

~~\*\*\*PLEASE REFER TO THE North Carolina DEPARTMENT OF  
ENVIRONMENTAL AND NATURAL RESOURCES DIVISION OF WATER  
QUALITY 2C SECTION .0100 WELL CONSTRUCTION STANDARDS WHEN  
REFERENCING WAKE COUNTY'S REGULATIONS FOR FURTHER  
CLARIFICATION.~~

## **REGULATIONS GOVERNING, WELL CONSTRUCTION, AND GROUNDWATER PROTECTION IN WAKE COUNTY**

**ORIGINALLY ADOPTED APRIL 14, 1986**

**AMENDED APRIL 13, 1987**

**AMENDED NOVEMBER 9, 1987**

**AMENDED NOVEMBER 10, 1992**

**AMENDED AUGUST 8, 1994**

**AMENDED APRIL 11, 1995**

**AMENDED JANUARY 1, 1998**

**REWRITTEN AND READOPTED JULY 24, 2003**

**Rewritten and Readopted \*\*\*\*2018**

**WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES  
RALEIGH, NORTH CAROLINA**

**REGULATIONS GOVERNING WELL CONSTRUCTION, AND  
GROUNDWATER PROTECTION IN WAKE COUNTY**

WHEREAS, THE WAKE COUNTY ~~BOARD OF~~ HUMAN SERVICES ~~BOARD~~ HAS THE RESPONSIBILITY TO PROTECT AND PROMOTE ~~THE PUBLIC'S~~PUBLIC HEALTH; AND

~~WHEREAS, THE NORTH CAROLINA COMMISSION FOR HEALTH SERVICES' REGULATIONS APPLY ONLY TO COMMUNITY WATER SUPPLIES AND PRIVATE WELLS FURNISHING WATER TO ESTABLISHMENTS UNDER FOOD, LODGING, INSTITUTIONAL, NURSING HOMES, DAY CARE FACILITIES, ETC. REGULATED BY STATE INSPECTIONAL PROGRAM; AND~~

WHEREAS, THE WAKE COUNTY ~~BOARD OF~~ HUMAN SERVICES ~~BOARD~~ IS OF THE OPINION THAT LOCAL CONDITIONS WHICH EXIST IN WAKE COUNTY JUSTIFY IMPOSING MORE STRINGENT MINIMUM STANDARDS IN CERTAIN INSTANCES IN ORDER TO REASONABLY ~~INSURE~~ENSURE THAT PRIVATE AND SEMI-PUBLIC WELL WATER SUPPLIES ARE SAFE AND ADEQUATE FOR DOMESTIC USE; AND

WHEREAS, THE WAKE COUNTY ~~BOARD OF~~ HUMAN SERVICES ~~BOARD~~ RECOGNIZES THE IMPORTANCE OF ADOPTING RULES AND REGULATIONS (NOT INCONSISTENT WITH LAWS AND RULES PROMULGATED BY THE GENERAL ASSEMBLY, THE COMMISSION FOR ~~PUBLIC HEALTH SERVICES~~ OR THE ENVIRONMENTAL MANAGEMENT COMMISSION) AS ARE NECESSARY TO PROTECT AND PROMOTE THE PUBLIC HEALTH OF THE CITIZENS OF WAKE COUNTY.

NOW, THEREFORE, BE IT RESOLVED THAT THE FOLLOWING REGULATIONS ARE ADOPTED BY THE WAKE COUNTY ~~BOARD OF~~ HUMAN SERVICES ~~BOARD~~ PURSUANT TO AUTHORITY CONTAINED IN CHAPTER 130A, ARTICLE 2, SECTIONS 39(b) AND 43 (b) AND SHALL APPLY TO PRIVATE AND SEMI-PUBLIC WELL WATER SUPPLIES AS DEFINED IN ~~THE THESE~~ REGULATIONS. SPECIFIC RULES OF THE COMMISSION FOR ~~PUBLIC HEALTH SERVICES~~ AND THE ENVIRONMENTAL MANAGEMENT COMMISSION INCORPORATED IN THESE REGULATIONS ARE ADOPTED BY REFERENCE AND SHALL BECOME AN INTEGRAL PART OF ~~THE THESE~~ REGULATIONS.

BE IT FURTHER RESOLVED, THAT ON THE DATE OF ADOPTION OF THESE REGULATIONS, THE WAKE COUNTY ~~BOARD OF~~ HUMAN SERVICES ~~BOARD~~ DIRECTS THE WAKE COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES TO DEVELOP NECESSARY PROCEDURES FOR ENFORCING THE PROVISIONS OF ~~THE THESE~~ REGULATIONS AND TO INITIATE THESE PROCEDURES ON THE EFFECTIVE DATE.

## Table Of Contents

SECTION I. GENERAL PROVISIONS .....	
SECTION II. DEFINITIONS.....	
SECTION III. REGISTRATION.....	
SECTION IV. PERMITTING AND INSPECTION .....	
SECTION V. STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS .....	
SECTION VI. WATER TESTING AND WATER QUALITY .....	8
SECTION VII. WELL MAINTENANCE AND REPAIR.....	
SECTION VIII. ABANDONMENT OF WELLS.....	10
SECTION IX. SEMI-PUBLIC WELL WATER SUPPLIES .....	
SECTION X VARIANCES .....	16
SECTION XI ENFORCEMENT AND PENALTIES .....	16
SECTION XII INJUNCTIONS .....	16
SECTION XIII APPEAL PROCEDURE.....	16
SECTION XIV SEVERABILITY .....	16
SECTION XV. EFFECTIVE DATE .....	17

SECTION	PAGE
101 General Provisions	1
102 Definitions	2
103 Registration	4
104 Reserved	
105 Permits	
106 Reserved	
107 Standards of Construction: Water Supply Wells	8
108 Reserved	
109 Pumps and Pumping Equipment	10
110 Well Tests for Yield and Capacity	10
111 Disinfection of Water Supply Wells	
112 Well Maintenance: Repair: Groundwater Resources	
113 Abandonment of Wells	13

120	114 Data and Records Required	14
121	115, 116 And 117, Reserved	
122	203 Semi Public Well Water Supplies	14
123	302 Plans	15
124	303 Submissions by Engineer and Water Supplier	15
125	305 Approval of Plans Necessary Before Contracting	
126	Or Constructing	15
127	306 Changes in Plans Or Specifications After Approval	16
128	402 Water Supply Wells	16
129	404 Water Treatment Facilities	17
130	405 Storage of Finished Water	17
131	406 Distribution Systems	17
132	407 Electrical Systems	17
133	408 Lead Free Construction	18
134	1001 Disinfection of New Systems	18
135	1002 Disinfection of Wells	18
136	1003 Disinfection of Storage Tanks and Distribution	
137	Systems	18
138	1301 Operator Requiring Disinfection Only	18
139	1303 Operation of Semi Public Water System Wells	19
140	1401 Variances	19
141	1402 Enforcement and Penalties	
142	1403 Injunctions	19
143	1404 Appeal Procedures	
144	1405 Severability	
145	1406 Effective Date	20

## **SECTION I. SECTION 101. GENERAL PROVISIONS**

(a) AUTHORIZATION. The Wake County ~~Board of Human Services Board~~ is authorized under the provisions of Chapter 130A, Article 2, Sections -39 and 43 of the General Statutes of North Carolina General Statutes to adopt appropriate rules and regulations for the protection of the public health. The Wake County Board of Human Services Board is also authorized under provisions of Chapter 87-96 and Chapter 87-97 of the General Statutes of North Carolina General Statutes to adopt by reference rules adopted by the Environmental Management Commission, and may adopt more stringent rules for the protection of public health.

(b) PURPOSE. It is the finding of the Wake County ~~Board of Human Services Board~~ that the entire geographical area of Wake County is vulnerable to groundwater pollution from improperly located, constructed, operated, altered, or abandoned water supply and other wells. Therefore, in order to ~~insure~~ ensure reasonable protection of the groundwater resources and consistent with the responsibility to protect and advance the public health, it is declared to be the policy of the Wake County ~~Board of Human Services Board~~ to require that the location, construction, repair ~~and abandonment of water supply, and abandonment of wells including private drinking water wells as defined in Chapter 87-85 of the North Carolina General Statutes and irrigation wells~~ conform to such reasonable standards and requirements as may be necessary to protect the public health and groundwater resources.

(c) SCOPE. The provisions set forth herein shall apply to private drinking water wells ~~well water and~~, semi-public water supplies, and irrigation wells as defined in Section II, "Definitions", of these Regulations. ~~Section 102, (DEFINITIONS). Wells drilled for private water supplies as defined in Section 102, (DEFINITIONS) shall also meet the applicable provisions of the North Carolina Administrative Code, Title 15A, Subchapter 2C, "Well Construction Standards", of the Department of Environment and Natural Resources, Division of Water Quality, Groundwater Section.~~

~~Wells drilled for semi-public water supplies as defined in Section 102, (DEFINITIONS) shall also meet the applicable provisions of the North Carolina Administrative Code Title 15A, Subchapter 18C, "Rules Governing Public Water Systems", of the Department of Environment and Natural Resources, Division of Environmental Health.~~

The well owner and the well contractor shall be jointly and severally responsible for complying with any and all provisions of these regulations. ~~Regulations.~~

(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 regulations.

(e) ADOPTION OF STATE RULES BY REFERENCE. The provisions contained in Title 15A of the North Carolina Administrative Code Subchapter 2C WELL CONSTRUCTION STANDARDS, Section .0100 WELL CONSTRUCTION STANDARDS CRITERIA AND STANDARDS APPLICABLE TO WATER-SUPPLY AND CERTAIN OTHER TYPE WELLS and Section .0300 PERMITTING AND INSPECTION OF PRIVATE DRINKING WATER WELLS are hereby adopted and incorporated by reference as if fully set forth herein, including any subsequent amendments, with the exception of Subchapter 2C sections Sections .0105, .0106, .0108, .0116, .0117 and .0119, including any subsequent amendments. Each of the Sections in of these regulations Regulations supplements or modify modifies the 15A NCAC Subchapter 2C .0100 and .0300 rules as indicated to provide more stringent rules for the protection of public health in Wake County as authorized in by G.S. 130A-39-(b) and G.S. 87-96(c).

(f) INSPECTION. Before being used to supply water for human consumption, all newly constructed wells shall be inspected for in compliance comply with the location, construction, and water quality requirements of this ordinance these Regulations, and tested for yield and capacity as outlined in Section 110 (WELL TESTS FOR YIELD AND CAPACITY). {A well for public water supply shall be inspected and approved by an authorized representative of the North Carolina Division of Environmental Health.} The Department reserves the right to inspect any repairs to a well that necessitate breaking the well's seal before use. (Also see Section 112, Well Maintenance: Repair: Groundwater Resources) The Department shall make these inspections as soon as practicable after receiving notice that an installation or repair has been made. Emergency repairs that are made outside normal working hours of the Department, i.e., nights, weekends, and holidays, shall not require a permit but shall be inspected on the next regular working day or as soon as practicable thereafter. Provided, however, that the requirements of Section 101 (e) do not apply to an individual homeowner making necessary repairs to his existing well. Before being used to supply water for human consumption, an existing well proposed to serve new construction or replacement structures requiring a building permit shall be in compliance with the wellhead construction and water quality requirements of this ordinance these Regulations.

Permanent abandonment of any well or any repair to a well shall be inspected by the Wake County Department of Environmental Services.

(f)(g) RESPONSIBILITIES OF WATER SUPPLY OWNERS It shall be unlawful for any person or firm to rent or offer to rent, lease or offer for lease, any residence or place of business which does not have a potable water supply. The owner, when required by the Department, shall provide proof that the water supply meets the water quality standards of these regulations Regulations.

## **SECTION 102II. DEFINITIONS.**

The definitions contained in 15A NCAC 02C .0102 Chapter 87-85 of the North Carolina General Statutes of North Carolina and the definitions of contained in 15A NCAC 02C .0102, 15A NCAC 02C .0302, and in 15A NCAC 18A .3801 are included in these



~~Regulations~~ as if fully set forth herein, ~~which are hereby incorporated by reference including any subsequent amendments and editions. The~~ In addition, the following definitions ~~are included to supplement the definitions in 15A NCAC 02C .0102; apply throughout these regulations~~ Regulations.

**ABANDONED WELL** ~~means a 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.~~

~~Temporarily abandoned well means any useable well whose use has been temporarily discontinued because of well or pump maintenance problems.~~

~~Permanently abandoned well means any well whose use is impracticable because of faulty construction, location, water quality, insufficient yield, unserviceable casing and screen; or which has been removed from service because it no longer serves its intended use.~~

~~ADDITION means any structure that is constructed, altered or placed on property that contains one or more wells. This would not include replacement of existing equipment within the existing footprint of a structure and addresses only those situations for which a building permit is required.~~

~~BOARD OF HUMAN SERVICES means the Wake County Board of Human Services or successor entity.~~

**COMPLIANCE SAMPLE** means a sample collected by an authorized representative of the Department for the purpose of detecting constituents that may threaten human health.

**DEPARTMENT** means the Wake County Department of Environmental Services, or its successor.

**DIRECTOR** means the Director of the Wake County Department of Environmental Services, or successor.

**ENVIRONMENTAL SERVICES REPRESENTATIVE** means an authorized agent of the Wake County Department of Environmental Services.

**IRRIGATION WELL** means an excavation that is cored, bored, drilled, jetted, dug or otherwise constructed for the purpose of withdrawing groundwater to be used for irrigation or other nonpotable purposes only and ~~will~~shall not ~~be connected to serve as~~ a potable water supply.

**PERMIT** means a written permit issued by the Wake County Department of Environmental Services authorizing or allowing the construction or repair of any well as defined in ~~this ordinance~~ these Regulations.

**PRIVATE WELL WATER SUPPLY** means any well water supply furnishing potable water to an individual residence, to a multi-family dwelling that does not otherwise meet the criteria for a semi-public supply, a public water system, or to a business having less than 25 employees.

**PUBLIC WATER SYSTEM OR COMMUNITY WATER SYSTEM** means a water system as defined in 15A NCAC 18C.0102 (Rules Governing Public Water Supplies)

**PUMPS AND PUMPING EQUIPMENT** means the pump, the well seal and any other equipment or materials used or intended to be used for withdrawing or obtaining groundwater.

**PUMP INSTALLER** means any person, firm or corporation engaged in pump installation and repair.

**REPAIR** means work involved in deepening or changing depths, reaming, sealing, installing, perforating, screening or cleaning, acidizing or redeveloping a well excavation or any other work which results in breaking or opening the well seal.

**REPLACEMENT WELL** means a new water supply well permitted to replace an existing water supply well that can no longer provide an acceptable quantity or quality of water.

**SEMI-PUBLIC WATER SUPPLY** means a water supply that serves water for the purpose of human consumption to three to fourteen (3-14) service connections or less than 25 year-round residents and that does not meet the definitions for of a public water system, or a private well water supply.

**SERVICE CONNECTION** for the purposes of these rules Regulations each residential unit in a building shall constitute a service connection.

**WATER SUPPLY** means any source of groundwater.

**WATER SUPPLY SYSTEM** means pump and pipe used in connection with or pertaining to the operation of a water well including pumps, distribution service piping, pressure tanks and fittings.

**WELL CONSTRUCTION** includes all acts necessary to construct wells for any intended use, including the location and excavation of the well, placement of casings, grouting, screens, and fittings, development and testing.

**WELL CONTRACTOR ACTIVITY** means any activity for which a permit is required.



~~**WELL CONTRACTOR** means any person, firm or corporation engaged in well contractor activities.~~

~~**WELL SEAL** means an approved arrangement or device used to cap a well or to establish and maintain a junction between the casing or curbing of a well and the piping or equipment installed therein, the purpose or function of which is to prevent pollutants from entering the well at the upper terminal.~~

### SECTION ~~103~~**III. REGISTRATION**

~~The provisions of 15A NCAC 02C.0103 are hereby replaced with the following requirements.~~

~~In addition to the requirements of Chapter 87-98, Article 7A of Chapter 87 of the General Statutes of North Carolina General Statutes and of 15A NCAC 27 pertaining to Well Contractor Certification, the following shall apply to all well contractors operating in Wake County:~~

#### (a) WELL CONTRACTOR REGISTRATION

(1) All persons, firms or corporations engaging in well contractor activities involving wells for irrigation, private or semi-public domestic use in Wake County shall register annually with the Department.

(2) Registration renewal shall be accomplished during the period of ~~January~~July 1 to ~~January~~July 31 of each year. The applicant shall submit the minimum following information:

- ~~1.~~1. Name
- ~~2.~~2. Name of Business
- ~~3.~~3. Address
- ~~4.~~4. Telephone numbers
- ~~5.~~5. Names of certified well contractors employed

(3) Registration shall be accomplished by completing and submitting to the Department a registration application form provided by the Department for this purpose. Upon acceptance by the Department of a properly completed application form and the posting of an approved performance bond, the applicant will be registered.

(4) All persons, firms, or corporations to be registered as a well contractor in Wake County must operate or be certified in accordance with 15A NCAC 27; ~~Well Contractor Certification Rules~~**WELL CONTRACTOR CERTIFICATION RULES**, Sections .0100- .0900 (Criteria and Standards Applicable to Well Contractor Certification).

(5) All persons, firms, corporations or other business entities registering as a well contractor shall either deposit ten thousand (\$10,000) dollars with the Wake

County Finance Department or post a continuing and automatically renewing original performance bond in the sum of ten thousand (\$10,000) dollars with the Department as beneficiary. If a performance bond is offered to meet the registration set forth herein, it shall be considered accepted by Wake County only upon approval by the Department or by the Wake County Attorney's office. The deposit of money or the delivery of a performance bond pursuant to this section constitutes agreement by the well contractor that the money deposit or the performance bond may be drawn on by Wake County at any time to remedy work performed by the well contractor which is inconsistent with these regulations. Examples of inconsistent work include but are not limited to improperly located, constructed, developed or abandoned wells that have not been corrected by the well contractor after notice from the Department. The money or bond may also be used to reimburse Wake County for inspection fees incurred by the well contractor.

(6) Any person or firm who drills or constructs geothermal heat exchange injection wells is required to be registered with the Department, and shall be certified for those installations by the International Ground Source Heat Pump Association or its equivalent.

~~(5)(7) Breaking a well seal to install, replace, or repair well pumps and equipment or to disinfect wells is considered a well contractor activity per Chapter 87-98 Article 7A of Chapter 87 of the General Statutes of North Carolina General Statutes and of 15A NCAC 27-Well Contractor Certification. Persons performing these activities are required to possess a Level D well contractor certification, except when exempted in accordance with Session Law 2009-418.~~

#### (b) PUMP INSTALLER REGISTRATION

(1) All persons, firms or corporations engaged in the business of installing, replacing or repairing pumps or other equipment in wells in Wake County shall register annually with the Department. ~~In order to register in Wake County, a pump installer must be registered with the North Carolina Department of Environment and Natural Resources, Division of Water Quality, Ground Water Section as a pump installer.~~

(2) Registration shall be accomplished during the period from ~~January~~July 1 to ~~January~~July 31 of each year by completing and submitting to the Department a registration application form provided by the Department for this purpose. Upon submitting a properly completed application form, the applicant will be registered.

The applicant shall submit the following minimum information:

- ~~6.~~• Name
- ~~7.~~• Name of Business
- ~~8.~~• Address

9. Telephone numbers

10. Names of employees installing pumps

#### ~~1. WATER SAMPLER REGISTRATION~~

~~(1) Every person, firm or corporation collecting confirmation samples shall register annually with the Department. Samplers will be limited to representatives of the Department, authorized representatives of a certified laboratory, registered sanitarians, certified well operators or others as approved by the Department.~~

~~(2) Registration shall be accomplished during the period from January 1 to January 31 of each year by completing and submitting to the Department a registration application form provided by the Department for this purpose. Upon submitting a properly completed application form, the applicant will be registered. The applicant shall submit the following minimum information:~~

~~2. Name~~

~~3. Name of Business~~

~~4. Address~~

~~5. Telephone numbers~~

~~6. Names of employees collecting samples~~

#### ~~SECTION 104 RESERVED~~ IV. PERMITTING AND INSPECTION

##### SECTION 105 PERMITS

The provisions of 15A NCAC 02C .0105 are not applicable in Wake County and are hereby replaced with the following requirements. The requirements of this section, unless otherwise noted, apply to all well types referenced within the Scope section of these regulations. In addition to the requirements of Chapter 87-97 of the General Statutes of North Carolina General Statutes, 15A NCAC 02C Section .0100 and Section .0300, the following shall apply:

##### (a) APPLICATION FOR PERMIT

(1) The fee for a permit to construct, repair, or abandon a well shall be established by the Wake County Board of County Commissioners and is payable to Wake County at the time the permit application is submitted.

~~(2) A complete application shall be submitted to the Department by a property owner or authorized agent who intends to construct, repair, alter or abandon a private well, semi-public water supply well, or irrigation well. The Department shall provide an application form to provide information needed to process the request as outlined in 15A NCAC 02C .0105 and other information as deemed necessary by the Department.~~

(b) ~~No person, owner or agent, shall commence the construction, repair, alteration or abandonment of a well without first obtaining a permit from the Department. The permit shall be obtained by the property owner or authorized agent prior to the construction, repair alteration or abandonment of any well for which a permit is required.~~

~~(1) Prior to construction, the location of the well must be approved by the Department.~~

~~(2) The well contractor shall maintain a copy of the permit on the job site at all times during the construction, repair or abandonment of the well. The well contractor shall be responsible for assuring all required setbacks and separations are met.~~

~~(3) The well contractor, owner or agent shall not commence any well construction within fifty (50) feet of a utility easement without the easement and utility clearly located and marked by the utility owner. The well contractor, owner or agent must contact North Carolina One Call Center, Inc., to have the easement and utility clearly located and marked.~~

~~(4)(2) No person shall allow permanent electrical service to a residence, place of business or place of public assembly served by a private drinking water well or semi-public water supply upon construction, location or relocation until the official electrical inspector with jurisdiction as provided in General Statutes (GS) Section 143-143.2 of the North Carolina General Statutes certifies to the electrical supplier that the required well system Certification of Completion has been obtained. Replacement wells and irrigation wells are exempt from the above provision. Replacement wells and irrigation wells must meet all other provisions of these regulations Regulations.~~

~~(5) The Department may suspend or revoke any permits issued upon a determination that the provisions of these regulations have been violated.~~

~~(6)(3) No residence, place of business or place of public assembly shall be occupied, nor shall any newly constructed well defined in subject to these regulations Regulations be placed into use until the Department has issued a Certificate of Completion and determined by inspection and required testing that:~~

~~1. The well is in compliance with these regulations Regulations;~~

~~2. All conditions prescribed by the well permit have been met; and,~~

~~3. All water quality standards have been met.~~

~~It shall be the duty of the builder or the homeowner, as applicable, to provide assistance when necessary for the completion of these requirements.~~

~~(7)~~

~~(4) Unless otherwise specified in writing by the Department, permits shall become invalid and the fee forfeited after sixty (60) months from the date of issue if the construction has not been completed during that time period. When a permit has~~

become invalid, the installation shall not be commenced or completed until a new permit has been obtained and a new fee is paid.

(84) The well contractor shall adhere to the Department's of policy regarding scheduling of required inspections. The well contractor shall contact Environmental Services~~the Department must be notified prior to well construction if any of the following occur:~~

- ~~4. The separation criteria specified in Section 107 cannot be met.~~
- ~~1. The residence or during normal business is relocated other than originally intended.~~
- ~~2. The use of the building is changed from the use originally permitted.~~
  - ~~4. There is a need hours to install the septic schedule an inspection unless scheduling is available through an automated system in an area other than indicated on the permit.~~
- ~~2. Landscaping changes have been made that affect site drainage.~~
- ~~3. There are current or pending restrictions regarding groundwater use~~
- ~~4. The water source for any well intended for domestic use is adjacent to any water-bearing zone suspected or known to be contaminated.~~

~~(c) When permits are issued by other agencies for any type of well not covered by these regulations, a copy of that permit must be filed with the Department within 30 days from the date of issuance.~~

## SECTION ~~106~~ RESERVED

## ~~SECTION 107.~~V. STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

~~The provisions contained in 15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS are included as if fully set forth herein, which are hereby incorporated by reference including any subsequent amendments and editions. The following provisions are included to supplement the provisions in 15A NCAC 02C .0107:~~

~~The requirements of this section, unless otherwise noted, apply to all well types referenced within the Scope section of these ~~regulations~~ Regulations. In addition to the requirements of 15A NCAC 02C .0107, the following shall apply:~~

### ~~4.~~ (a) Location:

~~In paragraph (a)(1), modify by adding at the beginning of the sentence: Prior to any construction and/or use, a representative of the Wake County Department of Environmental Services must approve the site and location for new and existing private or semi-public well water supply.~~

~~In paragraph (a)(2) Modify:~~

~~(M) Building foundations, excluding the foundation of a structure housing the wellhead, the setback shall be: 50 feet instead of 25 feet.~~

~~In paragraph (a)(2) add:~~

~~(S) Cemeteries. 50 feet~~

~~(T) Property boundaries. 10 feet.~~

~~(U) Other wells. 50 feet.~~

~~In paragraph (a) (3) add:~~

~~(E) Building Foundations. 25 feet.~~

The minimum horizontal separation between a well subject to these regulations and a property boundary or another well which exists or is permitted at the time the subject well is constructed shall be as follows unless otherwise specified:

1. Property Boundaries.....10 ft.

2. Other Wells.....50 ft.

~~2. (d) Casing:~~

~~In paragraph (d) (1) (A) modify to read as follows: The casing shall be new, seamless or electric resistance welded galvanized or stainless steel pipe. The use of black steel casing pipe is disallowed. Galvanizing shall be done in accordance with requirements of ASTM A-120.~~

~~(d) In paragraph (d)(2)(C) modify to read as follows: Casing shall have a minimum wall thickness and tolerance that meets or exceeds requirements for SDR 21 thermoplastic water well casing pipe for wells up to one hundred eighty-five (185) feet. Galvanized or stainless steel well casing as specified in (d)(1)(A) of this section shall be required for the entire length of the casing for any well in which the casing depth exceeds one hundred eighty-five (185) feet unless prior approval is granted by the Director of Environmental Services.~~

~~Paragraphs (d)(4)(A) and (B) are not applicable to these rules.~~

~~(b) Casing:~~

~~-The use of black steel casing pipe is disallowed.~~

~~(e) Grouting:~~

~~Paragraphs (e) (1) (A) and (B) do not apply in Wake County.~~

~~In paragraph (e) (2) (B), modify to read as follows: The annular space around the casing shall be filled with a cement type grout to a depth of at least twenty (20) feet.~~

~~Add as (e) (2) (C): The annular space around the casing below the grout of a bored well shall be filled with clean sand or gravel.~~



~~Add as (e)(2)(D): For large diameter bored wells, it shall be the responsibility of the well contractor, at the time of grouting, to pour a concrete collar or slab with a thickness of at least four (4) inches and extending at least two (2) feet outward from outer well casing.~~

~~Add as (e)(2)(E): The top of the slab shall be at least two inches above land surface and shall slope away from the well casing in all directions.~~  
~~Add as (e) (2) (F): If the supply line is to be routed through the slab, a ninety (90) degree, elbows conduit sleeve, with a minimum diameter of two (2) inches, shall be installed when the slab is poured~~

~~Add as (e) (10): The Department may inspect the grout and annulus before the grout is placed around the casing and observe as the grout is placed around the casing. The well contractor shall strictly comply with the grout inspections scheduling policy of the Department.~~

~~(g) Gravel and sand packed wells:~~

~~In paragraph (g) Gravel and sand packed wells shall not be used unless given prior approval by the Director of Environmental Services. In those cases, the provisions of 15A NCAC 02C .0107(g) apply.~~

~~(i) Well head completion:~~

~~Modify by adding the following: Add paragraph (i)(3)(E)~~

~~(d) Wellhead completion:~~

~~In addition to the requirements in 15A NCAC 2C .0107 and .0306, the following apply:~~  
~~The identification plateplates, if removed or obscured during pump installation, height adjustment or replacement, shall be relocated and securely attached to the well casing by the pump installer.well contractor or well pump contractor performing the work within seventy-two (72) hours of completion.~~

~~Add paragraph (i) (7): Completed wellhead installationsInformation required on the Pump Installation Information Plate must be stamped on the plate. Engraving is disallowed as a method of placing this information on the plate.~~

## SECTION VI. WATER TESTING AND WATER QUALITY

~~reported~~

~~In addition to the testing requirements of 15A NCAC 18A .3800 PRIVATE DRINKING WATER WELL SAMPLING, the following shall apply to new wells and existing wells serving new construction:~~

(a) Water quality testing requirements:

1. Any well subject to notice in accordance with North Carolina General Statute 87-97(e1) or located within 1,500 feet of any of the following contamination sources shall be tested for contaminants of concern associated with the contamination site:
  - Groundwater contamination incidents arising from agricultural operations, including application of agricultural chemicals pursuant to 15A NCAC 02L;
  - Groundwater contamination associated with the construction or operation of injection, monitoring, and other wells subject to permitting under the Well Construction Act (G.S. 87-88) and this Subchapter;
  - Groundwater contamination associated with the operation of non-discharge, discharge (NPDES) facilities, land application of animal waste, and other activities subject to permitting under G.S. 143-215.1;
  - Releases of hazardous waste or constituents that currently exceed the Groundwater Quality Standards listed in 15A NCAC 02L at facilities governed under G.S. 130A-294;
  - Dry-Cleaning Solvent Cleanup sites regulated under G.S. 143-215.104;
  - Pre-regulatory landfills and Inactive hazardous substance or waste disposal sites governed under the Inactive Hazardous Sites Act of 1987 (G.S. 130A-310 et seq);
  - Solid waste facilities subject to 15A NCAC 13B that have monitoring wells with exceedances of the Groundwater Protection Standards as defined in 15A NCAC 13A .1634(g) and (h);
  - Releases of petroleum and hazardous substances subject to G.S. 143-215.75 through 215.98;
  - Sites that fall within the authority of the Brownfields Program as defined by G.S. 130A, Article 9 Part 5;
  - Contamination associated with pollution sources in soils or other sites known or suspected to have exceeded the Groundwater Quality Standards listed in 15A NCAC 02L; or
  - Contamination known to the Department of Environmental Services through experience with the property, surrounding properties or information provided by the applicant.
2. Any well constructed within 150 feet of the foundation of a building built between the years 1948 and 1987 shall be tested for pesticides.
3. Any well constructed in an area of the county underlain by the following geologic units, as designated by the North Carolina Geological Survey, shall be tested for gross alpha particle activity:

- Rolesville Granite, Lake Benson Pluton, Wyatt Pluton, Avents Creek Granite, Raleigh Gneiss, Falls Leucogneiss, and other geologic units lying within these geologic units.
- Gneiss, schist, and argillite lying in the easternmost portion of Wake County.

Within 30 days of the adoption of this rule, the Department shall publish the extent of the area where gross alpha testing is required on Wake County's interactive mapping application (iMAPS).

4. The Department may specify additional required tests based upon evidence of land use that may have released contaminants not included in the testing required by 15A NCAC 18A .3800 on or adjacent to the property on which the well is proposed.~~Department within seventy-two (72) hours of completion.~~
5. No Certificate of Completion shall be issued for any private well until the Department is in receipt of analytical results of required water samples and the results of required water tests are reported to be as follows:
  - a. Absent for coliform bacteria;
  - b. No exceedances of the Maximum Contaminant Levels (MCLs) for drinking water, as specified in Title 40 of the Code of Federal Regulations, Chapter I, Subchapter D, Part 141, Subpart G (40 CFR 141.60 - 141.66);
  - c. Lead and copper shall not exceed the action levels specified in 40 CFR 141.80; and
  - d. If pesticide testing is required, dieldrin shall not exceed the North Carolina Groundwater Standard specified in 15A NCAC 2L .0202.

#### **~~SECTION 108. RESERVED~~**

#### **~~SECTION 109. PUMPS AND PUMPING EQUIPMENT~~**

~~The provisions contained in 15A NCAC 02C .0109 PUMPS AND PUMPING EQUIPMENT are included as if fully set forth herein, which are hereby incorporated by reference including any subsequent amendments and editions. The following provisions are included to supplement the provisions in 15A NCAC 02C .0109:~~

~~Modify (f) to read as follows: The person installing the pump shall install a hose bibb at the wellhead for the purpose of obtaining water samples. The hose bibb must be located in the piping, turned downward and positioned such that a water sample can be easily obtained without interference from any part of the wellhead.~~

#### **~~SECTION 110. WELL TESTS FOR YIELD AND CAPACITY~~**

~~The provisions contained in 15A NCAC 02C .0110 WELL TESTS FOR YIELD are included as if fully set forth herein, which are hereby incorporated by reference including~~

any subsequent amendments and editions. The following provisions are included to supplement the provisions in 15A NCAC 02C .0110:

Modify (a) to read as follows:

1. ~~Every water supply well, including semi-public wells shall be tested for capacity by a method and for a period of time as specified in this Rule.~~

Modify (b) by adding:

- Yield test results must be submitted to the Department within five (5) days after completion of the test(s).  
Paragraph (d) does not apply in Wake County.

## **SECTION 111. DISINFECTION OF WATER SUPPLIES, SAMPLING AND WATER QUALITY STANDARDS**

The provisions contained in 15A NCAC 02C .0111 DISINFECTION OF WATER SUPPLY WELLS are included as if fully set forth herein, which are hereby incorporated by reference including any subsequent amendments and editions. The following provisions are included to supplement the provisions in 15A NCAC 02C .0111:

Modify paragraph (2) as follows: Other materials and methods of disinfection at least as effective as those in item 15A NCAC .02C .0111 (1) (Chlorination) may be used upon prior approval by the Department.

Add as paragraph (3): continuous disinfection  
Water supply

(b) Continuous Disinfection:

Private drinking water wells, which ~~repeatedly~~ fail to test, absent for coliform bacteria on three consecutive post-disinfection sampling events, and upon well inspection are found to be constructed properly, shall be equipped with a continuous disinfection device that meets the conditions listed below:

1. ~~(a) Ultraviolet Disinfecting Units~~ Disinfection Unit: the The unit must be constructed and installed ~~to meet with an automatic shutoff control~~ or ~~exceed National Sanitation Foundation Standard 55-class A.~~ an alarm system (audible within the dwelling) that engages upon detection of a failure or malfunction. Pretreatment for the removal of excessive levels of inorganic chemicals and sediment must be installed when required by the manufacturer or the Department.
2. ~~(b) Continuous Chlorinator-~~ Continuous chlorination systems must provide continuous chlorination with a minimum chlorine residual of 0.2 mg/l and a chlorine contact time of at least twenty (20) minutes.
3. ~~(c) Other materials and methods of~~ continuous disinfection may be used upon prior approval by the Department.

——— Add as paragraph (4) compliance sampling

Add paragraph (4)(a): All newly constructed wells shall meet the water quality standards in this section before final approval by the Department. A compliance sample, testing absent for coliform bacteria and below exceedance levels of Groundwater Quality Standards for the State of North Carolina for target constituents determined by the Department, shall serve as confirmation that a well water supply complies with the water quality standards of this section.

Add paragraph (4)(b): For all new private or semi-public well water supplies, a compliance sample shall be collected not less than 24 hours after the chlorine or other disinfecting agent has been purged from the well and water supply system. Compliance samples will not be collected from:

- i. Water supply systems that contain residual chlorine
- ii. New systems that have not been properly chlorinated.
- iii. Wells that appear to be improperly protected or constructed.
- iv. Incomplete systems, i.e., wells without a functioning pump or completed well. It is the responsibility of the well owner to provide a source of power for the purpose of collecting the compliance sample.

Add paragraph (4) (c): Compliance samples will be collected only by persons approved per Section 103 (c) (WATER SAMPLER REGISTRATION) of these regulations. A chain of custody will be maintained between the person authorized to collect the compliance sample and the certified laboratory.

Add paragraph (4)(d): Compliance samples must be analyzed in the North Carolina State Laboratory of Public Health, the Wake County Department of Human Services Laboratory or in a contract laboratory certified by the Certification Unit of the Division of Public Health.

Add paragraph (4)(e): \_\_\_\_\_

~~Testing Protocol~~ For all new private or semi-public well water supplies, a compliance sample shall follow the protocol in Section 111 (5) (SAMPLING CONSTITUENTS) to determine compliance with maximum contaminant levels specified by the North Carolina Department of Environment and Natural Resources, Division of Water Quality, Groundwater Section rule: 15A NCAC 02L .0202 or as recommended by the North Carolina Occupational and Epidemiology Branch of the North Carolina Department of Health and Human Services.

Add paragraph (5) sampling constituents

Add paragraph (5) (a): Bacteria: For all new private or semi-public well water supplies, a compliance sample for Total and Fecal Coliform bacteria shall be collected not less than 24 hours after the chlorine or other disinfecting agent has been purged from the well and water supply system.

~~Add paragraph (5) (b): Inorganic Parameters: Inorganic parameters testing will be conducted on all private and semi-private drinking water supplies and will include as a minimum: Acidity, Silver, Arsenic, Barium, Calcium, Cadmium, Chloride, Chromium, Copper, Fluoride, Iron, Hardness, Mercury, Magnesium, Manganese, Sodium, Lead, pH, Selenium, and Zinc.~~

~~Add paragraph (5) (c): Nitrates/Nitrites: Nitrates and/or Nitrites testing will be conducted on all private and semi-private drinking water supplies~~

~~Add paragraph (5) (d): Volatile and Semi-volatile Organic Compounds including Chlorinated Organic Compounds: These compounds will be tested for private and semi-private drinking water supplies based on the following criteria.~~

- ~~2. Sampling based on a statistical population of all new wells installed.~~
- ~~3. Sampling based on the proximity of the well to existing and former underground storage tanks (UST).~~
- ~~4. Sampling based on the possibility that the well is located within twenty-five (25) feet of a building foundation that has at any time been treated with pesticides, herbicides or other lawn chemicals.~~
- ~~5. Sampling based on current or previous land use where industrial, land disposal or historical agriculture practices occurred.~~

## **SECTION ~~142.VII.~~ WELL MAINTENANCE AND REPAIR.**

~~The provisions contained in 15A NCAC 02C .0112 WELL MAINTENANCE: REPAIR: GROUNDWATER RESOURCES are included as if fully set forth herein, which are hereby incorporated by reference including any subsequent amendments and editions. The following provisions are included to supplement the provisions in 15A NCAC 02C .0112:~~

~~Add paragraph (e) In addition to the requirements of 15A NCAC 02C .0112, the following shall apply:~~

### ~~(a) Well Repair~~

~~(1) Repairs to any well with the existing wellhead terminating below ground (buried seal) shall include extending the well casing a minimum of twelve inches above land surface. The extension shall be made as follows:~~

~~(A) A tapered sleeve shall be inserted inside of the casing. The sleeve shall extend at least six inches below the top of the existing casing; and shall be welded or bonded to the existing casing, or;~~

~~(B) A sleeve shall be heated and forced over the existing casing. The sleeve shall extend at least six inches below the top of the existing casing.~~



The Department may inspect any well ~~by video~~ with a well camera before and after repairs are made. The Department ~~of Environmental Services~~ may inspect the liner and packer materials before they are installed, as they are installed in the well, and/or after they are installed.

(b) Testing

Following installation of a liner, the well shall be tested for coliform bacteria and inorganics.

(c) Maintenance ~~Add paragraph (f)~~

Discharges from any well shall not create a nuisance or hazard to the environment or public.

**SECTION ~~113.~~ VIII. ABANDONMENT OF WELLS.**

~~The provisions contained in 15A NCAC 02C .0113 ABANDONMENT OF WELLS are included as if fully set forth herein, which are hereby incorporated by reference including any subsequent amendments and editions. The following provisions are included to supplement the provisions in 15A NCAC 02C .0113:~~

~~Modify paragraph (c) as follows: In addition to the requirements of 15A NCAC 02C .0113, the following shall apply:~~

Any well which acts as a source or ~~channel~~ conduit of groundwater contamination shall be repaired or permanently abandoned within 30 days of receipt of notice from the ~~Environmental Services~~ Department or within thirty (30) days of commencement of the construction.

~~Add paragraph (f): The person or firm abandoning any well will provide a minimum twenty-four (24) hour notice to the Department prior to the commencement of permanent abandonment procedures.~~

**SECTION ~~114.~~ DATA AND RECORDS REQUIRED**

~~The provisions of 15A NCAC 02C .0114, which are hereby incorporated by reference including any subsequent amendments and editions with the following changes:~~

~~The provisions of 15A NCAC 02C .0114 (a) are not applicable to these rules.~~

~~Modify paragraph (b) as follows: (1) Any person completing or abandoning any well in Wake County shall submit to the Department and to the well owner a record of the construction or abandonment which includes the owner's name, the well's location, diameter and depth, casing depth, the method of finishing or abandoning, static water level, pumping water level, yield, pump type, capacity and setting, and date of completion or abandonment.~~

(2) Any person repairing a well shall submit to the Department and the well owner a record of the repair to include the owner's name, location of the well, change in construction and materials replaced, and date of repair with the exceptions noted in Section 101-E.

(3) The reports required in Sections (a) and (b) above shall be submitted to the Department within five (5) working days after completing construction, abandonment or repair.

(4) Reports shall be certified by the contractor or other person completing the construction, abandonment or repair.

#### **SECTIONS 115, 116 AND 117 ARE RESERVED**

#### **SECTION 119 RESERVED**

### **SECTION 203.IX. SEMI-PUBLIC WELL WATER SUPPLIES**

#### **(a) Location**

Every new well constructed ~~for use as to serve~~ a semi-public well water supply shall meet the location provisions of ~~Section 203 of Title 15A, Subchapter 18C of the N.C. Administrative Code~~ 15A NCAC 18C .0203 ~~of the N.C. Division of Environmental Health, Public Water Supply Section~~ which are hereby incorporated by reference including any subsequent amendments and editions.

#### **SECTION 302. PLANS**

#### **(b) Plans**

Every new well constructed ~~for use as to serve~~ a new semi-public well water supply shall meet the provisions of ~~Section 302 of Title 15A, Subchapter 18C of the N.C. Administrative Code~~ 15A NCAC 18C .0302 ~~of the N.C. Division of Environmental Health, Public Water Supply Section~~ which are hereby incorporated by reference including any subsequent amendments and editions, with the following changes:

4.(a) Plans shall be submitted in triplicate to the Department.

### **SECTION 303. SUBMISSIONS REQUIRED BY ENGINEER AND WATER SUPPLIER**

#### **(b) Submissions required of engineer and water supplier**

Every new well constructed for use as a semi-public well water supply shall meet the provisions of ~~Section 303 of Title 15A, Subchapter 18C of the N.C. Administrative Code~~ 15A NCAC 18C .0303 ~~of the N.C. Division of Environmental Health, Public Water Supply Section~~, which are hereby

incorporated by reference including any subsequent amendments and editions,  
with the following changes:

Revisions to plans shall be in accordance with paragraph 306 of these rules.

**SECTION 305. APPROVAL OF PLANS NECESSARY BEFORE  
CONTRACTING OR CONSTRUCTING**

Every new well constructed for use as a semi public well water supply shall meet the provisions of Section 304 of Title 15A, Subchapter 18C of the N.C. Administrative Code of the N.C. Division of Environmental Health, Public Water Supply Section, which are hereby incorporated by reference including any subsequent amendments and editions with the following changes:

The Department will provide approvals for in lieu of the Department of Environment and Natural Resources, Division of Environmental Health as referenced in paragraphs (a) and (b), and

(c) Approval of plans necessary before contracting

No construction shall be undertaken until the Department has approved submitted plans when required by this section and has issued a Construction Authorization.

~~Paragraph (b) (2) does not apply~~

~~Paragraph (b) (3) does not apply~~

~~Paragraph (b) (5) does not apply~~

~~Paragraph (b) (6) does not apply~~

**SECTION 306. CHANGES IN PLANS OR SPECIFICATIONS AFTER  
APPROVAL**

~~Section 305 of Title 15A, Subchapter 18C of the N.C. Administrative Code of the N.C. Division of Environmental Health, Public Water Supply Section, for Changes in Plans or Specifications After Approval does not apply and is replaced with the following:~~

(d) Changes in plans or specifications after approval

Deviations from the approved plans and specifications affecting capacity, hydraulic conditions, operating units, the functioning of water treatment processes, the quality of water to be delivered, or any provisos stipulated in Wake

County's original and subsequent letters of approval must be approved by the Department prior to any construction installation. Revised plans and specifications shall be submitted in time to permit the review and approval of such plans or specifications before any construction work affected by such deviations is begun.

## **SECTION 402. WATER SUPPLY WELLS**

### **(e)Water Supply Wells**

Owners and operators of semi-public well water supplies are required to exercise proper due diligence when ascertaining the risk of potential groundwater contamination. Every new well constructed for use as a semi-public well water supply shall meet the provisions of ~~Section 402 of Title 15A, Subchapter 18C of the N.C. Administrative Code~~ 15A NCAC 18C .0402 ~~of the N.C. Division of Environmental Health, Public Water Supply Section~~ which are hereby incorporated by reference including any subsequent amendments and editions with the following changes:

Replace paragraph (a) as follows: The construction of water supply wells shall conform to well construction regulations and standards of these ~~Rules~~Regulations.

Paragraph (g) subparagraph (5) and (6) are not applicable to these regulationsRegulations.

Replace paragraph (h) as follows: ~~Initial Disinfection of Water Supply Well.~~ All new wells and wells that have been repaired or reconditioned shall be cleaned of foreign sub substances such as soil, grease, and oil and then shall be disinfected: A in accordance with 15A NCAC 02C .0111.

1. All new semi-public well water supplies shall be tested for water quality in accordance with Section VI of these rulesRegulations. ~~representative sample or samples of water (free of chlorine) shall be collected by Wake County (or by a firm registered with Wake County for sample collection per these Rules) and sampled for bacteriological analysis in accordance with these Rules. After disinfection, the water supply shall not be placed into service until bacteriological tests of representative water samples analyzed in the North Carolina State Laboratory of Public Health, the Wake County Department of Human Services Laboratory or in a contract laboratory certified by the Certification Unit of the Division of Public Health. The water supply well shall not be placed into service until the Department is in receipt of analytical results of required water samples and the results of required water tests are reported as follows:~~

e. Absent for coliform bacteria;

f. No exceedances of the Maximum Contaminant Levels (MCLs) for drinking water, as specified in Title 40 of the Code of Federal

Regulations, Chapter I, Subchapter D, Part 141, Subpart G (40 CFR 141.60-141.66);

- g. Lead and copper shall not exceed the lead action level specified in 40 CFR 141.80; and
- h. If pesticide testing is required, dieldrin shall not exceed the North Carolina Groundwater Standard specified in 15A NCAC 2L .0202.

~~Replace paragraph (i) as follows: Compliance Sample. A representative sample or samples of water shall be collected by Wake County and submitted for chemical analysis by Wake (or by a firm registered with Wake County for sample collection per Section 111 of these Rules) analyzed in the North Carolina State Laboratory of Public Health, the Wake County Department of Human Services Laboratory or in a contract laboratory certified by the Certification Unit of the Division of Public Health.~~

~~The results of the analysis shall demonstrate the water is treatable to meet the water quality standards in Section 1500 of Title 15A, Subchapter 18C of the N.C. Administrative Code of the N.C. Division of Environmental Health and needed treatment shall be included before the well is placed into service.~~

#### **SECTION 404. WATER TREATMENT FACILITIES**

##### **(f) Water Treatment Facilities**

Every new well constructed for use as a semi-public well water supply shall meet the provisions of ~~Section 404 of Title 15A, Subchapter 18C of the N.C. Administrative Code~~ 15A NCAC 18C .0404 of the N.C. Division of Environmental Health, Public Water Supply Section which are hereby incorporated by reference including any subsequent amendments and editions with the following changes:

Modify paragraph (b) as follows: delete any references to surface water treatment. Paragraphs ~~(f)~~ (h), (i), (j) (k) are not applicable to these rules.

#### **SECTION 405. STORAGE OF FINISHED WATER**

##### **(g) Storage of finished water**

The semi-public well water supply shall meet the provisions of ~~Section 405 of Title 15A, Subchapter 18C of the N.C. Administrative Code~~ 15A NCAC 18C .0405 of the N.C. Division of Environmental Health, Public Water Supply Section which are hereby incorporated by reference including any subsequent amendments and editions, with the following changes:

Paragraphs (b) and (d) are not applicable to these rules.

**SECTION 406. DISTRIBUTION SYSTEMS****(h) Distribution Systems**

~~The~~All semi-public well water supply distribution systems shall meet the provisions of ~~Section 406 of Title 15A, Subchapter 18C of the N.C. Administrative Code~~15A NCAC 18C .0406 of the N.C. Division of Environmental Health, Public Water Supply Section which are hereby incorporated by reference including any subsequent amendments and editions, with the following changes:-

Paragraph (a) applies only to new systems.

Paragraphs (b)(3) and (5) are not applicable.

**(i) Electrical Systems****SECTION 407. ELECTRICAL SYSTEMS**

~~The~~ All semi-public well water supply electrical systems shall meet the provisions of ~~Section 407 of Title 15A, Subchapter 18C of the N.C. Administrative Code~~15A NCAC 18C .0407 of the N.C. Division of Environmental Health, Public Water Supply Section which are hereby incorporated by reference including any subsequent amendments and editions.

**SECTION 408. LEAD FREE CONSTRUCTION****(j) Lead free construction**

~~The~~ All semi-public well water supply systems shall meet the provisions of ~~Section 408 of Title 15A, Subchapter 18C of the N.C. Administrative Code~~15A NCAC 18C .0408 of the N.C. Division of Environmental Health, Public Water Supply Section which are hereby incorporated by reference including any subsequent amendments and editions with the following changes:-

~~Paragraph (d) is not applicable to these rules.~~

**SECTION 1001. DISINFECTION OF NEW SYSTEMS****(k) Disinfection of new systems**

The semi-public well water supply systems shall meet the provisions of ~~Section 1001 of Title 15A, Subchapter 18C of the N.C. Administrative Code~~15A NCAC 18C .1001 of the N.C. Division of Environmental Health, Public Water Supply Section which are hereby incorporated by reference including any subsequent amendments and editions.



## SECTION 1002. DISINFECTION OF WELLS

The semi-public well water supply systems shall meet the provisions of Section 1002 of Title 15A, Subchapter 18C of the N.C. Administrative Code of the N.C. Division of Environmental Health, Public Water Supply Section which are hereby incorporated by reference including any subsequent amendments and editions.

## SECTION 1003. DISINFECTION OF STORAGE TANKS AND DISTRIBUTION SYSTEMS

### (l) Disinfection of storage tanks and distribution systems

The semi-public well water supply systems shall meet the provisions of Section 1003 of Title 15A, Subchapter 18C of the N.C. Administrative Code 15A NCAC 18C .1003 of the N.C. Division of Environmental Health, Public Water Supply Section which are hereby incorporated by reference including any subsequent amendments and editions.

## SECTION 1301. OPERATOR REQUIRING DISINFECTION ONLY

The provisions contained in Section 1301 of Title 15A, Subchapter 18C of the N.C. Administrative Code of the N.C. Division of Environmental Health, Public Water Supply Section are replaced with the following provisions:

### (m) Continuous disinfection of water supply

The All semi-public well water supply systems shall require be continuously disinfected by means of chlorination or by other methods approved by the Department. Equipment shall be provided to assure uninterrupted disinfection.

### (n) Operation of semi-public water system wells

All semi-public well water supply systems are required to have an operator in responsible charge. The operator must hold a valid certificate issued by the North Carolina Water Treatment Facility Operators Board of Certification. The operator in responsible charge of a semi-public system requiring disinfection shall be capable of computing chlorine dosages that may be applied to the water. The operator shall be familiar with the entire water system, including pipelines, chlorinators, and other appurtenances pertaining to the operation of the entire system. The operator should be familiar with the North Carolina Water Treatment Facility Operators Certification requirements.

## SECTION 1303. OPERATION OF SEMI-PUBLIC WATER SYSTEMS WELLS

~~The provisions contained in Section 1303 of Title 15A, Subchapter 18C of the N.C. Administrative Code of the N.C. Division of Environmental Health, Public Water Supply Section are replaced with the following provisions:~~

~~The semi-public well water supply systems shall require an operator in responsible charge. The operator in responsible charge of a semi-public community and non-transient, non-community water system well shall be capable of computing chlorine dosages that may be applied to the water. The operator shall be familiar with the entire water system, including pipelines, chlorinators, and other appurtenances pertaining to the operation of the entire system. The operator should be familiar with the North Carolina Water Treatment Facility Operators Certification requirements.~~

#### **SECTION 1401. X. VARIANCES**

The provisions contained in 15A NCAC 02C .0118 VARIANCE are included as if fully set forth herein, which are hereby incorporated by reference including any subsequent amendments and editions.

#### **SECTION 1402. XI. ENFORCEMENT AND PENALTIES**

If any person violates any part of these regulations or willfully fails to perform any acts required by these regulations, he shall be guilty of a misdemeanor and shall be subject to sanctions as provided in N.C.G.S. 130A-25; additionally, he may have any permit or registration issued pursuant to these rules suspended or revoked. Such enforcement procedures shall be in addition to and not to the exclusion of any other civil enforcement mechanisms available under law.

#### **SECTION 1403. XII. INJUNCTIONS**

If any person violates any of these regulations or if any person hinders or interferes with the proper performance of duty by the Environmental Services Representative, the Director may institute an action in the Superior Court of Wake County for injunctive relief as provided in N.C.G.S. 130A-18.

#### **SECTION 1404. XIII. APPEAL PROCEDURE**

Appeals concerning the interpretation and enforcement of these rules shall be conducted in accordance with the Wake County Environmental Services Rules of Appeal, and in compliance with N.C.G.S. 130A-24.

#### **SECTION 1405. XIV. SEVERABILITY**

If any provision or clause of these regulations or the application thereof shall be declared invalid by a court of competent jurisdiction, such declaration shall not invalidate any other provision, clause, or application of these regulations.

1237  
1238 **SECTION ~~1406.~~ XV. EFFECTIVE DATE**  
1239

1240 These rules and regulations adopted by the Wake County Board of  
1241 Human Services on this the 14th day of April, 1986 and shall be in full force and effect  
1242 from and after October 1, 1986.  
1243

1244 Amendments were adopted on July 24, 2003 and shall become a part of these regulations  
1245 and in full force and effect from and after September 1, 2003.  
1246

1247 Amendments were adopted on XXXXXXXX 2018 and shall become a part of these  
1248 regulations and in full force and effect from and after XXXXX2018  
1249

1250  
1251  
1252 SIGNED: \_\_\_\_\_  
1253 Chairman, Wake County Board of Human Services:  
1254

1255 SIGNED \_\_\_\_\_  
1256 Director, Wake County Department of Human Services  
1257

1258 SIGNED \_\_\_\_\_  
1259 Director, Wake County Department of Environmental Services  
1260

1261 SIGNED \_\_\_\_\_  
1262 Clerk, Wake County Board of Human Services  
1263  
1264  
1265  
1266  
1267  
1268  
1269  
1270  
1271  
1272