SECTION .0300 - SUBMISSION OF PLANS: SPECIFICATIONS: AND REPORTS

15A NCAC 18C .0301 APPLICABILITY: PRIOR NOTICE

(a) All persons, including units of local government, intending to construct, alter, or expand a community or nontransient, non-community water system shall give written notice thereof, including submission of applicable Water System Management Plan, engineering reports, and engineering plans and specifications to the Department, as required by the rules of this Section. Any construction, alteration, or expansion which affects capacity, hydraulic conditions, operating units, the functioning of water treatment processes or the quality of water to be delivered shall require submission of the documents described in this Paragraph. A non-community water system using surface water or ground water under the direct influence of surface water shall be subject to the provisions of this Rule. Non-transient, non-community water systems shall not be subject to the provisions of this Rule unless constructed, altered, or expanded on or after July 1, 1994.

(b) Water System Management Plan and Engineer=s Report shall be submitted to the Department at least 60 days prior to the date upon which action by the Department is desired.

(c) All reports, other than those in Paragraph (b) of this Rule, engineering plans and specifications and other data intended for approval shall be submitted to the Department at least 30 days prior to the date upon which action by the Department is desired.

(d) If revisions to the Water System Management Plan are necessary, the system applicant will be notified. A revised Water System Management Plan will constitute a resubmittal and additional time will be required for review.

(e) If revisions to the engineering plans or specifications are necessary, the engineer who prepared them will be notified. Revised engineering plans and specifications will constitute a resubmittal and additional time will be required for review.

History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Eff. January 1, 1977; Readopted Eff. December 5, 1977; Amended Eff. July 1, 1994; September 1, 1990; March 1, 1989; June 30, 1980; September 1, 1979; Temporary Amendment Eff. October 1, 1999; Amended Eff. August 1, 2000; Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.

15A NCAC 18C .0302 SUBMITTALS

(a) All plans, specifications, reports, or other data shall be submitted in triplicate for review by the Public Water Supply Section, Division of Water Resources at 512 N Salisbury Street, Room 1304A, Raleigh NC 27604-1170, or 1634 Mail Service Center, Raleigh NC 27699-1634.

(b) Engineering plans shall consist of legible prints having black, blue, or brown lines on a white background suitable for microfilming. The engineering plans shall not be more than 36 inches wide and 48 inches long and not be less than 11 inches wide and 17 inches long.

(c) An applicant subject to G.S. 143-355(l) shall submit three copies of the adopted Local Water Supply Plan. If information required in the Engineer's Report or the Water System Management Plan is included in an adopted Local Water Supply Plan, a submittal to the Department may incorporate this information by referencing the location in the adopted Local Water Supply Plan.

(d) Existing systems that have previously submitted an Engineer's Report and a Water System Management Plan in accordance with Rule .0307 of this Section shall document any changes either as revised reports and plans or addendums.

History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Eff. January 1, 1977; Readopted Eff. December 5, 1977; Amended Eff. July 1, 1994; December 1, 1991; September 1, 1990; June 30, 1980; September 1, 1979;

Temporary Amendment Eff. October 1, 1999; Amended Eff. April 1, 2014; August 1, 2000; Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.

15A NCAC 18C .0303 SUBMISSIONS REQUIRED BY ENGINEER AND APPLICANT

(a) Detailed Engineer's Reports and engineering plans and specifications shall be prepared by a professional engineer licensed to practice in the State of North Carolina. These documents shall bear an imprint of the registration seal of the engineer. Upon completion of the construction or modification, the applicant shall submit a certification statement signed and sealed by a registered professional engineer stating that construction was completed in accordance with approved engineering plans and specifications, including any provisions stipulated in the Department's plan approval letter or authorization to construct letter, and revised only in accordance with the provisions of Rule .0306 of this Section. The statement shall be based upon observations during and upon completion of construction by the engineer or a representative of the engineer's office who is under the engineer's supervision.

(b) A Water System Management Plan as required in Paragraph (c) of Rule .0307 of this Section shall include a signed certification stating that the information submitted is true, accurate, and complete. This certification shall be in accordance with Paragraph (d) of this Rule.

(c) The applicant shall submit a signed certification, prior to Final Approval, stating that the requirements in Paragraph (d) (Operation and Maintenance Plan) and Paragraph (e) (Emergency Management Plan) of Rule .0307 of this Section have been satisfied, and that the system will have a certified operator as required by Section .1300 of this Subchapter prior to operation. This certification shall be in accordance with Paragraph (d) of this Rule.

(e) The certifications required in Paragraphs (b) and (c) of this Rule shall be provided on a form provided by the Department and shall be signed by the following individual or his duly authorized representative:

- (1) for a corporation, limited liability company, home owner association or a non-profit organization: a president, vice president, secretary, or treasurer;
- (2) for a partnership or sole proprietorship: by a general partner or the proprietor; or
- (3) for a municipality, State, Federal or other agency: by either a principal executive officer or ranking elected official.

History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Eff. January 1, 1977; Readopted Eff. December 5, 1977; Amended Eff. July 1, 1994; December 1, 1987; September 1, 1979; Temporary Amendment Eff. October 1, 1999; Amended Eff. August 1, 2000; Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.

15A NCAC 18C .0304 APPLICATION FOR APPROVAL: BY WHOM MADE

Applications for approval shall be filed by the current owner on blanks which will be supplied by the Department. If ownership changes before Final Approval, the new owner shall submit a new Water System Management Plan in accordance with Rule .0307 of this Section.

History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Eff. January 1, 1977; Readopted Eff. December 5, 1977; Amended Eff. September 1, 1990; Temporary Amendment Eff. October 1, 1999; Amended Eff. August 1, 2000; Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.

15A NCAC 18C .0305 APPROVALS NECESSARY BEFORE CONTRACTING OR CONSTRUCTING

(a) No construction shall be undertaken, and no contract for construction, alteration, or installation shall be entered into, unless the Department determines the system complies with G.S. 130A-317(c) and the Department issues the authorization to construct letter. This authorization shall be issued following completion and submittal of the Engineer's Report and Water System Management Plan, as specified in Rule .0307(b) and (c) of this Section, and approval of the engineering plans and specifications by the Department. Authorization to construct from the Department shall be valid for 36 months from the date of the letter. Authorization to construct may only be extended if the rules governing a public water supply and site conditions have not changed since the letter was issued. The authorization to construct and the approval for engineering plans and specifications letters from the Department shall be posted at the primary entrance of the job site during construction.

(b) Upon request, permission to drill test wells at approved sites in order to establish the quality and quantity of the ground water shall be granted by the Department prior to completion and submittal of the Engineer's Report and Water System Management Plan and approval of engineering plans and specifications. All wells abandoned, either temporarily or permanently, shall be abandoned in accordance with 15A NCAC 02C .0113 (Well Construction Standards) and all local ordinances.

(c) Units of local government that have an adopted water system extension program pursuant to Section .1800 of this Subchapter, upon submission to and approval of their program by the Department, shall be excluded from the requirements of submitting engineering plans and specifications for water main extensions that would not have adverse effect upon the existing system supply or pressure, provided the following requirements are met:

- (1) Engineering plans and specifications for all such extensions shall be prepared by or under the direct supervision of an engineer licensed to practice in the State of North Carolina.
- (2) All engineering plans shall be approved by the unit of local government's engineering department or its consulting engineers prior to the commencement of construction.
- (3) The Department shall have approved the extension program submitted by the unit of local government prior to construction commencing.
- (4) The extension program submitted for review and approval by the Department shall provide for establishing ownership, operation, and maintenance of water system extensions and shall constitute prior notice of proposed construction.
- (5) Where design is to be based on a local government's standard specifications in lieu of written separate specifications for each extension project, the standard specifications shall have been previously approved by the Department.
- (6) The local government shall have obtained from the Department a letter stating they have met the requirements set forth in Section .1800 of this Subchapter.
- (7) An annual up-to-date plan of the entire public water system shall be maintained by the supplier of water and made available on request by the Department.

History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Eff. January 1, 1977; Readopted Eff. December 5, 1977; Amended Eff. July 1, 1994; September 1, 1990; September 1, 1979; Temporary Amendment Eff. October 1, 1999; Amended Eff. August 1, 2000; Readopted Eff. July 1, 2019.

15A NCAC 18C .0306 CHANGES IN ENGINEERING PLANS OR SPECIFICATIONS AFTER APPROVAL

Deviations from the approved engineering plans and specifications or changes in site conditions affecting capacity, hydraulic conditions, operating units, the functioning of water treatment processes, the quality of water to be delivered, or any provisos stipulated in the Department's original and subsequent letters of approval must be approved by the Department before any construction or installation. Revised engineering 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. The Secretary may seek injunctive relief under G.S. 130A-18, assess an administrative penalty under G.S. 130A-22(b), or revoke or suspend engineering plan approval under G.S. 130A-23 for any violation of this Rule.

History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Eff. January 1, 1977; Readopted Eff. December 5, 1977; Amended Eff. November 1, 1987; Temporary Amendment Eff. October 1, 1999; Amended Eff. August 1, 2000; Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.

15A NCAC 18C .0307 ENGINEER'S REPORT, WATER SYSTEM MANAGEMENT PLAN AND OTHER PLANS

(a) The applicant shall submit to the Department an Engineer's Report and Water System Management Plan.

(b) Engineer's Report. The Engineer's Report shall contain a system description for the entire project, including scheduled phase development and the following information, where applicable:

- (1) description of all existing water systems related to this project;
- (2) identification of the municipality, community, area, or facility to be served by the proposed water system;
- (3) the name and address of the applicant;
- (4) a description of the nature of the establishments and of the area to be served by the proposed water system;
- (5) a description of the future service areas of the public water system for 5, 10, 15 and 20 years;
- (6) consideration of alternative plans for meeting the water supply requirements of the area, including, for new systems, obtaining water service from an existing system;
- (7) for applicants seeking State loan or grant support for the project, financial considerations, including:
 - (A) technical alternatives;
 - (B) the costs of integral units; and
 - (C) the total costs.
- (8) population records and trends, present and anticipated future water demands, and present and future yield of source or sources of water supply, including provisions to supply water to other systems;
- (9) character of source or sources of water supply, including:
 - (A) hydrological or hydrogeological data;
 - (B) stream flow rates or well yields;
 - (C) for surface sources, analytical results for chemical, mineral, bacteriological, and physical qualities; and
 - (D) the location and nature of sources of pollution.
- (10) proposed water treatment processes, including:
 - (A) the criteria and basis of design of units;
 - (B) the methods or procedures used in arriving at recommendations; and
 - (C) the reasons or justifications for any deviations from conventional or indicated process or method.
- (11) for purchased water, a copy of the agreement with the supplier and the hydraulic analysis showing the supplier's capabilities for supplying the purchased water;
- (12) a description of the design basis of the source, treatment, and distribution system, and the useful life of all sources, treatment, and transmission facilities including pipes, pumping stations, and storage facilities;
- (13) for existing system projects intending to alter or expand a distribution system, a statement of maximum daily treated water supply and maximum daily demand, including supporting documentation and calculations; and
- (14) for existing systems, a prioritized list of infrastructure improvements.

(c) Water System Management Plan. The Water System Management Plan shall document the ability to finance, operate, and manage the system in accordance with this Subchapter for the current owner and for any entity that assumes ownership of the water system within the first 24 months of operation. The Water System Management Plan shall include the following information, where applicable:

- (1) Organization:
 - (A) a description of organizational structure or a chart showing all aspects of water system management and operation;

- (B) an identification of positions responsible for policy decisions ensuring compliance with State rules and the day-to-day operation of the system; and
- (C) a copy of all contracts for management or operation of the water system by persons or agencies other than the system's owner.
- (2) Ownership:
 - (A) identify the ownership structure, such as sole proprietor, partnership, corporation, limited liability company, homeowner association, nonprofit organization, local government unit, state or federal agency, or other legal entity, and disclose if the ownership of the system is expected to change once the system is constructed and, if known, identify the future owners;
 - (B) provide the mailing address and street address of the owner and the physical location of the water system;
 - (C) disclose any encumbrances, trust indentures, bankruptcy decrees, legal orders or proceedings, or other items that may affect or limit the owner's control over the system and describe how compliance with the requirements of this Subchapter will be maintained; and
 - (D) describe the legal authority, such as ownership, leases or recorded easements, allowing inspection, repair, and maintenance of system components.
- (3) Management qualifications:
 - (A) describe the qualifications of the owners and managers of the water system, including training and experience in owning or managing a water system; and
 - (B) provide the name and Public Water Supply Identification Number of all public water systems owned within the last five years as well as all systems operated under contract for another owner within the last five years. If any system has been assessed a penalty for violating a requirement set forth in this Subchapter, describe how the owner will prevent similar violations at this system.
- (4) Management training. Describe plans to keep management current with regulatory requirements for managing and operating a public water system.
- (5) Policies. The system shall have policies regarding the following procedures:
 - (A) cross-connection control;
 - (B) customer information, complaints, and public education;
 - (C) budget development and rate structure;
 - (D) response and notification if water quality violations occur;
 - (E) customer connection, disconnection, billing, and collection; and
 - (F) safety procedures.
- (6) System monitoring, reporting and record keeping. The applicant shall provide:
 - (A) a summary of the applicable system monitoring and reporting requirements; and
 - (B) a description of procedures for keeping and compiling records and reports in accordance with this Subchapter.
- (7) Financial Plans. The plan shall contain the following financial information, where applicable:
 - (A) Units of Local Government:
 - (i) For projects that require the unit of local government to incur debt, the unit of local government shall submit a statement from the Local Government Commission stating that debt issue has been approved.
 - (ii) For projects that do not require the unit of local government to incur debt, the unit of local government shall submit the following:
 - (I) a statement from the unit of local government documenting that they are in compliance with G. S. 159, Article 3, The Local Government Budget and Fiscal Control Act; and
 - (II) estimated revenues, expenditures, and rate structure for the construction, operation and maintenance, administration, and reasonable expansion of the project. This information shall be provided on a form designated by the Department and shall demonstrate that revenues are greater than expenses.
 - (B) The North Carolina Utilities Commission's financial determination may be used as the financial plan for systems subject to its regulations:

- (i) submit a copy of the Order Granting Franchise and Approving Rates from the North Carolina Utility Commission; or
- (ii) submit a copy of the Order Recognizing Continuous Extension and Approving Rates from the North Carolina Utilities Commission.
- (C) Non-transient non-community water systems. Owners of existing non-transient non-community water system(s) which receive no violation of this Subchapter during the preceding three years shall provide a description of negative impacts the project would have on the financial ability to comply with this Subchapter. The owner of either a proposed new or existing non-transient non-community water system that was in violation of this Subchapter within the prior three years shall follow the requirements in Part (D) of this Subparagraph.
- (D) All other community and non-transient non-community water systems shall document the following:
 - (i) analysis that compares anticipated revenues with planned expenditures for a five-year period that demonstrates a positive cash flow in each year, and a 20-year equipment replacement cost plan documenting the methods to finance equipment replacement;
 - (ii) the creation and funding of a continuous operating cash reserve greater than or equal to one-eighth of the annual operating, maintenance, and administrative expenses for the water system. The operating cash reserve shall be fully funded by the end of the first year of operation;
 - (iii) the creation and funding of an emergency cash reserve greater than or equal the cost of replacing the largest capacity pump. The emergency cash reserve shall be fully funded by the end of the fifth year of operation; and
 - (iv) a description of the budget and expenditure control procedures that assure budget control for the applicant, including procedures or policies to prevent misuse of funds and a demonstration that the system has adopted generally accepted accounting procedures.
 - (v) In lieu of Sub-Items (ii) and (iii) of this Paragraph, substitute documentation shall be accepted in the following instances:
 - (I) an applicant with multiple water systems showing reserves affording greater or equal capabilities; or
 - (II) an applicant showing equivalent financial capacity to comply with requirements of this Section.
- (8) One Water System Management Plan may be submitted on behalf of an applicant owning and operating multiple water systems or an applicant pursuing multiple alterations or expansions and may include future projected construction or system acquisitions. The applicant shall submit a new Water System Management Plan for a project not covered under the existing Water System Management Plan or if violations of this Subchapter occur or continue at a system under an applicant's ownership or control.

(d) Operation and Maintenance Plan. The plan shall be completed prior to submitting the applicant's certification in accordance with Rule .0303(c) of this Section. This plan shall be accessible to the operator on duty at all times and available to the Department upon request. The Operation and Maintenance Plan shall include, at a minimum, a description of the location and routine operation and maintenance procedures for:

- (1) components of the treatment facility;
- (2) pumps, meters, valves, blowoffs, and hydrants;
- (3) backflow devices;
- (4) storage tanks; and
- (5) all other appurtenances requiring routine operation and maintenance.

(e) Emergency Management Plan. The Emergency Management Plan shall be completed prior to submitting the applicant certification required in Rule .0303(c) of this Section. The Emergency Management Plan shall be available to personnel responsible for emergency management and operator on duty at all times and available to the Department upon request. The supplier of water shall consider using the principles, practices, forms, nomenclature, structure, and definitions found in the National Incident Management System and shall contain the following information where applicable:

(1) For community water systems, a plan with the following elements shall be required:

- (A) an identification and phone numbers of personnel responsible for emergency management, including public water system, local, State, and federal emergency contacts;
- (B) an identification of foreseeable natural and human-caused emergency events, including water shortages and outages;
- (C) a description of the emergency response plan for each identified event;
- (D) a description of the notification procedures; and
- (E) an identification and evaluation of all facilities and equipment whose failure would result in a water outage or water quality violations.
- (2) For a supplier of water that treats and furnishes water from a surface water source, completion of the Source Water Protection Plan in accordance with Rule .1305 of this Subchapter shall fulfill the Emergency Management Plan requirement.
- (3) For non-transient, non-community water systems, the plan shall contain the positions and phone numbers of responsible persons to contact in the event of an emergency, including public water system, local, State and federal emergency contacts.

History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Eff. January 1, 1977; Readopted Eff. December 5, 1977; Amended Eff. July 1, 1994; September 1, 1990; June 30, 1980; September 1, 1979; Temporary Amendment Eff. October 1, 1999; Amended Eff. August 1, 2000; Readopted Eff. July 1, 2019.

15A NCAC 18C .0308 ENGINEERING PLANS AND SPECIFICATIONS

- (a) Engineering Plans. Engineering Plans for water supply systems shall consist of the following:
 - (1) title information including the following:
 - (A) name of the city, town, board, commission or other owner for whom the plans were prepared;
 - (B) the locality of the project;
 - (C) the general title of the set of drawings and prints;
 - (D) the specific title of each sheet;
 - (E) the date; and
 - (F) the scales used;
 - (2) a preliminary plat plan or map showing the location of proposed sources of water supply;
 - (3) a general map of the entire water system showing layout and all pertinent topographic features;
 - (4) detail map of source or sources of water supply;
 - (5) layout and detail plans for intakes, dams, reservoirs, elevated storage tanks, standpipes, pumping stations, treatment plants, transmission pipelines, distribution mains, valves, and appurtenances and their relation to any existing water system, and the location of all known existing structures or installations and natural barriers that might interfere with the proposed construction; and
 - (6) the north point.

(b) Specifications. Complete detailed specifications for materials, equipment, workmanship, test procedures and specified test results shall accompany the plans. The specifications shall include, where applicable:

- (1) the design and number of chemical feeders, mixing devices, flocculators, pumps, motors, pipes, valves, filter media, filter controls, laboratory facilities and equipment, and water quality control equipment and devices;
- (2) provision for continuing with minimum interruption the operation of existing water supply facilities during construction of additional facilities;
- (3) safety devices and equipment;
- (4) procedure for disinfection of tanks, basins, filters, wells and pipes; and
- (5) identification of type, brand name, and model number for all back flow devices.

(c) One copy of the engineering plans and specification, upon approval, will be returned to the person or persons making application for approval.

History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Eff. January 1, 1977; Readopted Eff. December 5, 1977; Amended Eff. July 1, 1994; July 1, 1993; Temporary Amendment Eff. October 1, 1999; Amended Eff. August 1, 2000; Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.

15A NCAC 18C .0309 FINAL APPROVAL

(a) No construction, alteration, or expansion of a water system, subject to approval as described in Section .0300 of this Subchapter, shall be placed into final service or made available for human consumption until the applicant has complied fully with Section .0300 of this Subchapter and received Final Approval from the Department.(b) Temporary approval may be granted by the Department for system alterations required to remedy an imminent

(b) Temporary approval may be granted by the Department for system alterations required to remedy an imminent hazard as determined by the Department.

History Note: Authority G.S. 130A-315; 130A-317; P.L. 93-523; Temporary Adoption Eff. October 1, 1999; Eff. August 1, 2000; Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. November 23, 2015.