



GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

**Stakeholder Meeting regarding Proposed
Updates to the Rules for Safe Drinking
Water, Rule 391-3-5-.07, and Proposed
Updates to Georgia's Minimum Standards
for Public Water Systems**

December 18, 2024

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DRINKING WATER WELL LOCATION

Agenda

- Background on current rules for drinking water well location
- Proposed changes to 391-3-5 Rules For Safe Drinking Water
- Proposed changes to Georgia Minimum Standards for Public Water Systems (revised March 2021)
- Public Comment Period
- Q and A
- Adjourn



BACKGROUND- LOCATING DRINKING WATER WELLS IN GEORGIA

Rule 391-3-5-.07 Wells (Amended)

(3) Protection from Contamination. Each well must be protected from contamination by surface waters and other sources of contamination. The location of wells must be in compliance with the latest edition of the Division's "Minimum Standards for Public Water Systems." .

Minimum Standard Section 5.2.4 WELL LOCATIONS:

Wells shall be located:

- i. not less than 100 feet from surface water



BACKGROUND (CONTD)

- There is no variance provisions in the Georgia Minimum Standards.
- Stakeholders have requested EPD and DNR Board to set up a variance or modification of the Rules and/or Minimum standards to allow location of wells within 100 feet of surface water.
- When wells are located close to a surface water source the concern is that the ground water could be under the influence of surface water.



RULE 391-3-5-.07 WELLS (AMENDED)

Rule 391-3-5-.07 Wells

(3) Protection from Contamination. Each well must be protected from contamination by surface waters and other sources of contamination. The location of wells must be in compliance with the latest edition of the Division's "Minimum Standards for Public Water Systems."

- (a) A public water systems that is requesting to locate a well within 100 feet of a surface water must complete an evaluation, including:
 - 1. Submit results of a hydrogeologic assessment completed by a Georgia registered geologist. The assessment must include the following:
 - (i) Well characteristics: well depth, screened or perforated interval, casing seal placement;

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RULE 391-3-5.07 (CONTINUED)

- (ii) Aquifer characteristics: thickness of the vadose zone, hydraulic conductivity (meaning the capacity of the medium, for example, soil, aquifer, or any hydrogeological unit of interest, to transmit water) of the vadose zone and the aquifer, presence of low permeability zones in the vadose zone, degree of connection between the aquifer and surface water;
- (iii) Hydraulic gradient: gradient between the aquifer and surface water source during pumping conditions, variation of static water level and surface water level with time; and
- (iv) Groundwater flow: flow of water from the surface water source to the groundwater source during pumping conditions, estimated Time of Travel (TOT) for groundwater from the surface water source(s) to the well(s), spring(s), etc.



RULE 391-3-5.07 (CONTINUED)

2. Collect a minimum of two samples according to the "Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA)."
3. Samples will be collected twice during a twelve-month period: once between August 15 and October 15 (fall) and again between April 1 and May 30 (spring) or at other times as determined by the EPD. Both water samples must be collected during a period of high runoff or streamflow.
4. Well(s) that are proposed to be located in a flood zone shall also test during an annual flood event during which their system is inundated, in addition to the initial fall and spring sampling periods, unless the times are synonymous.
5. All wells must be pumping constantly or cycled on and off on a regular basis for at least two weeks prior to acquiring a sample for MPA.



RULE 391-3-5.07 (CONTINUED)

6. The sampling period is 24 hours. The flow-limiting device on the sampling apparatus should be calibrated to allow one gallon per minute through the system. It is important that 1,400-1,500 gallons of water pass through the filter during the 24-hour sampling period. The minimum amount of water that can be used is 500 gallons.
7. In addition to MPA analysis, the water sample collected in accordance with subparagraphs (a)2. through (a)6. of this rule shall also be tested for Giardia Lamblia, Cryptosporidium, turbidity and Heterotrophic Plate Count (HPC).
8. The result of the testing shall be submitted to the Georgia Environmental Protection Division, Drinking Water Program, Source Water Assessment Unit, and must be accompanied by an explanation from the laboratory as to the score the results warrant per the EPA's risk rating scale outlined in Table 1 and Table 2 of the "Consensus Method for Determining Groundwaters under the Direct Influence of Surface Water Using Microscopic Particulate Analysis (MPA)."



RULE 391-3-5.07 (CONTINUED)

9. An approval may be provided for the Well(s) to be treated as a ground water if, based on the hydrologic assessment, the Director determines that direct surface water influence is not likely and test results meet all the following conditions:
- (i) MPAs score is fewer than 8 points for the samples collected in accordance with Condition 2 through 6 of this rule,
 - (ii) There is no presence of Giardia Lamblia or Cryptosporidium in the sampled water,
 - (iii) HPC in the sampled water is less than 500, and
 - (iv) Turbidity of the sampled water is less than 1 NTU.



RULE 391-3-5.07 (CONTINUED)

10. An approval may be provided for the Well(s) to be treated as a surface water and subject to the Surface Water Treatment Rule (SWTR) if, based on the hydrologic assessment the Director determines that direct surface water influence is likely and test results indicate any of the following conditions:

- (i) MPAs score is greater than 8 points for the samples collected in accordance with Condition (a) 2 through (a) 6 of this rule,
- (ii) There is presence of Giardia Lamblia or Cryptosporidium in the samples water,
- (iii) HPC in the sampled water is greater than 500, or
- (iv) Turbidity of the sample water is greater than 1 NTU



RULE 391-3-5.07 (CONTINUED)

11. Well(s) that are approved pursuant to subparagraph (a)9. of this rule and as such treated as groundwater with potential for the influence of surface water shall conduct MPA analysis twice a year in accordance with subparagraphs (a)2. through (a)6. of this rule while the well is in operation. A special condition shall be added to the Drinking Water Permit to meet this requirement.



MINIMUM STANDARD UPDATES

5.2.4 WELL LOCATIONS:

Well(s) shall be located:

- i. not less than 100 feet from surface water; or within 100 feet of surface water in accordance with Rule 391-3-5-.07(3)(a);
- Other changes to Minimum Standards not related to Well location.
- Typos, conflict with drinking water rules and/or duplicates



MINIMUM STANDARD UPDATES (NOT RELATED TO WELL STANDARDS)

10.6 ACCESS

- b. Manholes above the waterline:
 - 1. At least two manholes should be provided.
 - 2. On elevated storage ~~or doom~~ dome roof structures, at least one of the access manholes shall be framed at least 4 inches, and preferably 6 inches, above the surface of the roof at the opening.



MINIMUM STANDARD UPDATES

10.17 SAMPLING

A ~~suitable~~ **smooth-noosed** sampling tap should be provided on all storage structures and be protected from public access. Smooth-nosed sampling tap(s) shall be provided to facilitate collection of water samples for both bacteriological and chemical analyses. The sample tap(s) shall be easily accessible.

12.9 WATER SERVICES AND PLUMBING

c. All new ~~and existing~~ services connected to community and non-transient noncommunity water systems shall be individually metered.

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COMMENT

How to submit your comments

- Written comments should be received by close of business on Friday, December 27, 2024.
- Written comments may be emailed to EPDComments@dnr.ga.gov.
- Please include the words “Drinking Water Program” in the subject line.



Questions/Comments?

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