

TITLE V, ORDINANCE #10 - HEALTH REGULATIONS

PRIVATE WATER WELL CONSTRUCTION

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Section I - Title.

The title of this Chapter is ***Private Water Well Construction***.

Section II - Purpose.

The purpose of this Chapter is to regulate private water wells within Butler County, Iowa.

Section III - Definitions.

For use in this Chapter the following terms are defined:

1. ***County Sanitarian*** means the person appointed by the Butler County Board of Health to supervise private water well construction within Butler County. Also referred to as the Health Officer.
2. ***Department*** means the Iowa Department of Natural Resources (IDNR).
3. ***Nuisance*** means whatever is injurious to health, indecent, or offensive to the senses or an obstacle to the free use of property so as essentially to interfere with the comfortable enjoyment of life or property. This shall include all definitions in Section 657.2 of the Code of Iowa.
4. ***Administrative Authority*** means Butler County Board of Health.

5. All terms defined in the current issue of the Iowa Administrative Code 567 Chapter 49, shall be defined the same for these regulations.

Section IV - Applicability.

The provisions contained herein apply to all private water wells constructed after the effective date of these rules and include existing water wells undergoing major rehabilitation or reconstruction.

Section V - General.

The administrative authority shall have the authority to visit well sites during any phase of the work in progress without prior notice. The Administrative Authority may also by rule require the issuance of permits, the posting of performance bonds, the submission of water well logs, and other data as necessary. The issuance of permits shall be coordinated with the withdrawal permits issued by the Iowa Department of Natural Resources.

Section VI - Variances.

Variances to these rules may be granted by the Butler County Board of Health provided sufficient and proposed alternative information is afforded to substantiate the need and propriety for such action. Variances and reasoning shall be in writing.

Section VII - Location of Wells.

Wells shall be located with due consideration given to the lot size, contour, porosity and absorbency of the soil, local ground water conditions, and other factors necessary to implement the basic rules contained herein. The lack of specific distances to other possible sources of contamination such as refuse disposal sites, buried oil and gasoline storage tanks, etc., does not minimize their potential hazard. These must be evaluated in each particular situation and a distance arrived at that is based on pertinent facts. The administrative authority should be called upon for assistance in determining a proper distance in these cases.

1. Minimum distances. Minimum distances shall be those set out in the most current issue of the Iowa Administrative Code 567 Chapter 49.
2. Relation to buildings. With respect to buildings, the well shall be located so that it will be reasonably accessible for cleaning, treatment, repair, test, inspection and other maintenance. Wells shall not be located in basements, including sand point wells.
3. Areas subject to flooding.
 - a. Wells shall not be located in areas subject to flooding unless the casing is grouted and extends at least one foot above the level of the highest known flood and is

equipped with a well cap, or is otherwise protected as prescribed in writing by the administrative authority.

- b. The ground surface immediately adjacent to the well casing shall be compacted and graded so that surface water is diverted away from the casing. Well platforms are not recommended other than indicated in Chapter 49.
4. Easements. No well shall be located on a property not owned by the well owner unless an easement allowing such placement is reviewed and approved by the administrative authority and the easement is legally recorded.
 5. Location of Property. No well shall be located closer than 10 feet from the property or right of way line.

Section VIII - Standards for Well Construction, Major Rehabilitation or Reconstruction.

1. Water used in construction. Water used in the construction process shall be obtained from a source that will not result in contamination of the well. To preclude iron bacteria contamination, chlorination of the water utilized shall be as outlined in Chapter 49.
2. Wells located within frost pits.
 - a. In new construction, wells are not permitted to be located within frost pits since they present a sanitary hazard to the water supply by providing access of flood or surface waters to the well.

EXCEPTION: Wells are permitted to be located with frost pits of augered or bored wells which do not penetrate consolidated formations.
 - b. When existing wells located within frost pits undergo major rehabilitation or reconstruction,
 - 1) The casing shall be extended, a pitless adaptor installed, the curbing of the pit removed at least two (2) feet below the ground surface, the area of the pit filled with a clean backfill, tamped and the area graded in accordance with Chapter 49.
 - 2) The well casing shall be provided with a sanitary seal.
3. Frost pits located adjacent to wells. Frost pits that do not contain wells within are permitted for the purpose of housing pressure tanks, valves, etc., provided they are not located closer than ten (10) feet from any well. The walls of the frost pit are to be constructed of six (6)-inch poured concrete, four (4)-inch reinforced concrete, two (2)-inch special concrete mix, vibrated and reinforced or eight (8)-inch minimum concrete blocks. The junction of the walls and the water lines, electrical conduits and roof, etc., shall be watertight. The roof of the frost pit shall be constructed of watertight four (4)-inch minimum reinforced concrete, and any opening shall be provided with a raised curbing

extending at least four (4) inches higher than established grade. A substantial watertight, overhanging, tight fitting type cover shall be provided. An independent floor drain, discharging to ground surface and fitted with a brass, bronze or copper 16-mesh screen, to prohibit the entrance of pests, should be provided.

4. Equipment located within the well casing. In new construction, no equipment shall be located within the well casing except submersible pumps, pump jets, drop pipes, air lines, and the necessary wiring and switches to operate the pumping equipment. When existing wells undergo major rehabilitation or reconstruction, auxiliary equipment shall be removed from within the casing and be properly relocated to areas such as a pump house, basement, or frost pit as outlined in Chapter 49.
5. Buried well seals. Buried well seals, where the casing terminates below ground surface, are not permitted on new construction. Existing installations, upon major reconstruction, rehabilitation or pump replacement shall have the casing extended and the area graded as provided for in Chapter 49.
6. Vents. Vents shall be constructed so as to exclude dust, birds, animals and insects, and shall terminate in an inverted U construction, the opening of which is a least twelve (12) inches above ground surface and is covered with a brass, bronze, or copper 16-mesh screen.
7. Plumbness and alignment. Casings, after installation, shall be sufficiently plumb and straight so as not to interfere with the installation and operation of the pump.

Section IX - Types of Well Construction

Refer to the appropriate sections of the current issue of the Iowa Administrative code 567 Chapter 49.

1. Springs. While springs are utilized as a water source in isolated instances, the quality of the water obtained therefrom varies greatly since they are merely a breakout of groundwater and are subject to intermittent contamination. Information regarding utilization of springs as a source of water should be sought from the administrative authority prior to its development.

Section X - Materials Standards.

All materials utilized shall be in accordance with the current issue of Iowa Administrative Code 567 Chapter 49.

Section XI - Pump Installation

1. To be in accordance with the current issue of of the Iowa Administrative code 567 Chapter 49.

2. Pumps and pumping equipment. All pumps shall be designed, installed and maintained so that priming is not required for ordinary use. Pumps that have unprotected openings into the interior of the pump or casing shall not be used.
- a. Submersible pumps. Submersible pump discharge lines shall leave the well through a properly installed pitless adaptor or through a sanitary seal.
 - b. Other power pumps. Other power pumps located over the well shall be mechanically joined to the casing or on a pump foundation or stand in such a manner as to effectively seal the top of the well. A sanitary seal shall be used where the pump is not located over the well, and the pump delivery or suction pipe emerges from the top thereof. If these units are located in a basement, all suction lines shall be elevated at least twelve (12) inches above the floor and shall be encased in a protective galvanized steel pipe.

Section XII - Well Disinfection.

All new, repaired or reconditioned wells or pump installations shall be thoroughly pumped to waste until all dirt and foreign materials are removed and the water is reasonably clear. Super chlorination, with calcium or sodium hypochlorite compounds with a concentration of at least 100 parts per million (ppm), shall then be accomplished simultaneously throughout the water well distribution system by the contractor. Refer also to the appropriate sections of the current issue Iowa Administrative code 567 Chapter 49.

Section XIII - Water Analysis.

The contractor or owner of new, repaired or reconditioned well or pump installations, upon properly disinfecting the well or pump installations, shall submit a water specimen to the University Hygienic Laboratory at Iowa City (previously known as the State Hygienic Laboratory, or to another approved laboratory for bacterial and nitrate analysis. Information regarding the procurement of water specimen, bottles, fees, etc., can be obtained from the local board of health, the department or the University Hygienic Laboratory.

Section XIV- Hydropneumatic (pressure) tanks, filters, and Miscellaneous Water Treatment Equipment.

Properly sized tanks, filters, and other treatment equipment shall be installed in accordance with the manufacturer's directions and shall maintain a pressure of fifteen (15) pounds at highest point usage under normal demand. Where applicable, AWWA Standards for Steel Tanks, Standpipes, Reservoirs, and Elevate Tanks Storage (D1009-59) shall be followed.

Section XV - Abandonment of Wells.

Abandoned wells are a hazard to the water bearing formation as well as to the physical well-being of people. In addition to providing easy access to pollution entering formations

supplying water to other wells in the vicinity, numerous cases of injury and death have resulted from persons or animals falling into unprotected, improperly abandoned wells.

Under no circumstances shall abandoned wells be used for the disposal of garbage, septic tank sludge or effluent, as a receptacle for field tile drainage, or for any other type of unauthorized disposal of waste materials.

Section XVI - Forms.

Water well construction permit forms may be obtained in the office of the Butler County Sanitarian.

Section XVII - Permit Requirement.

1. When permit required. A landowner or landowner's agent shall not drill or construct a new private water well without first obtaining a well construction permit. Examples of private water wells requiring well construction permits include, but are not limited to: domestic wells, livestock wells, irrigation wells, recreational-use wells, monitoring wells, heat pump wells, industrial wells, and dewatering wells, except the dewatering wells shall be exempt from the construction standards of this Chapter.

2. Exemptions. The following types of excavations do not need private water well construction permits: soil borings, percolation test holes, sand and gravel and limestone exploration holes, excavations for storing and extracting natural gas or other products, gravel pits and quarries and all monitoring wells required as part of a permit or a construction approval issued by the department. Test holes, used to determine the availability, quality or depth of groundwater are also exempt provided that all the following conditions are met.
 - a. The use of the test hole is limited to the conduct of the test only.
 - b. The duration of the test is not more than seven consecutive days.
 - c. The test hole is properly closed immediately after the test is completed in accordance with Iowa Administrative Code Chapter 39 "Requirements for Properly Plugging Abandoned Wells."

3. Caveat. Nothing in these rules shall be construed as exempting public water supply wells from the construction permit and water withdrawal permit provisions of the Environmental Protection Commission rules, Iowa Administrative Code 567.

Section XVIII - Form of Application.

Application shall be made on forms supplied by the Board of Health. Each application shall list all wells, including abandoned wells on the applicant's property contiguous to the well site described in the application and shall describe the location of each well site. The location

Section XIX - Fees.

Fee payment. Each application shall be accompanied by a nonrefundable fee of fifty dollars (\$50.00) in the form of a check or money order payable to the Butler County Treasurer. A proper application shall consist of a fully and properly completed form and nonrefundable fee. The above fee may be revised from time to time as deemed necessary after approval by the Board of Health and by Resolution of the Board of Supervisors.

Section XX - Well Maintenance and Reconstruction.

A private well construction permit is required for all replacement wells. A private well construction permit is required for the repair, maintenance, rehabilitation or reconstruction of an existing well. Changes in physical dimensions include, but are not limited to: deepening the well and changing the diameter or length of the casing or the screen.

Section XXI - Permit Issuance and Conditions.

1. When issued. Upon receipt of a complete application, the Sanitarian shall issue a permit to the landowner or landowner's agent except as provided in section XXIII.
2. Not withdrawal permit. Each permit shall include notification that a private well construction permit is not a water withdrawal permit and does not eliminate the necessity of obtaining any water withdrawal permits required in 567 Chapters 51 and 52, Iowa Administrative Code. A water withdrawal permit is required before an applicant can withdraw more than 25,000 gallons of water per day from any source or combination of sources in the State of Iowa.
3. Construction by registered well driller. Each well construction permit shall require that each well shall be constructed by a registered well driller in compliance with Iowa Administrative Codes 567 – Chapters 37 and 49. However, temporary dewatering wells at construction sites shall be exempt from the construction standards of Chapter 49.

Section XXII - Expiration of Permit.

A private well construction permit shall expire one calendar year from the date of issuance. If construction of the proposed well is not started prior to the expiration date, a new application plus a new nonrefundable fee must be filed with the Board of Health.

Section XXIII - Denial of Permit.

The department may deny a private well construction permit if granting the permit would lead to a violation of state law, would result in ground-water contamination, would lead to withdrawal from a protected source; or the director determines that the well would threaten public health or the environment.

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Section XXIV- Transferability.

A private well construction permit is not transferable.

Section XXV - Inspections.

Whenever the Health Officer has reasonable grounds to believe that a violation of this regulation exists, he may enter and make an inspection of such premises, dwelling or other building, and to gather other necessary information, including water samples or other necessary specimens for the purpose of laboratory analysis. The owner, or occupant of such premises shall permit the health officer to enter such premises and to make such inspection, and to obtain such samples, at the request of the Health Officer. The provisions of this Section shall apply to all premises, buildings or dwellings, vacant or occupied. The Health Officer may make as many additional inspections of such premises as are deemed necessary. Every occupant of a dwelling or dwelling unit shall give the owner thereof, or his agent or employee access to any part of such a dwelling or dwelling unit, or its premises, at all reasonable times for the purpose of making such repairs or alternations as are necessary to effect compliance with the provisions of this regulation or with any lawful regulation adopted or any lawful order issued pursuant to the provisions of this regulation.

Section XXVI - Refusal of Admittance.

In the event the Health Officer, in proceeding to enter any premises for the purpose of making an inspection to carry out the provisions of this regulation, shall be refused entry, a complaint may be made under oath to any magistrate of the County and said magistrate shall thereupon issue his warrant directed to some peace officer of the County commanding him between the hours of sunrise and sunset, accompanied by the Health Officer, to enter upon such premises and to make such inspection, and to obtain such samples as may be required to carry out the provisions of this regulation, which order shall be executed by said officer under direction of the Health Officer.

Section XXVII - Notice.

1. Whenever the Health Officer determines that there are reasonable grounds to believe that there has been a violation of any provisions of this regulation or any regulation pursuant thereto, he shall give notice of such alleged violation to the person or person responsible therefore, as hereinafter provided. Such notice shall:
 - a. Be in writing.

- b. Include a statement of the reasons why it is being issued.
 - c. Allow a reasonable time for the performance of any act it requires.
 - d. Be served upon the owner or his agent or the occupant, as the case may require; provided that such notice shall be deemed to be properly served upon such owner or agent, or upon such occupant, if a copy thereof is served upon him personally; or if a copy thereof is sent by certified mail to his last known address; or if a copy thereof is posted in a conspicuous place in or about the premises affected by the notice, or if he is served with such notice by any other method authorized or required under the laws of this State.
2. Such notice may contain an outline of remedial action which, if taken, will effect compliance with the provisions of this regulation and with other pertinent regulations of the Board of Health.

Section XXVIII- Hearings.

In the event any interested person is aggrieved by any order made by the Health Officer, he may within twenty (20) days of the date of such order appeal to the Board of Health and in writing state his reasons for requesting such order to be rescinded or modified. The Board of Health shall review the action of the Health Officer, and if reasonable grounds exist, shall modify, withdraw or order compliance with the said order. Appeal from any order of the Board of Health may be taken within twenty (20) days to the District Court of Butler County, Iowa.

Section XXIX - Jurisdiction.

The Provisions of this Ordinance shall apply throughout Butler County, Iowa including cities and towns therein.

Section XXX - Enforcement.

It shall be the duty of the Health Officer to enforce the provisions of this Ordinance and this duty may be delegated to his authorized representatives.

Section XXXI - Penalty.

Any person violating this Ordinance or any provision thereof, shall be guilty of a misdemeanor and upon conviction thereof may be fined not more than One Hundred Dollars (\$100.00) or imprisoned in jail for a period not to exceed thirty (30) days. Each additional day of neglect or failure to comply with such provision, regulation or order, after notice of violation by the Board of Health, its officers or authorized representative shall constitute a separate offense.

Section XXXII - Separability of Provisions.

If any section, paragraph, clause or provision of this Ordinance shall be held invalid, the invalidity of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this Ordinance.

Section XXXIII - Supplemental Power

No section, clause or provision of this Ordinance shall limit the power of the Health Officer or Board of Health to obtain injunctive or other relief or to enforce Public Health Laws or Ordinances or standards in any other lawful manner.

Passed and adopted this 16th day of March 1998

Neal Wedeking
Neal Wedeking
Chairman
Butler County Board of Supervisors

Attest: Alberta Opperman
Alberta Opperman
Butler County Auditor