

G.S. 150B-21.3A Report for 15A NCAC 02C, WELL CONSTRUCTION STANDARDS								
Agency - Environmental Management Commission								
Comment Period - January 29, 2016-April 8, 2016								
Date Submitted to APO - Filled in by RRC staff								
Rule Section	Rule Citation	Rule Name	Date and Last Agency Action on the Rule	Agency Determination [150B-21.3A(c)(1)a]	Implements or Conforms to Federal Regulation [150B-21.3A(e)]	Federal Regulation Citation	Public Comment Received [150B-21.3A(c)(1)]	Agency Determination Following Public Comment [150B-21.3A(c)(1)]
SECTION .0100 - CRITERIA AND STANDARDS APPLICABLE TO WATER-SUPPLY AND CERTAIN OTHER TYPE WELLS	15A NCAC 02C .0101	GENERAL PROVISIONS	Amended Eff. December 1, 1992	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0102	DEFINITIONS	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0105	PERMITS	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0107	STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		Yes	Necessary with substantive public interest
	15A NCAC 02C .0108	STANDARDS OF CONSTRUCTION: WELLS OTHER THAN WATER SUPPLY	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0109	PUMPS AND PUMPING EQUIPMENT	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0110	WELL TESTS FOR YIELD	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		Yes	Necessary with substantive public interest
	15A NCAC 02C .0111	DISINFECTION OF WATER SUPPLY WELLS	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0112	WELL MAINTENANCE: REPAIR: GROUNDWATER RESOURCES	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		Yes	Necessary with substantive public interest
	15A NCAC 02C .0113	ABANDONMENT OF WELLS	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0114	DATA AND RECORDS REQUIRED	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		Yes	Necessary with substantive public interest
	15A NCAC 02C .0116	DESIGNATED AREAS: WATER SUPPLY WELLS CASED TO LESS THAN 20 FEET	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0117	DESIGNATED AREAS: WATER SUPPLY WELLS CASED TO MINIMUM DEPTH OF 35 FEET	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0118	VARIANCE	Amended Eff. September 1, 2009	Necessary with substantive public interest	No		No	Necessary with substantive public interest

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	15A NCAC 02C .0119	DELEGATION	Amended Eff. October 1, 2009	Necessary with substantive public interest	No		No	Necessary with substantive public interest
SECTION .0200 - CRITERIA AND STANDARDS APPLICABLE TO INJECTION WELLS	15A NCAC 02C .0201	PURPOSE	Amended Eff. May 1, 2012	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0202	SCOPE	Amended Eff. May 1, 2012	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0203	CONFLICT WITH OTHER LAWS, RULES, AND REGULATIONS	Amended Eff. September 1, 1996	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0204	DEFINITIONS	Amended Eff. May 1, 2012	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0206	CORRECTIVE ACTION	Amended Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 146.7 Corrective Action	No	Necessary with substantive public interest
	15A NCAC 02C .0207	MECHANICAL INTEGRITY	Amended Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 146.8 Mechanical Integrity	No	Necessary with substantive public interest
	15A NCAC 02C .0208	FINANCIAL RESPONSIBILITY	Amended Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 144.52 Financial Responsibility	No	Necessary with substantive public interest
	15A NCAC 02C .0209	CLASSIFICATION OF INJECTION WELLS	Amended Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 144.6 Classification of Wells; 40 CFR 146.5 Classification of Injection Wells	No	Necessary with substantive public interest
	15A NCAC 02C .0210	REQUIREMENTS: WELLS USED TO INJECT WASTE OR CONTAMINANTS	Amended Eff. September 1, 1996	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 146.7 Corrective Action	No	Necessary with substantive public interest
	15A NCAC 02C .0211	GENERAL PERMITTING REQUIREMENTS APPLICABLE TO ALL INJECTION WELL TYPES	Amended Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 144.32 Signatories to permit applications and reports, 40 CFR 144.51 Conditions applicable to all permits.	No	Necessary with substantive public interest
	15A NCAC 02C .0217	PERMITTING BY RULE	Eff. May 1, 2012	Necessary with substantive public interest	No		No	Necessary with substantive public interest

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	15A NCAC 02C .0218	AQUIFER RECHARGE WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0219	AQUIFER STORAGE AND RECOVERY WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0220	AQUIFER TEST WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0221	EXPERIMENTAL TECHNOLOGY WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0222	GEOHERMAL AQUEOUS CLOSED-LOOP WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0223	GEOHERMAL DIRECT EXPANSION CLOSED-LOOP WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0224	GEOHERMAL HEATING/COOLING WATER RETURN WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0225	GROUNDWATER REMEDIATION WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest

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	15A NCAC 02C .0226	SALINITY BARRIER WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0227	STORMWATER DRAINAGE WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0228	SUBSIDENCE CONTROL WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0229	TRACER WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0230	OTHER WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 145.1 Purpose and scope of State UIC Programs. 40CFR 145.11 State UIC Program Requirements for permitting.	No	Necessary with substantive public interest
	15A NCAC 02C .0240	ABANDONMENT AND CHANGE-OF-STATUS OF WELLS	Eff. May 1, 2012	Necessary with substantive public interest	Yes If yes, include the citation to the federal law	40 CFR 144.51 Conditions applicable to all permits, 40 CFR 146.10 Plugging and abandoning Class I, II, III, IV, and V wells.	No	Necessary with substantive public interest
	15A NCAC 02C .0241	VARIANCE	Eff. May 1, 2012	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0242	DELEGATION	Eff. May 1, 2012	Necessary with substantive public interest	No		No	Necessary with substantive public interest
SECTION .0300 - PERMITTING AND INSPECTION OF PRIVATE DRINKING WATER WELLS	15A NCAC 02C .0301	SCOPE AND PURPOSE	Eff. July 1, 2008	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0302	DEFINITIONS	Eff. July 1, 2008	Necessary with substantive public interest	No		No	Necessary with substantive public interest

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	15A NCAC 02C .0303	APPLICATION FOR CONSTRUCTION PERMIT	Eff. July 1, 2008	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0304	PERMITTING	Eff. July 1, 2008	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0305	GROUT INSPECTION: CERTIFICATION	Eff. July 1, 2008	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0306	WELL COMPLETION AND CERTIFICATION	Eff. July 1, 2008	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0307	WELL DATA AND RECORDS	Eff. July 1, 2008	Necessary with substantive public interest	No		No	Necessary with substantive public interest
	15A NCAC 02C .0308	APPEAL PROCEDURE	Eff. July 1, 2008	Necessary with substantive public interest	No		No	Necessary with substantive public interest

15A NCAC 2C COMMENTS AND RESPONSES FOR PERIODIC REVIEW OF EXISTING RULES

15A NCAC Subchapter 2C Section .0100, Well Construction Standards

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

Commenter Name: Walt Haven

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: Another type of comment

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: Just as a note for consideration during the next round of DWR/EMC rulemaking, whenever it may occur: 15A NCAC 02C.0107(a)(2)(M) technically prohibits constructing a small well house to contain the wellhead on a private well. Suggest rewording (M) as follows, "Building perimeters, including any attached structures, with the exception of a structure built to exclusively contain a wellhead..."

Agency Response:

The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the readoption process.

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

Commenter Name: COMMENTER #2 and COMMENTER #3

Do I agree with the Agency's determination? No

I would determine this rule's classification as: Necessary without substantive public interest

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: Another type of comment

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: Eliminate the requirements of 15A NCAC 2C.0016 and 17 (20 and 35 foot minimum grout) and require complete full grouts on all wells. Designate geographical areas of the State, such as coastal plain, piedmont and Mountains or confined and unconfined aquifers. Minimum setbacks should correspond to the potential contamination for each geographical area or aquifers (confined or unconfined). As you are aware, an unconfined aquifer is more susceptible to contamination and should have a greater setback than an unconfined aquifer. Designate a minimum of 50 feet from any septic system for existing lots only. Set a minimum setback for new lots.

Require a minimum of 100 feet from any cemetery in rule 15A NCAC 2C. 0107(2)S

Agency Response:

The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the readoption process.

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

Commenter Name: John Nykamp

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: An objection to the rule

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: 15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS (j) Add (7) "Each new well shall be equipped with a cover or enclosure which is free of cracks, holes, etc. and is determined to be approved by the Director. No single dimension of the cover or enclosure shall exceed seven feet in length and it should be secured firmly to the ground surface, while still being easily accessible for inspection. If a concrete floor is poured within the cover or enclosures, a drain hole must be provided to allow water to drain out.

A new well designed to serve a water supply system where system components will require an area with an enclosure having a single dimension exceeding seven feet in length, shall have a four-inch thick concrete floor. The enclosure shall be anchored to the floor and shall have a drain hole provided to allow water to drain out, with the well still being accessible for inspections."

Most wells installed in North Carolina do not use pitless adapters; they use a wellseal and pipes and wires enter through the top of the well. The pipes are then vulnerable to freezing. A proper well cover will help prevent frozen pipes and protect the pipes from exposure to Ultra-Violet light rays, which could weaken the plastic.

Agency Response:

The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the readoption process.

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

Commenter Name: John Nykamp

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: An objection to the rule

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: 15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS (j) (5) (C)
Change to "The top of the casing extends at least 12 inches above land surface; If a pitless unit is used, the pitless unit extends at least 12 inches above land surface;"

If a pitless adapter is used, the existing casing would be used. If a pitless unit is used, the existing casing would be terminated below land surface and the pitless unit would be attached to the top of the casing and the pitless unit would extend above land surface.

Agency Response:

The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the readoption process.

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

Commenter Name: John Nykamp

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: Another type of comment

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: 15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS (j) (2) (E)(viii) the well construction permit number or numbers, if such a permit is required

This has been repealed by a Session Law.

Agency Response:

A statute change to G.S. 87-97 that addressed this issue was considered during the 2013-2014 Session (Senate Bill 38), but was never ratified. The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the readoption process.

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

Commenter Name: John Nykamp

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: An objection to the rule

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: 15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS (e) (1) (D) Change to "Bentonite slurry grout shall consist of a mixture of not more than 24 gallons of clear, potable water to one 50 pound bag of commercial western sodium bentonite. Non-organic, non-toxic substances may be added to bentonite slurry grout mixtures to improve particle distribution and pumpability. Bentonite slurry grout may only be used in accordance with the manufacturer's written instructions. Bentonite slurry grout shall be pumped to the minimum grout depth as required by Subparagraph (f)(1) of this Section."

Western sodium bentonite from the Wyoming area has the best sealing characteristics of any bentonite and this change will more clearly define the grout. Using the best available materials will better protect our groundwater and provide a better well for the well owner. Pumping to the minimum grout depth ensures that the grout will displace any liquids that are in the annular space. Simply pouring a slurry grout in the top of the annular space would cause the grout to comeingle with drilling fluids.

Agency Response:

The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the readoption process.

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

Commenter Name: John Nykamp

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: An objection to the rule

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: 15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS (a) (3) (F)
Change to "Thermoplastic casing shall not be driven into any formation by impact, but may be pushed."

Agency Response:

The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the readoption process.

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

Commenter Name: John Nykamp

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: An objection to the rule

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: 15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS (a) (3) (B) Sewage or liquid-waste collection or transfer facility constructed to water main standards in accordance with 15A NCAC 02T .0305(g)(2) or 15A NCAC 18A .1950(e), as applicable: 25 feet

FOR REFERENCE: 15A NCAC 02T .0305(g)(2) For public or private wells, piping materials, testing methods and acceptability standards meeting water main standards shall be used where these minimum separations cannot be maintained. All appurtenances shall be outside the 100 foot radius. The minimum separation shall however not be less than 25 feet from a private well or 50 ft from a public well.

2C .0100 should define what is "water main standards". 02T .0305 defines how to construct a sewer line. We are approving sites for wells, not testing materials for sewer lines. If the well can be 25 feet from a sewer line, why must the well be 100 feet from a manhole that is vacuum-tested. The manhole would have visible overflow to the surface, yet the sewer pipe could leak underground where it would not be visible.

Agency Response:

The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the readoption process.

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

Commenter Name: John Nykamp

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: An objection to the rule

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: 15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS (a) (2) (D) Sewage or liquid-waste collection or transfer facility constructed to water main standards in accordance with 15A NCAC 02T .0305(g)(2) or 15A NCAC 18A .1950(e), as applicable: 50 feet

FOR REFERENCE: 15A NCAC 02T .0305(g)(2) For public or private wells, piping materials, testing methods and acceptability standards meeting water main standards shall be used where these minimum separations cannot be maintained. All appurtenances shall be outside the 100 foot radius. The minimum separation shall however not be less than 25 feet from a private well or 50 ft from a public well.

2C .0100 should define what is "water main standards". 02T .0305 defines how to construct a sewer line. We are approving sites for wells, not testing materials for sewer lines. If the well can be 50 feet from a sewer line, why must the well be 100 feet from a manhole that is vacuum tested. The manhole would have visible overflow to the surface, yet the sewer pipe could leak underground where it would not be visible.

Agency Response:

The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the readoption process.

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

Commenter Name: Laura Honeycutt

Company/Organization: Guilford County

Email: lhoneyc@myguilford.com

Zip: 27401

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: An objection to the rule

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: 15A NCAC 02C .0107 Standards of Construction: Water Supply Well (j). Add (7) "Each new well shall be equipped with a cover or enclosure which is free of cracks, holes, etc. and is determined to be approved by the Director. No single dimension of the cover or enclosure shall exceed seven feet in length and it should be secured firmly to ground surface, while still being easily accessible for inspection. If a concrete floor is poured within the cover or enclosures, a drain hole must be provided to allow water to drain out.

A new well designed to serve a water supply system where system components will require an area with an enclosure having a single dimension exceeding seven feet in length, shall have a four-inch thick concrete floor. The enclosure shall be anchored to the floor and shall have a drain hole provided to allow water to drain out, with well still being accessible for inspections"

Most wells in NC use a well seal with pipes and wires entering through the top of the well. This makes the pipes more vulnerable to freezing. A proper well cover will prevent frozen pipes and protect piping components from exposure to UV light rays which can weaken the plastic.

Agency Response:

The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the re-adoption process.

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS

Commenter Name: Laura Honeycutt
Company/Organization: Guilford County
Email: lhoneyc@myguilford.com
Zip: 27401

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: An objection to the rule

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: Objecting to 15A NCAC 02C.107(a) (2) (D) which references 02T .0305(g)(2). 2C.0100 should define what is "water main standards". 02T.035 defines how to construct a sewer line. We are approving sites for wells, not testing materials for sewer lines. If the well can be 50 ft. from a sewer line, why must the well be 100 ft. from a manhole that is vacuum-tested. The manhole would have visible overflow to the surface, yet the sewer pipe could leak underground where it would not be visible.

Agency Response:

The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the re-adoption process.

15A NCAC 02C .0110 WELL TESTS FOR YIELD

Commenter Name: Dwight Respass

Email: dwightr@mchsi.com

Zip: 27962

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: An objection to the rule

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: While I agree with section A of this rule requiring a well test on domestic wells to provide some protection for homeowners who may have very limited knowledge of well design and construction I do not believe that section B is necessary. Capacity tests for irrigation and industrial wells should be a contractual matter between the owner and well driller.

Agency Response:

The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the readoption process.

15A NCAC 02C .0112 WELL MAINTENANCE: REPAIR: GROUNDWATER RESOURCES

Commenter Name: John Nykamp

Email: jnykamp@myguilford.com

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: An objection to the rule

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: 15A NCAC 02C .0112 WELL MAINTENANCE: REPAIR: GROUNDWATER RESOURCES (f)
Change to "No well shall be repaired or altered such that the upper terminus of the well outer casing is completed less than 12 inches above land surface. Any grout excavated or removed as a result of the well repair shall be replaced in accordance with Rule .0107(f)"

Many older wells in the piedmont area are rehabbed by installing a packer/liner. In fact, many times the original casing is only 3-4" above land surface. The top of the liner is extended more than 12" above land surface and held in place with a riser clamp. When completing the wellhead, a 4" well seal is installed. Requiring that the outer casing be extended 12" above land surface would greatly increase the cost to consumers with no benefit. To extend a galvanized casing one foot would usually require the services of a welder. This would increase the cost approximately \$600 to \$800. The cost of a riser clamp is approximately \$10. When the original casing extends more than 12" above land surface, it is sometimes preferable to cut the original casing to a shorter height, in order that the 4" wellseal be only 13-14" above land surface. If the original casing is only 2" above land surface, the riser clamp is positioned so that the well seal is 13-14" above land surface.

There are other benefits to requiring the wellhead be 12" above land surface and not limiting the height requirement to the outer casing. With the 4" wellseal installed, all chlorination products that are poured down the access port are certain to be inside the casing and can be washed down to the water level. If the 4" liner is installed below a 6" wellseal, chlorination products that are poured down the access port may become lodged between the liner pipe and the outer casing. This would result in insufficient chlorine getting to the water and corrosion of the outer casing and wellseal. 15A NCAC 2C .0112(e) requires that the annular space around the liner casing shall be at least five-eighths inches and shall be completely filled with neat-cement grout or sand cement grout. To verify that the grout is to the top of the liner would require breaking the wellseal, which would then require that the well be disinfected again. If the liner is installed to a great depth or the grout settles, a second grout emplacement is required. This would again require breaking the wellseal and another well disinfection. If a 4" wellseal is used, the grouting can be performed in stages without disturbing the wellseal. It is easy to verify that the grout is to the top of the existing casing. This allows the well contractor to complete the grout and the wellowner does not have a disruption of water service.

Agency Response: The agency's selected determination is "necessary with substantive public interest." Comments will be considered during the readoption process.

15A NCAC 02C .0114 DATA AND RECORDS REQUIRED

Commenter Name: John Nykamp

Email: jnykamp@myguilford.com

Do I agree with the Agency's determination? Yes

I would determine this rule's classification as: undefined

Do I want to submit a written comment on this rule? Yes

My comment type on this rule is: An objection to the rule

Do I want to enter a comment, or submit a file? Enter a comment

My Comment Text: 15A NCAC 02C .0114 DATA AND RECORDS REQUIRED (b)(1) Change to(A) “Any person completing, repairing or abandoning any well shall submit to the Division a record of the construction or abandonment. For water supply wells, a copy of each completion or abandonment record shall also be submitted to the health department responsible for the county in which the well is located. The record shall be on forms provided by the Division and shall include certification that construction or abandonment was completed as required by this Section, the owner's name and address, latitude and longitude of the well with a position accuracy of 100 feet or less, diameter, depth, yield, and any other information the Division may require as necessary to depict the location and construction details of the well.”

Records of well construction and abandonment are required, but many wells are being repaired and rehabbed. Records for these wells are every bit as useful as records for newly constructed wells. Abandoned wells are no longer in use, but rehabbed wells are still being used. These records reflect what is actual wells and should be treated as such.

Add (B) “Any person installing a pump or equipment in a well shall submit to the Division a Record of Pump Installation to include the well’s location, date of pump installation, depth of pump intake, horsepower rating of pump, and static water level. The record shall be on forms provided by the Division and shall include certification that pump installation was completed as required by this Section, the owner's name and address, latitude and longitude of the well with a position accuracy of 100 feet or less, diameter, depth, yield, and any other information the Division may require as necessary to depict the location and construction details of the well. This record is not required for pump repair or pump replacement if the replacement pump is the same horsepower rating and will be installed at the same depth as the original pump.”

15A NCAC 02C .0107 STANDARDS OF CONSTRUCTION: WATER SUPPLY WELLS (j) (3) requires that a Pump Installation Information Plate be installed on the well, along with the Well Contractor Identification Plate. If the person installing the pump must install a plate, that person should also complete a Pump Installation record. This information is extremely valuable when diagnosing well problems. Most water supply problems seem to be related to improper pump installation or improper disinfection by the pump installer. I have been told of situations where a non-certified person has installed a pump and stamped the certification number of a well contractor. This would provide a paper trail back to the person installing the pump and verify that the well was properly disinfected.

Agency Response: The agency’s selected determination is “necessary with substantive public interest.” Comments will be considered during the readoption process.