

Guilford County

Well Rules



Effective _____, 2026

FOREWORD

The Guilford County Board of Health enacted these rules, effective June 1, 1989, on the need to protect the groundwater more responsibly in Guilford County. During the years that preceded local rule implementation, development escalated, resulting in an increase in density and in potential for groundwater contamination. While a state standard for well construction had been established, at that time there was no active state program enforcing the standard, and Guilford County Health Department saw the need for more stringent local well rules and enforcement action to protect the groundwater resources in the county. During the years that followed, the program/rules have been evaluated on a regular basis to determine where changes have been needed that would enhance the approach to well construction and keep pace with the ever-changing industry. The passing of Session Law 2026-32 has significantly limited the ability for local health department to enact rules to protect groundwater resources and has prompted the Guilford County Environmental Health Division to revise our current and long-established local well rules.

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CHAPTER 1

GENERAL PROVISIONS, DEFINITIONS, AND VARIANCE

SECTION I GENERAL PROVISIONS

(A) Authorization - The Guilford County Board of Commissioners acting as the Board of Health is authorized under the provisions of Chapter 130A, Section 39 of the General Statutes of North Carolina to adopt appropriate rules and regulations for the protection of the public's health.

(B) Purpose - Consistent with the responsibility to safeguard the public health and protect the groundwater resources it is declared to be policy of the Guilford County Board of Commissioners to require that all wells conform to such reasonable standards and requirements as may be necessary to protect the public health and groundwater resources.

(C) Scope - No person shall construct, repair or abandon, or cause to be constructed, repaired, or abandoned, any non-private drinking water well contrary to the provisions of these Rules.

(D) Conflict with other Laws and Regulations - The provisions of any federal, state, or municipal law or regulation establishing standards affording greater protection to the public welfare, safety, health, and the groundwater resources shall prevail within the jurisdiction of such agency or municipality over standards established by these Rules.

(E) Penalties and Remedies

1. Criminal Penalties: Any person who willfully violates any provision of these Rules, or the rules adopted by the Commission or a local board of health shall be guilty of a misdemeanor. N.C.G.S. § 130A-25

2. Additional Remedies: As provided by N.C.G.S. § 130A-18, the Guilford County Health Director may also institute an action in the Guilford County Superior Court for injunctive relief. All other remedies provided by state law, including, but not limited to, Part 1 of Chapter 130A of the North Carolina Statutes, shall be available to the Guilford County Health Director.

(F) Inspection

1. All newly constructed wells shall be inspected and found to comply with the provisions of this ordinance. Permanent abandonment of any well or any repair to a well shall be inspected by the Guilford County Health Director or their designee.

2. The Guilford County Health Director or their designee shall have the authority to enter upon the property at all reasonable times for the purposes of inspecting a well, contractor activity, or sampling of a water supply system or for the investigation of a complaint relating to a well contractor activity or the water supply system.

(G) Appeals - Appeals concerning the interpretation and enforcement of these rules by the local Health Department, shall be conducted in accordance with the following procedure:

1. The aggrieved person shall give written notice of appeal to the local Health Director within thirty (30) days of the challenged action. Failure to give timely written notice constitutes a waiver of appeal rights. The notice shall contain the name and address of the aggrieved person, a description of the challenged action, and a statement for the basis of the challenge. The Health Director may affirm, modify, or reverse the original action. The Health Director shall issue a written decision based on evidence presented at the administrative appeal. The decision shall contain a concise statement of the reasons for this decision.

2. If the aggrieved person desires to pursue the appeal further, such party shall give written notice of the appeal to the local Health Director pursuant to N.C. G.S. § 130A-24. An appeal fee in an amount approved by the Board of Commissioners and

a performance bond in the amount necessary to correct the duly noted violation may be charged. Upon filing of the notice, the local Health Director shall, within five working days, transmit to the Board of Commissioners the notice of appeal and the papers and materials upon which the challenged action was taken.

3. On appeal, the Board of Commissioners shall have authority to affirm, modify, or reverse the challenged action, and issue a written decision based on the evidence presented at the hearing. The decision shall contain a concise statement of the reasons for the decision.

4. A person who wishes to contest a decision of the Board of Commissioners shall have the right of appeal to the Guilford County District Court within 30 days after the date of the decision by the Board. The scope of review in the District Court shall be the same as in N.C.G.S. § 150B-51.

SECTION II DEFINITIONS

The following definitions apply throughout these Rules:

- (1) “Abandoned well” means any well whose use or construction has been discontinued, or which is in such a state of disrepair that continued use for obtaining groundwater or other useful purpose is impracticable. All wells must be abandoned in accordance with 15A NCAC 02C .0113 and/or 15A NCAC 02C .0309 as applicable.
- (2) “Agent” means any person who by mutual and legal agreement with a well owner has authority to act on behalf of the well owner in executing an application for well permits. The agent authorized may be either a general agent or a limited agent to do one particular act.
- (3) “Air injection well” or “air sparging well” means a well that is used to inject uncontaminated air to the subsurface to promote volatilization and enhance bioremediation of contaminants in the soil and groundwater.

(4) "Certificate of Completion" means a certification by the Guilford County Health Director or their designee that a well has been constructed or repaired in compliance with the construction permit or repair permit.

(5) "Commercial well" means any well used for commercial use including wells drilled to fill public swimming pools or community lakes, ponds or other bodies of natural water. Wells approved by 15A NCAC 18C Rules Governing Public Water Supply are exempt from this definition.

(6) "Construction of wells" means all wells drilled in Guilford County must meet North Carolina Administrative Code Title 15 A Chapter 2C Well Construction Standards.

(7) "Health Director" means the administrative head of the Guilford County Department of Public Health appointed pursuant to N.C. G.S. § 130A-40 or their authorized representative.

(8) "Health Department" means the Guilford County Health and Human Services Agency, Department of Public Health.

(9) "Injection Well" means any excavation which is cored, bored, drilled, jetted, dug, or otherwise constructed, whose depth is greater than its largest surface dimension and which is used, or intended to be used, for the injection of fluids or solids into the subsurface or groundwaters.

(10) "Monitoring well" means any well constructed for the primary purpose of obtaining samples of groundwater or other liquids for examination or testing or for the observation or measurement of groundwater levels. Any well using "Push Technology" shall be considered a monitoring well as defined herein if it is not permanently abandoned within 24 hours after initiation of construction. This definition excludes lysimeters, tensiometers, and other devices used to investigate the characteristics of the unsaturated zone but includes

piezometers, a type of monitoring well that is constructed solely for the purpose of determining groundwater levels. Monitoring wells are real property and their construction on land rests ownership with the landowner in the absence of contrary agreements in writing.

(11) “Monitoring well permit” means a permit issued by the Guilford County Health Director or their designee permitting the construction, repair, operation, or abandonment of monitoring wells, air injection wells, air sparging wells, or recovery wells during a subsurface investigation.

(12) “Owner” or property owner means any person who holds the fee or other property rights where the well is being constructed.

(13) “Recovery well” means any well constructed for the purpose of removing contaminated groundwater, other liquids, or vapor from the sub-surface.

(14) “Repair” means work involved in deepening or changing depths, reaming, sealing, lining, perforating, screening, cleaning, acidizing, hydraulic fracturing, or otherwise redeveloping a well excavation or any other work which requires breaking or opening the well seal. “Repair” does not apply to routine pump maintenance or replacement; however, routine pump maintenance or replacement shall be followed by disinfection of the water supply system and proper replacement of the seal.

(15) “Responsible party” means the person or persons responsible for oil or chemical contamination resulting from a release from any storage tank or oil or chemical spill and, as such, is responsible for payment of all fees associated with permitting of monitoring wells, air injection wells, air sparging wells, or recovery wells (that are within the plated property lines associated with the contamination incident). The responsible party shall remain liable for all monitoring wells until such time as the contamination incident requires no further action as documented by the State of North Carolina. This definition shall also apply to any person or persons desiring to monitor soil and/or groundwater integrity for the purpose of quality assurance/quality control.

(16) “Temporary well” means a well, other than a water supply well that is constructed to determine aquifer characteristics, and which will be properly abandoned or converted to a permanent well within five days (120 hours) of the completion of drilling of the borehole.

(17) “Water supply well” means any well, other than private drinking water well, constructed for the purpose of obtaining ground water for any domestic or industrial use, including irrigation and agriculture.

(18) “Well” means any excavation that is cored, bored, drilled, jetted, dug, or otherwise constructed for the purpose of locating, testing, developing, draining, or recharging any groundwater reservoirs or aquifer, or that may control, divert, or otherwise cause the movement of water from or into any aquifer.

(19) “Well contractor” means a persons, firm or corporation engaged in the business of constructing wells and does so in accordance with the well contractor certification requirements of 15A NCAC 27.

(20) “Well contractor activity” means the construction, installation, redevelopment, repair, alteration, abandonment, or disinfection of any well. This also includes breaking the well seal and installation of a pump or other equipment in a well.

(21) “Wellhead” means the upper terminal of the well including adapters, ports, valves, seals, and other attachments.

(22) “Well operation permit” means a permit issued by the Guilford County Health Director or their designee to operate a well. This permit may include specific requirements for maintenance and operation, restrictions on water usage, responsibilities of the owner, and other requirements for the continued proper performance of the well.

(23) “Well owner” means entity(ties) who hold the fee or other property rights to the well. A well is real property and its construction on land determines ownership in the absence of a contrary agreement.

(24) “Well permit” means a permit issued by the Guilford County Health Director or their designee permitting the construction, repair, or abandonment of any water supply well as defined in these rules.

SECTION III VARIANCE

The Health Director may grant a variance from a construction standard in these rules. A variance may be granted under the same conditions and requirements as described in 15A NCAC 02C .0118 (a-d).

Any variance applicant who is dissatisfied with the decision of the Health Director may file an appeal as established in Section I of this rule.

CHAPTER 2

WELL CONSTRUCTION, REPAIR, AND ABANDONMENT FOR WATER SUPPLY WELLS

SECTION I APPLICATION

A complete application packet shall be submitted to the Guilford County Health Director or their designee by an owner or authorized agent who intends to construct any water well. The type of well will determine the application

1. Water supply wells and commercial wells must complete a Guilford County Environmental Health Well application and provide a site plan as described in 15A NCAC 02C .0105 (e) (4-5).
2. Monitoring, air sparging, air injection or recovery well must complete either the Guilford County Department of Public Health application or the Division of Water Resources GW-22M application.

SECTION II WELL PERMITS

Before issuing a well construction permit, the Guilford County Health Director or their designee shall conduct a field investigation to evaluate the topography, landscape position, available space, and potential sources of groundwater contamination on or around the site on which a water well is to be located. The Guilford County Health Director or their designee shall issue a water well construction permit after determining whether the site can be permitted for a well that meets the rules of this chapter. Notwithstanding the above, the Guilford County Health Director or their designee shall not issue a construction permit for a well in violation of restrictions regarding groundwater use established pursuant to N.C.G.S. § 87-88(a). The construction permit shall include a site plan showing the location of potential sources of contamination and area(s) suitable for well construction.

The Guilford County Health Director or their designee shall issue a written notice of denial of a construction permit if it determines that a well cannot be constructed in compliance with the rules of this chapter. The notice of denial shall identify the reasons for the denial.

(A) No person shall construct, repair, or abandon a well without first obtaining a well permit from the Director or their designee. A well repair permit is not required for repairs involving only pumps, pumping equipment, or well disinfection.

(B) If there is an improperly abandoned well(s) on the site the construction permit shall be conditioned upon permanent abandonment of any improperly abandoned well(s) in accordance with the rules of this chapter.

(C) Water Supply Wells

1. It shall be unlawful for any person to commence any well contractor activities in Guilford County without first obtaining a well permit from the Guilford County Health Director or their designee in accordance with 15A NCAC 02C .0304 (a)(c). The well permit shall be obtained by the well-owner or their authorized agent. The well permit is valid for five years from date of issuance. If construction or repairs have not commenced within five years from the date of issuance of the well permit, the well permit then becomes invalid. When a well permit has become invalid, construction or repairs may not be commenced until a well permit has been updated and/or modified by the Guilford County Health Director or their designee or a new well permit is issued.

2. The location of all new proposed water supply wells in Guilford County shall comply with all the requirements of private drinking water wells as set forth by the NC Department of Health and Human Services, On-Site Water Protection Branch. The well site for a Community Water System or a Non-Transient Non-Community Water System shall be approved by a representative of the NC Department of Environmental Quality, Division of Water Resources, Public Water Supply Section.

3. The Guilford County Health Director or their designee is authorized to revoke or suspend any well permits issued pursuant to these Rules, upon the determination that these Rules are not being fully complied with.

SECTION III STANDARDS OF CONSTRUCTION

Any water well drilled in Guilford County shall meet the construction standards set forth in 15A NCAC 02C.

SECTION IV DISINFECTION OF WELLS

Any person constructing, repairing, testing, performing maintenance, or installing a pump in a well shall disinfect the well upon completion of construction, repairs, testing, maintenance, or pump installation in accordance with 15A NCAC 02C .0304 which references disinfection as specified in 15A NCAC 02C .0111.in accordance with the standards of drinking water wells established by the US Public Health Services

SECTION V FINAL INSPECTION AND SAMPLING

(A) Upon completion of construction of a water supply well, the Guilford County Health Director or their designee shall ensure compliance with 15A NCAC 02C .0300.

(B) Sample collection standards and procedures shall follow 15A NCAC 18A .3800

(C) Wells that serve establishments regulated by 15A NCAC 18A. 1700 shall be sampled as required per the rules.

SECTION VI WELL MAINTENANCE AND REPAIR

(A) Every well shall be maintained by the owner in a condition whereby it will conserve and protect the groundwater resources, and whereby it will not be a source or channel of contamination to the groundwater. All wells shall be maintained in accordance with 15A NCAC 02C .0112

(B) Any work that necessitates breaking the seal of a well that has the wellhead terminating below grade shall include extension of the well casing above grade and conform to all current well standards in 15A NCAC 02C .0112.

(C) All materials used in the maintenance, replacement, or repair of any well shall meet the requirements for new installations in 15A NCAC 02C.

SECTION VII ABANDONMENT OF WELLS

(A) All wells must be abandoned in accordance with 15A NCAC 02C .0113 and/or 15A NCAC 02C .0309

SECTION VIII RECORDS REQUIRED

(A) All records for any well drilled in Guilford County must meet the requirements set forth in 15A NCAC 02C .0300.

CHAPTER 3

WELL CONSTRUCTION, REPAIR, AND ABANDONMENT FOR MONITORING WELLS, AIR INJECTION WELLS, AIR SPARGING WELLS, AND RECOVERY WELLS

SECTION I MONITORING WELL, AIR INJECTION WELL, AIR SPARGING WELL, AND RECOVERY WELL PERMITS

(A) It shall be unlawful for any person to commence, operate, and/or maintain any monitoring well, air injection well, air sparging well, or recovery well contractor activities in Guilford County without first obtaining a monitoring well, air injection well, air sparging well, and recovery well permit from the Guilford County Health Director or their designee. The monitoring well, air injection well, air sparging well, and recovery well permit shall be obtained by the responsible party or his authorized agent. The monitoring well, air injection well, air sparging well, and recovery well permit shall be valid for 12 months from date of issuance.

(B) Monitoring well, air injection well, air sparging well, and recovery well permits must be verified every 12 months from the date of initial issuance for so long as they may remain in operation.

(C) Only one well permit shall be required for each site regardless of the number of monitoring wells, air injection wells, air sparging wells, and/or recovery wells to be constructed.

(D) An application for a monitoring well, air injection well, air sparging well, and recovery well permit shall be submitted to the Guilford County Health Department by the responsible party, property owner, well owner, or designated agent. The application shall either be the Guilford County application for monitoring wells or the N.C Department of Environmental Quality, Division of Water Resources GW-22M.

(E) If it becomes necessary to construct additional monitoring wells, air injection wells, air sparging wells, or recovery wells on a previously permitted site, no construction may be

initiated until such time as an application for the additional wells has been received and approved by the Guilford County Health Department.

(F) Any monitoring well, air injection well, air sparging well, or recovery well no longer serving its intended use shall be permanently abandoned in accordance with 15A NCAC 02C .0113

(G) A copy of the monitoring well, air injection well, air sparging well, and recovery well permit must be on site during the construction of any monitoring well, air injection well, air sparging well, and/or recovery well.

(H) Only Certified Well Contractors per 15A NCAC 27 shall perform well contractor activities.

(I) The Guilford County Health Director or their designee is authorized to revoke any monitoring well, air injection well, air sparging well, and recovery well permits issued pursuant to these Rules upon the determination that these Rules are not being fully complied with.

SECTION II STANDARDS OF CONSTRUCTION

(A) Monitoring wells, air injection wells, air sparging wells, and recovery wells shall be located, designed, constructed, and operated in accordance with 15A NCAC 02C .0108, Well Construction Standards.

(B) Drilling equipment shall be decontaminated using accepted methods prior to each boring to minimize the potential for cross contamination of the groundwater resources from one boring location to another.

(C) The geographical (GPS) coordinates of all monitoring wells, air injection wells, air sparging wells, and recovery wells shall be established with an accuracy to within one foot (using decimal degrees) at the time of well construction and the coordinates shall be recorded on the record of construction as required by Section V of this chapter. The well cover conditions and location of the wells will be verified annually.

SECTION III WELL MAINTENANCE AND REPAIR

(A) Every monitoring well, air injection well, air sparging well, and recovery well shall be maintained in a condition whereby it will conserve and protect the groundwater resources, and whereby it will not be a source or channel of contamination to the groundwater.

(B) All construction and materials used in the maintenance, replacement, or repair of any monitoring well, air injection well, air sparging well, or recovery well shall meet the requirements for new installations set forth in Chapter 2 section VI of this document.

(C) Broken, punctured or otherwise defective or unserviceable casing, screens, fixtures, seals, or any part of the wellhead shall be repaired or replaced within 30 days of notification by the Guilford County Health Department, or the well shall be permanently abandoned.

SECTION IV PERMANENT ABANDONMENT OF MONITORING WELLS, AIR INJECTION WELLS, AIR SPARGING WELLS, AND RECOVERY WELLS

(A) All wells must be abandoned in accordance with 15A NCAC 02C .0113.

(B) In the case that any monitoring well, air injection well, or air sparging well is being converted to a recovery well, the conversion shall be completed within 30 days, or the existing well shall be permanently abandoned.

SECTION V RECORDS REQUIRED

(A) All records for any well drilled in Guilford County must meet the requirements set forth in 15A NCAC 02C .0306-.0307.

(B) The reports required in this section shall be submitted within 15 days after completing construction, repair, or abandonment.

CHAPTER 4
SEVERABILITY

SECTION I SEVERABILITY

If any provisions or clauses of these rules shall be declared invalid, void, or unconstitutional, such declaration shall not invalidate any other provisions or clause of said rules.

Revised and adopted by the Guilford County Board of Commissioners on __ (add date), 2026 and shall be effective upon adoption.

Public Health Director

Date