township are able to provide a reliable, safe and adequate supply of water to support the intended use within the capacity of available groundwater resources. Also, it is to ensure that new wells do not infringe upon the performance of existing wells. Lastly, it is to provide an opportunity to collect accurate information on the aquifers in the Township.

§ 26-402. Severability. [Ord. 02-05-04, -/-/2002, § 2]

If any sentence, clause, section or part of this Part is for any reason found to be unconstitutional, illegal or invalid, such unconstitutionality, illegality or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections or Parts of this Part. It is hereby declared as the intent of the New Britain Township Board of Supervisors that this Part would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

§ 26-403. Applicability. [Ord. 02-05-04, -/-/2002, § 3]

1. No person, firm, corporation or other entity within the Township shall withdraw groundwater for any purpose by use of a well, except as permitted by this Part.
2. No building permit for a new residential building or nonresidential building or addition to a building which is to be served by a new well, shall be issued unless the well intended to serve the building has been drilled, tested and certified by a licensed state laboratory to be in compliance with this Part.
3. This Part shall apply to any and all situations where a new well is to be drilled for an existing use and where a building permit and/or occupancy permit is required by the New Britain Township Zoning Ordinance [Chapter 27].

§ 26-404. Permit Procedures. [Ord. 02-05-04, -/-/2002, § 4]

1. Prior to commencing the construction of a well, the owner or agent shall obtain a well drilling permit from New Britain Township in accordance with the following:

- A. The required drilling, pump testing and water quality analysis shall be completed in compliance with the standards herein, prior to the issuance of a building permit to verify adequate water supply is available for the lot and water is potable.
- B. There are two phases of a well permit. Phase I consists of the permit requirements for drilling the well. Phase II consists of sampling and analysis of the water quality.

(1) Phase I Drilling Requirements.

(a) The following information shall be shown on a plot plan of the property and submitted with the Township's well permit application:

- 1) One hundred foot isolation distance for the proposed well to verify compliance with the regulations of Pa. Title 25 Chapter 73, Standards for Sewage Disposal Facilities.
- 2) Location of all existing or proposed on-site sewage disposal systems.
- 3) Location of dwelling and utility services for the lot.

(b) In order to be certified for use for a single-family dwelling, a well shall have a production of not less than six gallons per minute as certified by a licensed well driller. If less than six gallons per minute yield is established, such a well may still be certified for use if sufficient storage is provided to meet the calculated peak demand. In no case shall a well yielding less than two gallons per minute be certified for use by the Township.

(c) Each proposed well for a single-family dwelling shall be evaluated through a two-part pump test comprised of a peak demand test and a constant rate pump test. Such pumping tests and any required storage shall be calculated in accordance with the New Jersey Geological Survey Groundwater Report Series No. 1, Two-Part Pump Test for Evaluating the Water Supply Capabilities of Domestic Wells, as prepared by Jeffrey L. Hoffman and Robert Canace for the New Jersey Geological Survey. The domestic well worksheet contained in the above-referenced report shall be

submitted to the Township for approval prior to issuance of any building permits.

(2) Phase II Water Quality Analysis Requirements.

- (a) Samples shall be obtained from the well at the termination of pump testing to demonstrate drinking water quality conforming to this section. Additional or specialized analysis should be discussed with the Township Engineer prior to sampling for the purposes of streamlining the permitting process; however, said discussion shall not be construed as final approval of the proposed testing.
- (b) All samples shall be collected, transported and analyzed in accordance with USEPA and PADEP protocol for drinking water. Sample testing shall be performed by a laboratory certified by the commonwealth to perform drinking water analysis. Laboratory reports shall contain sufficient quality assurance and quality control data to explain any analysis and reporting conditions or deficiencies.
- (c) Water quality must comply with currently published USEPA National Primary and Secondary Drinking Water Standards and Health Advisories.
- (d) Water quality testing shall include, at a minimum, the following parameters, total coliform, nitrate/nitrite, pH, iron, manganese, lead, chloride, hardness, total dissolved solids, surfactants (detergents), volatile organic compounds — Group 1 (VOC1) + 10 unknowns¹, MTBE, herbicides — Group 1 (H1) and pesticides — Group 3 (P3).
- (e) The applicant shall perform a survey to identify and evaluate potential sources of contamination that may impact water quality in the proposed well(s) and shall perform additional sampling and analysis as may be required to assure water quality is satisfactory for the protection of human health and the environment.
- (f) Additional sampling and analysis will be required to quantify any observed objectionable effects resulting

1. A library search for tentatively identified compounds (TICs). Additional analysis will be required if TICs are discovered. Group 1 (VOC1), etc., refers to PADEP categories of contaminants.

from the quality of the water including, but not limited to, odor, color, foaming, staining, scaling and sedimentation.

- (g) A well that does not meet the above standards will be required to meet them through adequate treatment facilities. After treatment facilities are installed, the applicant shall have the water supply tested again.
- (h) The following information shall be submitted to the Township with the water quality report:
 - 1) The report from the laboratory shall contain the name, license number and address of the laboratory.
 - 2) Depth and diameter of the well, including the ground elevation at the well head.
 - 3) Drilling method and type of casing and grouting used.
 - 4) Type of treatment and storage, if applicable.
- (i) A bacterial test shall be performed on the well after installation of the house plumbing, but within 30 days of requesting issuance of an occupancy permit for the dwelling. The guidelines set forth by the Bucks County Department of Health shall be followed for disinfecting a contaminated well.

§ 26-405. General Well Construction Standards. [Ord. 02-05-04, -/-/2002, § 5]

1. All well construction shall be in accordance with the construction requirements set forth by the PADEP Public Water Supply Manual, latest edition and as contained in this Part. If there is a conflict between the requirements of the PADEP and the requirements of this Part, the more restrictive shall be applicable.
2. When drilling or increasing the depth of a well, an accurate well drilling log shall be maintained. This log shall contain the following information:
 - A. Interval. The depth in feet below a datum level such as ground level or top of casing through which the drill is advancing.

- B. Geologic Description. A description of the rock type penetrated through the particular interval. The description shall include such things as color, texture, rock type and geologic name, in known.
 - C. Yield. The total yield of water at the base of the interval last described.
 - D. General Comments. Includes anything that the driller finds noteworthy, i.e., water bearing zones, artesian conditions, change in pressure, loss of fluid, etc.
3. The pump shall be so located and designed as to make the use of a pump pit unnecessary. Pitless adapters shall conform to the standards set forth by the PADEP.
 4. The space between the pump column and the casing of each well shall be provided with a vent which shall be protected with an elbow facing downward or mushroom type head located at least 18 inches above flood levels. All vents shall be screened to prevent the entry of insects.
 5. The casing shall be temporarily capped and any open space covered until the well has been grouted and the pump installed. The cap should be either threaded onto the casing or be a friction type device which locks onto the outside of the casing.
 6. The well head shall be constructed so as to assure the maximum protection of the well and to exclude entry of any contaminant. All wells shall be cased to protect against contamination. Water bearing formations that are known to be contaminated or identified as being in danger of contamination shall be sealed off with casing and grout. Sealing shall be accomplished by a method approved by the PADEP.
 7. Completed wells shall be properly capped with sanitary seals to prevent the entry of contamination.
 8. All wells shall be provided with a watertight, 1/4 inch thick welded steel pipe casing. Pipe shall be in accordance with AWWA Standard C200. The minimum length of casing shall be 40 feet or 10 feet into bedrock, whichever is greater. All joints between sections of the casing shall be made by continuous welding in accordance with AWWA Standard C206. All casing shall be extended at least 18 inches above final grade or 12 inches above the basement floor. The space between the earth and outside casing shall be filled with cement grout to a distance of at least six feet below the ground surface.

9. Any existing well that is to be abandoned shall be properly sealed. The "Water Well Abandonment Procedures," as published in Chapter 7 of the PADEP Groundwater Monitoring Guidance Manual, February, 1996 edition, as amended, shall be followed for all well abandonment.

§ 26-406. Exemption. [Ord. 02-05-04, -/-/2002, § 6]

1. A well drilling permit is not required when an existing well is to be drilled to a greater depth and the anticipated withdrawal from the well is to remain the same. If the depth of a well is to be increased and the quality of water withdrawn is to be increased, a permit is required and compliance with all applicable well drilling provisions of the New Britain Township Subdivision and Land Development Ordinance [Chapter 22].
2. Either the property owner or the well driller shall notify the Township that the existing well has lost its supply and it will be modified by increasing the depth of the well or a new well will be drilled to replace it.
3. Within two weeks of the modified or replacement well being in operation, the property owner or well driller shall supply the Township a copy of the well drilling log documenting the quantity of water to be withdrawn from the well.