

**TITLE 150
LEGISLATIVE RULE
PUBLIC SERVICE COMMISSION**

**SERIES 7
RULES FOR
THE GOVERNMENT OF
WATER UTILITIES**

§150-7-1. General.

1.1. Scope. -- These rules govern the operation and service of water utilities subject to the jurisdiction of the Public Service Commission pursuant to W. Va. Code §24-2-1.

1.2. Authority. -- W. Va. Code §§24-1-1, 24-1-7, 24-2-1, 24-2-1r, 24-2-2, and 24-2H-1.

1.3. Filing Date. -- January 9, 2025

1.4. Effective Date. -- March 10, 2025

1.5. General.

1.5.1. These rules replace rules that went into effect on March 25, 2023.

1.5.2. These rules are intended to ensure adequate service to the public, to provide standards for uniform and fair charges and requirements by the utilities and customers, and to establish the rights and responsibilities of utilities and customers.

1.5.3. Adoption of these rules in no way precludes the Commission from altering or amending them in whole or in part, or from requiring any other or additional service, equipment, facility, or standard either upon complaint or upon its own motion, or upon the application of any utility.

1.5.4. These rules shall not relieve in any way a utility from any of its duties under the laws of this State.

§150-7-2. Application of rules.

2.1. These rules apply to all public utilities as defined in Water Rule 3.

2.1.1. If hardship results from the application of any Water Rule or if unusual difficulty is involved in immediately complying with any rule, application may be made to the Commission for the modification of the rule or for temporary or permanent exemption from its provisions: Provided, that no application for modification or exemption will be considered by the Commission unless there is submitted therewith a full and complete justification for such action.

§150-7-3. Definitions.

3.1. “Alternate main extension” – Any Commission-approved extension of the utility’s mains to serve new customers that does not follow the general main extension provisions that are provided for under Rules 7.4.1 through 7.4.8.f.

3.2. "Applicant" -- A person, firm, corporation, municipality, public service district or any other entity that applies for water service.

3.3. AWWA -- Means the American Water Works Association.

3.4. "AWWA M17" -- The fifth edition of the "Manual of Water Supply Practices, Fire Hydrants: Installation, Field Testing, and Maintenance" published by the American Water Works Association and, unless the Commission modifies this definition, no preceding or subsequent edition. The edition of AWWA M17 defined herein shall remain in effect for the purposes of these rules unless amended in the future by the Commission.

3.5. Billing Related Dates.

3.5.1. "Bill due date" -- The date when the utility mails the bill.

3.5.2. "Latest pay date" -- The last date that the bill may be paid without incurring a late payment penalty. The last date shall be no sooner than the 20th day following the date the utility mails the bill and must be stated on the face of the bill.

3.5.3. "Delinquent bill" -- Any bill issued by a public service district or a municipal system that has not been paid within twenty (20) days of the bill due date; or any bill issued by a water utility that is not a public service district or a municipal system within thirty (30) days of the bill due date. The date that a bill will become delinquent must be stated on the face of the bill.

3.6. "Commercial Service" -- Service to each separate business enterprise, occupation or institution occupying for its exclusive use any unit or units of space as an entire building, entire floor, suite of rooms or a single room, and using water for such incidental use as the schedule of rates applicable to the particular installation may permit. Commercial service shall apply to all stores, offices, hotels, wholesale houses, garages, display windows, signs, theaters, barber and beauty shops, churches, opera houses, auditoriums, lodge halls, school houses, banks, bakeries and any other space occupied for commercial purposes. Any rooming house, lodging house, resort, inn or tavern renting more than four (4) rooms to strangers or transients without any previous agreement for accommodation or as to the duration of stay shall be classed as a hotel and as such it comes under the commercial classification.

3.7. "Commission" -- Whenever in these rules the words "Commission" or "Public Service Commission" occur, such word or words shall, unless a different intent clearly appears from the context, be taken to mean the Public Service Commission of West Virginia.

3.8. "Customer" -- Any person, firm, corporation, municipality, public service district or any other entity who/that purchases a product or services from any utility including any such person, firm, corporation, municipality, public service district or any other entity who purchases such services or product for resale.

3.9. "Customer's Service Pipe" -- That portion of the service pipe from the point of service to the structure or premises supplied.

3.10. "Distribution Main" -- Water pipe owned, operated, or maintained by the utility which is used for the purpose of distribution of water from which utility service pipes extend to make service connections with customers at the point of service.

3.11. “Fire Flow” -- The flow rate of water in gallons-per-minute (gpm) at a residual pressure of twenty pounds-per-square-inch (20 psi) that is available for firefighting. The fire flow may be a measured or calculated value based on flow testing. Fire flow shall be used to mark (color code) fire hydrants pursuant to these rules.

3.12. “Flow Hydrant(s)” -- The hydrant or group of hydrants being flowed during the flow test.

3.13. “Governmental Unit” -- Any municipality or other political sub-division or agency of the State of West Virginia or the Federal Government.

3.14. “Moratorium” -- A condition imposed on a utility by the Commission prohibiting service connections and/or reactivation of service for an entire system, or a portion thereof.

3.15. “NFPA” -- means the National Fire Protection Association.

3.16. “NFPA 291” -- The 2022 edition of the "Recommended Practice for Water Flow Testing and Marking of Hydrants" published by the National Fire Protection Association and, unless the Commission modifies this definition, no preceding or subsequent edition. The edition of NFPA 291 defined herein shall remain in effect for the purposes of these rules unless amended in the future by the Commission.

3.17. “Out-of-Service Hydrant” -- any public fire hydrant that is inoperable, damaged or otherwise unserviceable. Out-of-service hydrants must be marked pursuant to Water Rule 12.10 and W. Va. Code § 8-19-2.

3.18. “Payment” -- Payment is made by any legal form of payment, including vouchers, that the utility accepts.

3.19. “Point of service” -- The point at which the utility’s pipe and appurtenances connect the utility service pipe with the inlet connection of a customer’s service pipe at or near the customer’s property line, or elsewhere if provided for in a user’s agreement. The utility shall own and maintain all facilities located between the point of service and the main.

3.20. “Private Fire Service Connection” -- Is one to which is attached fixtures from which water is taken in whole or in part for the extinguishment of fire.

3.21. “Public Fire Hydrant” -- A fire hydrant owned by a water utility regulated by the Commission. Sub-standard hydrants and Out-of-Service hydrants are considered public fire hydrants under these rules.

3.22. “Public Utility” -- Except where a different meaning clearly appears from the context, the word or words “utility” or “public utility” when used in these rules shall include any person or persons, or association of persons, however associated, whether incorporated or not, including municipalities, engaged in the business of producing, furnishing, transporting, distributing or selling water for any purpose which is now or may hereafter be held to be a public service.

3.23. “Residual Pressure” -- For the purposes of these rules, residual pressure means the pressure (psi) that exists in the water distribution system at the time that flow readings are taken during a flow test.

3.23.1. For flow tests designed to determine the flow from a single hydrant the static and residual pressures shall be measured at that hydrant. In this type of flow test the flow hydrant also serves as the static and residual hydrant.

3.23.2. For flow tests designed to evaluate the overall water supply capacity in a given area or, when the flow test utilizes multiple flowing hydrants, the static and residual pressures should be measured at a residual pressure hydrant located nearby and on the same main or within the same hydraulic zone as the flowing hydrant or hydrants.

3.24. “Residual Pressure Hydrant” -- the hydrant that is used to measure static and residual pressures during a flow test.

3.25. “Residential Service” -- Service to a householder or a tenant, living in a separate house or separate apartment in an apartment building, using water for general household service. If an owner of a multiple apartment building undertakes to furnish water to tenants as a part of the tenants’ monthly rent, then such service shall be classed as “Commercial.” However, a close branch of a householder’s family living with the householder and using the same water facilities shall not be classified as an additional service or as “Commercial.” In cases where a householder or tenant devotes some portion of the occupied building to commercial use and uses the remainder as a residence then the predominate use of water shall constitute the basis for classification as either residential or commercial.

3.26. “Standard Distribution Pressure” -- The distribution pressure established by the utility under the requirements of Water Rule 7.8.

3.27. “Static Pressure” -- For the purposes of these rules, static pressure means the pressure (psi) that exists within a water distribution system under normal conditions, with no hydrants flowing.

3.28. “Sub-standard hydrant” -- any public fire hydrant that, when flow-tested, provides a fire flow of less than 250 gpm. Sub-standard hydrants are established as a special class of hydrants, designated as “Class S”, by these rules and are subject to specific marking requirements contained in Water Rule 12.10. Sub-standard hydrants cannot be relied upon to deliver adequate flow for firefighting purposes. However, their availability may offer limited benefits to public safety and/or operational benefits to a water system.

3.29. “Temporary Service Connection” -- A connection installed for the temporary use of water provided that the customer’s premises is located on a lot having a curb line abutting a street or public right-of-way in which is located a utility distribution main extending along the total frontage of the lot on said street or right-of-way, unless otherwise agreed to by the utility.

3.30. “Water Losses” -- The volume of water introduced into the distribution system less all metered usage and all known non-metered usage which can be estimated with reasonable accuracy.

3.31. “Utility Service Pipe” -- That portion of the service pipe between the distribution main and the curb cock or the inlet connection of the coppersetter at or near the customer’s property line or point of service regardless of the side of the road on which the customer is located in reference to the main line.

3.32. Where terms are not specifically defined by these rules they should be defined using their ordinarily accepted meanings within the context in which they are used.

§150-7-4. Records, Reports and Other Information to be Supplied to the Commission.

4.1. Records and reports.

4.1.1. Preservation of records. -- All records required by these rules shall be preserved by the utility in the manner prescribed by the Commission.

4.1.2. Location of records.

4.1.2.a. Required records shall be kept at the office(s) of the utility in West Virginia, and shall be available during the utility's regular business hours for examination by the Commission or its duly authorized representative.

4.1.2.b. If kept outside the State, records shall be brought to the utility's office in West Virginia upon request of the Commission, or the utility may be required to pay the reasonable traveling expenses of Commission employees assigned to examine the records.

4.1.3. Reports to Commission. -- Upon Commission request, a utility shall furnish to the Commission the results of any test or tests required to be made, or the information contained in any records required to be kept by the utility, or any further information in its possession, respecting its rates, charges, or practices, without formal order of the Commission requiring the release of such information.

4.2. Filing of rate schedules.

4.2.1. Tariffs containing rates and rules of each utility shall be filed in the manner prescribed by the Commission in "Rules and Regulations for the Construction and Filing of Tariffs" 150 C.S.R. 2 (Tariff Rules) effective as amended or modified by the Commission.

4.2.2. Municipal rates. -- Rates for municipal water and combined water and sewer utilities shall be adopted, and tariffs shall be filed, in accordance with the Commission's Tariff Rules, effective as amended or modified by the Commission.

4.3. Utility's special rules.

4.3.1. A utility desiring to establish any rule(s) supplementing the rules of the Commission shall first make application to the Commission for authority to establish such a rule(s), clearly stating the reasons for the rule(s).

4.3.2. On and after ninety (90) days from the effective date of these Rules, any utility's special rules and regulations now on file with the Commission which conflict with these rules, will become null and void, unless they have been refiled after the effective date of these rules and approved by the Commission.

4.3.3. Exemption. -- A customer who has complied with the rules of the Commission shall not be denied service for failure to comply with the rules of the utility that have not been approved by the Commission.

4.4. Financial and statistical report.

4.4.1. Every utility shall file annually a financial and statistical report with the Commission. The report shall be based upon the accounts set up in conformity with Water Rule 4.5. The report shall be filed on or before three (3) months following the end of the utility's fiscal year or on such date as the Commission may direct. The form requirement will be specified in the annual letter sent by the Commission to utilities. The report shall be filed utilizing the form template and filing instructions that can be found on the Commission website.

4.4.2. Upon written request and for good cause shown, the Commission may approve or disapprove, through its Executive Secretary, by letter, a reasonable extension of time to file the financial and statistical report. A utility shall apply for an extension before the expiration of the time for filing the report.

4.5. Uniform system of accounts.

4.5.1. All water utilities shall maintain all accounts and records in compliance with the Uniform System of Accounts as promulgated in 1996 by the National Association of Regulatory Utility Commissioners for Class A, B, and C Water Utilities.

4.5.2. All persons having direct charge of the books and accounts of the utility must observe the system of accounts applicable to the water utility by appropriate class. For the purpose of securing uniformity in the applications of this system all questions of doubtful interpretation of accounting rules are to be submitted to the Commission for consideration and decision.

4.5.3. The classification of water utilities for purposes of keeping accounts in accordance with the Uniform System of Accounts shall be as follows:

Classification	Revenue Level
A	\$1,000,000 or more
B	\$200,000 - \$999,999
C	less than \$200,000

4.6. Maps and records.

4.6.1. Each utility shall keep on file suitable maps, plans and records showing the entire layout of every pumping station, filter plant, reservoir, transmission and distribution system, with the location, size and capacity of each plant, size of each transmission and distribution line, fire hydrant, valve and customer's service, reservoirs, tanks and other facilities used in the production and delivery of water.

4.6.2. In the case of new construction or property acquired from others, a utility shall reflect the changes in the maps and records by the end of the next calendar year following the year the construction is done or property acquired. All drawings shall have the scale clearly shown and be of sufficient detail to accurately depict the project or property.

4.6.3. In general, where present maps of existing facilities are not entirely up to date, special surveys to locate any plant or facilities will not be required immediately, but maps must be updated as prescribed by the Commission.

4.7. Management audits.

4.7.1. Scope. -- To establish a procedure for examination of management practices and policies to determine whether the utility being audited is operating with efficiency and utilizing sound management practices. The purpose of a management audit is to disclose operating areas that are efficient or inefficient, to identify areas for improvement, and to form recommendations for changes. The results of a management audit and the response of the utility to the recommendations and implementation plans developed pursuant to a management audit may be a factor in determining just and reasonable rates, as set out herein.

4.7.2. Types of management audits. -- The following types of management audit, which vary in scope, may be directed and used by the Commission:

4.7.2.a. Comprehensive. -- An investigation characterized by an extensive, detailed analysis of a utility's management and operations.

4.7.2.b. Reconnaissance. -- A broad review, similar in scope to a comprehensive audit, but in less detail. The objective of this type of audit is to identify specific areas for more intensive investigation based upon the magnitude of the problem identified or the potential benefits to be derived.

4.7.2.c. Focused. -- An in-depth investigation of one or several specific areas of a utility's management and operations.

4.7.3. Frequency. -- The Commission shall order a management audit of any utility under its jurisdiction whenever the Commission deems it necessary to investigate the operational efficiency of the utility. Such factors as the cost of the management audit and the potential benefits of such audit may be taken into consideration. The Commission may accept or request a management audit performed under the rules of another jurisdiction in satisfaction of this rule when that audit is of the scope contemplated by the Commission, conforms to the standards herein set forth and covers the utility's service functions in its West Virginia jurisdiction.

4.7.4. Conduct and control.

4.7.4.a. The Commission may choose to have the audit performed by its Staff or contracted to a qualified outside auditing firm. In the latter case, the Commission may supervise the selection process. If the management audit is to be conducted by an auditing firm, the Commission's order initiating the audit shall include provision for the development of the request for proposal (RFP), the consultant selection process and Staff's assistance and supervision during the audit.

4.7.4.b. The Commission may impose eligibility restrictions upon contractors relating to past, current and post-audit relationships with the utility.

4.7.4.c. The utility is expected to cooperate to the fullest extent with the performer of a Commission ordered management audit. A responsible employee shall be appointed by the utility as its management audit coordinator, who shall be responsible to assist in the efficient performance of the management audit.

4.7.5. Costs. -- The audited utility is responsible to pay for a contracted audit. The Commission shall include the reasonable cost of conducting the contracted management audit in the cost of service of the utility. The Commission may allow such costs to be recovered in the utility's next general rate case following completion of the audit, or the Commission may order such costs to be amortized over a reasonable period of years, considering the impact of these costs on both the utility and its customers.

4.7.6. Implementation of recommendations.

4.7.6.a. Draft report.

4.7.6.a.1. Upon completion of the audit the auditor will submit a draft report to the utility for comments.

4.7.6.a.2. The auditor and utility representatives shall conduct a draft review meeting subsequent to the distribution of the draft review report.

4.7.6.b. Final report.

4.7.6.b.1. The auditor will submit a final report to the Commission no later than thirty (30) days after the submission of the draft report to the utility.

4.7.6.b.2. Within thirty (30) days of the final submission of the management audit report, the utility shall file a document detailing its position on each audit recommendation. This document must state which recommendations are acceptable to the utility and the nature of the utility's disagreement with any recommendations.

4.7.6.c. The Commission may, after hearing, issue an order prescribing the recommendations that should be adopted by the utility.

4.7.6.d. The utility shall file detailed implementation plans for Commission review and approval within the time specified in the Commission's order prescribing the recommendations that the utility should adopt. The utility shall not deviate from an approved implementation plan without prior notice to the Commission that specifically states the utility's reasons for departing from the approved plan. The utility shall obtain Commission approval prior to any deviation from the approved plan.

4.7.6.e. At the direction of the Commission, a follow-up audit may be performed to review the progress of the utility in implementing the approved plans and the results of previously performed management audits.

4.7.6.f. A management audit report, the resulting implementation plan and any follow-up audit may be used by parties in a general rate case subsequent to the management audit. Audits and implementation plans may be a factor in the determination of just and reasonable rates if introduced as an exhibit and subjected to normal due process procedures.

4.7.6.g. The Commission may grant an extension of the time limits established in this section upon a showing of good cause for such extension.

§150-7-5. Meter Requirements.

5.1. Utility to provide meters. -- Unless otherwise authorized by the Commission, each utility shall provide and install at its own expense (except as provided in Water Rules 6.1.6.d. and 7.2.) and shall continue to own, maintain, and operate all equipment necessary for the regulation and measurement of water, in accordance with tariff or contract provisions, to its customers. Where a customer requests additional meters for the customer's convenience and the utility furnishes additional meters, the utility may impose a charge. A utility will own and operate any meters used to serve a bulk or resale customer(s).

5.2. Location of meters.

5.2.1. Accessibility. -- In the interest of safety and convenience to the customer, and as a measure of economical operation to the utility, it is required that all meters should be located at or near the property line: provided that when such location is impractical meters shall be placed outside of the customer's building as near as possible to where the "Point of Service" joins the "Customer's Service Pipe": provided, further, if neither of the foregoing requirements can be complied with on account of physical, economic, or climatic conditions, the meter may be placed within the building, preferably in the cellar, and when so

placed within the building, the meter shall be so located that it will be easily accessible for reading, maintenance and protected from freezing and mechanical damage.

5.2.2. Meter grouping. -- When a number of meters are grouped, every meter shall be tagged so as to indicate the particular customer served by it.

5.2.3. Remote meters. -- When a meter is located inside a home or building, the utility may install a remote register or dial on the exterior of a home or building accessible for meter reading. The remote counter reading shall be compared to the actual meter register reading not less than once every six (6) months.

5.2.4. Meter setting installation. -- Meter settings shall be installed in accordance with drawings submitted and approved by the Commission under Water Rule 7.2.9.

5.3. Prohibitions on master metering.

5.3.1. Mobile home parks. -- For mobile home parks constructed on or after October 24, 2003, each mobile home in a mobile home park shall be individually metered with taps installed at the lot line of each mobile home. The lot owner shall be responsible for payment of any applicable tap fees. All utility easements and mains constructed within the mobile home park will become the property of the utility by agreement between the (i) owner of the mobile home park or the lot owner, whichever is applicable, and (ii) the utility. The agreement must be approved by order of the Commission prior to construction of any main. Lines extending from the mobile home to the tap will be considered customer service lines and maintenance of those lines will be the responsibility of the applicable lot owner.

§150-7-6. Customer Relations.

6.1. Customer information.

6.1.1. Information as to service. -- Each utility shall, upon request, give its customers such information and assistance as is reasonable, in order that customers may enjoy safe and efficient service.

6.1.2. Explanation of meter readings. -- Each utility shall adopt some means of informing its customers as to the method of reading meters, either by a printed description on its bills, or by a notice to the effect that the method will be explained at the office of the utility upon request. It is recommended that an exhibition meter be kept on display in each sales office maintained by a utility.

6.1.3. Explanation of rates. -- It shall be the duty of the utility to explain to the customer at the beginning of service, or whenever the customer shall request the utility to do so, the utility's rates applicable to the type of service furnished to the customer and all other classes of customers, and to assist the customer in obtaining the best rate for the customer's service requirements. The responsibility for the selection, however, rests with the applicant. In the event the customer's use of service changes such that a rate schedule other than the one initially selected becomes favorable, the responsibility for requesting a change in rate schedule, consistent with the provisions of the service agreement, shall rest with the customer. The utility shall, on its periodic statements, annually inform its customers that, if requested by the customer, the utility shall supply the customer with a copy of the utility's rate or rates applicable to the type of service to be furnished to all classes of customers with a concise written explanation of the rates, and an identification of any classes of customer for whom rates are not summarized.

6.1.4. Posting of law, rates, rules and collection agents.

6.1.4.a. Every utility shall maintain in its office for inspection by the public the following:

6.1.4.a.1. A copy of the rates and rules of the utility, and of forms of contracts and applications applicable to the territory served from that office.

6.1.4.a.2. A copy of the Public Service Commission Law of this State.

6.1.4.a.3. A copy of these rules.

6.1.4.b. A utility shall exhibit a suitable placard, in large type in a conspicuous location, giving information to customers that the utility has a copy of the law, the rules of the Public Service Commission applicable to the utility and the schedules of rates available for customer inspection.

6.1.4.c. Once a year, or as often as a utility changes collection agents, each utility shall publicize by newspaper or bill insert to its customers its collection agents to whom customers may deliver payment of water bills.

6.1.5. Applications for water service.

6.1.5.a. All applicants desiring water service may be required to make written application at the office of the utility on printed forms provided therefor, setting forth in said application all purposes for which water will be used upon the applicant's premises. The utility may require the applicant to provide identification at the time of application for service. All applicants for service are required to designate on every application for service whether the applicant is a tenant or an owner of the premises to be served. If the applicant is a tenant, the applicant shall state the name and address of the owner or owners of the premises to be served.

6.1.5.b. Any change in the identity of the contracting customer at a premises will require a new application for water, and the utility may, after reasonable notice, discontinue water service until such new application has been made and accepted, but the former customer shall remain liable for water furnished to said premises until the customer has given notice in writing to the utility to discontinue water service. In the event the customer of record has died or has become incapable of being responsible for water service, that individual's spouse may become the customer of record without being required to complete a new application for water service, or paying a new deposit.

6.1.5.c. Except as provided in Water Rule 6.8.3.b., a utility will not charge to turn on water during regular working hours for a new customer or a current customer transferring service to a new location.

6.1.5.d. The utility's approval of an application for water to be supplied to any premises shall constitute a right to the customer to take and receive a supply of water for said premises for the purposes specified in such application; (i.e. Residential, Commercial, and Industrial) subject only to the fulfillment of the conditions of these rules by the customer.

6.1.5.e. In the event that a public service district providing sewer service owns and operates facilities within the same service territory as the publicly or privately owned water utility, city, incorporated town, other municipal corporation or other public service district providing water service to the area, then an application shall not be complete until such time as the applicant provides a receipt from the sewer public service district showing that, where the applicant is legally required to do so, proper application for sewer

service has been made and a security deposit paid thereto. Upon receipt of said proof from the applicant, or upon a showing that the applicant is not legally required to apply for sewer service or pay a security deposit, the water utility shall notify the sewer public service district, in writing, the date upon which water service is scheduled to be turned on to the applicant. Said written notification to the sewer public service district shall be made within five (5) days, excepting Saturdays, Sundays, and state or federal holidays, of the date that the application for water service is deemed complete.

6.1.6. Special applications to a utility for water service.

6.1.6.a. An applicant must specifically apply to the utility for water for building, construction or other temporary purposes.

6.1.6.b. An applicant must specifically apply to the utility for a connection for private fire service.

6.1.6.c. Where an applicant desires water for only a short period of time, and not continuously throughout the year, such as for vacation homes or cottages, building purposes, street paving, cleaning property, filling tanks or other short-term uses, an application shall be made to the utility as set forth in Water Rule 6.1.5., and payment made in accordance with the applicable schedule of rates and charges, in which case a suitable deposit shall be made.

6.1.6.d. Whenever a street service connection is made to the mains for temporary service or for temporary private fire service, the applicant shall bear the entire cost and expense of labor and material for tapping the main and installing the service pipe and meter and its removal, if required.

6.1.7. Private fire protection service.

6.1.7.a. The applicant shall furnish the utility with one set of complete drawings prior to the completion of the tap, showing the pipes, valves, hydrants, tanks, openings, and appurtenances contemplated in the application. Such sketch must also show any other water supply system, pipelines and appurtenances existing on the premises. There shall be no connection between such other supply and pipes connected to the utility's mains unless protected by a backflow prevention device approved by the utility, or the Bureau for Public Health.

6.1.7.b. The utility shall not approve an application for private fire protection service unless the utility determines that its system provides an adequate size water main with sufficient water volume and pressure. Prior to the installation of a private fire protection system, a flow test shall be performed as required by the State Fire Code, specifically as described within the incorporated National Fire Protection Association (NFPA) Standard 291, to determine the water supply and pressure available in the utility's water main. The private fire protection system shall be designed by the applicant based on the results of this flow test, with the understanding that the results of a particular test may not consistently be available on the utility's system. The applicant shall be responsible for the cost of the flow test.

6.1.7.c. The customer shall obtain the approval of the utility in advance for any change, alteration or addition in the fixtures, openings and uses specified in the application. The customer shall make its fire protection facilities available to the utility at all reasonable times.

6.1.7.d. The utility shall determine the size and location of any connections made to its distribution mains for private fire protection service, and will, at the cost and expense of the customer, make the connection to its mains and install the service connection from the distribution main to a point at or near the property line.

6.1.7.e. The extent of the rights of the private fire protection service customer is to receive, but only at times of fire on his premises, the available water supply. The utility shall not be considered an insurer of property or persons, or to have undertaken to extinguish fire or to protect any persons or property against loss or damage by fire or otherwise, and shall be free and exempt from any and all claims for damages on account of injury to property or persons by reason of fire, water, failure to supply water or pressure, or for any other cause whatsoever.

6.1.7.f. Unless otherwise provided in a written agreement between the applicant and the utility, service lines for private fire protection service shall be distinct and separate from the regular or general water service line. A private fire service connection is furnished for the sole purpose of supplying water for the extinguishment of fires, and the use of water from such a connection for any other purpose is absolutely forbidden.

6.1.7.g. Where the applicant and the utility have entered into a written agreement that one service pipe be used for both general and fire purposes, the utility may set minimum construction standards and specifications for the applicant's portion of the dual purpose service pipe, and may require that its construction be subject to inspection by the utility.

6.1.7.g.1. At the building to be served, the common service pipe shall separate into two service pipes, one for private fire protection and the other for general water service unless the private fire protection service is for a residential one- or two-family dwelling. Residential one- and two-family dwelling Life Safety fire sprinkler systems based on the State Fire Code, standard NFPA 13D may be provided through the general water service connection. The utility will, at its cost and expense, install and maintain a water meter of appropriate size on the general water service pipe and the necessary piping and fitting for the meter setting. All dual purpose service lines must comply with all applicable Bureau for Public Health standards and regulations.

6.1.7.g.2. The utility will charge the applicant for general water service based on the consumption through and size of the water meter installed, in accordance with its schedule of rates for general water service with the exception that a residential one- or two-family Life Safety fire service supplied through a residential service meter shall be provided with a one-inch meter and shall be charged based on the consumption through the meter. The minimum charge shall be based on a meter size no greater than the size of meter that would have otherwise been needed without residential fire service. It shall be understood that this increased meter size is due to the potential volume necessary for a residential Life Safety fire service and for no other purpose. The applicant shall be responsible for the additional cost of materials for the one-inch service over the service size that would have otherwise been needed without a residential fire service. Except as otherwise provided in this rule, the utility shall, subject to Commission approval, charge the applicant for private fire protection service in accordance with its schedule of rates for such service.

6.1.7.h. The customer shall furnish and install at the customer's expense a gate valve and curb box, or a post indicator and gate valve controlling the entire supply at the curb or property line of the street in which the main is located or at such other points as may be approved by the utility. If required by the utility, the customer shall furnish and install at the customer's expense the valve in a valve pit or vault.

6.1.7.i. The utility shall ensure that service lines supplying private fire protection systems are protected by a minimum of two approved check valves. One of these check valves may be the alarm check provided as part of the system. The other may be a detector check, double check valve assembly, or an approved single check valve. Specific requirements and/or installation procedures are governed by the

Bureau for Public Health but the utility's backflow prevention requirements shall be no more stringent than the minimum standards necessary to protect the utility's main(s).

6.1.7.j. Under no circumstances will anti-freeze be permitted in the sprinkling systems unless a reduced pressure zone backflow preventer, approved by the utility or the Bureau for Public Health, is provided at the point of connection in the anti-freeze system.

6.1.7.k. The entire private fire service system on the customer's premises shall be installed and maintained by and at the expense of customer and shall be subject to the inspection, test and approval of the utility before the service is made effective, and at such times thereafter as the utility deems necessary or appropriate.

6.1.7.l. The utility may seal hydrants and other fixtures connected with a private fire service system, and such seals may be broken only in case of fire or as specially permitted by the utility, and the customer shall immediately notify the utility of the breaking of any such seal.

6.1.7.m. Whenever a fire service system is to be tested, the customer shall notify the utility of the proposed test, designate the day and hour when same is to be made, so that, if desired, the utility may have an inspector present during the test.

6.1.8. Public fire service.

6.1.8.a. Any governmental unit located in the utility's service area by ordinance of its Council or by resolution of its Board of County Commissioners shall have the right to order the installation of additional fire hydrants on existing utility owned mains having an internal diameter of six (6) inches or larger and the utility will install such hydrants at its own cost and expense; provided the estimated gross receipts from such proposed new fire hydrant rentals shall equal or exceed twelve percent (12%) annually of the cost of said installations.

6.1.8.b. Where pipeline installations are required to carry out an order of any governmental unit located in the utility's service area to install fire hydrants, or where existing utility owned mains, in the opinion of the utility, are inadequate to provide fire flows to such hydrants, and when any governmental unit located in the utility's service area orders the installation of a water main of adequate size to provide such flows to the hydrant or hydrants so ordered, the utility will install such mains and hydrants at its own cost and expense; provided that the utility shall not be required to make extensions of said water mains unless the estimated gross receipts from private consumers and from such proposed new public fire service fire hydrant rentals shall equal or exceed twelve percent (12%) annually of the cost of such mains and hydrants.

6.1.8.c. Non-emergency use of a fire hydrant is prohibited unless there has been made advance notification of such proposed use by the user to the utility, and the utility has provided prior written approval of such use to the user. The utility shall charge its tariff rate for domestic water usage for all non-emergency fire hydrant water usage.

6.2. Customer deposits.

6.2.1. Security deposits.

6.2.1.a. Security deposits for utilities other than public service districts. -- A utility, other than a public service district may require the applicant or customer to make a deposit with it initially, and from time to time, to secure the payment of water service rates and charges. Except for municipal water systems,

such deposit shall not be more than one-twelfth (1/12) of the annual estimated charge for residential service or one-sixth (1/6) of the annual estimated charge for all other service. For a municipal water system only, the deposit shall not be more than either fifty dollars (\$50) or two-twelfths (2/12) of the average annual usage of the applicant's specific customer class, whichever is greater. For combined water and sewer municipal systems the deposit shall not be more than either one hundred dollars (\$100) or two-twelfths (2/12) of the average annual usage of the applicant's specific customer class, whichever is greater. This provision must be included in the utility's tariff filed with the Commission. The utility shall not be bound to supply water until these conditions are fulfilled and it may terminate water service if the security or increased security is not given when required. The utility shall have a reasonable time, not to exceed thirty (30) days, to read and remove meters and to ascertain that the obligations of the customer have been fully performed before being required to return any deposit in the case where there has not been an automatic refund. This provision must be included in the utility's tariff filed with the Commission.

6.2.1.b. Security deposits for public service districts. -- All new applicants for residential or other water service from a public service district shall make a deposit of (i) a minimum of fifty dollars (\$50), or (ii) two-twelfths (2/12) of the average annual usage for the applicant's specific customer class for water service, whichever is greater, with the district to secure the payment of water service rates and charges. For combined water and sewer public service districts such deposit shall not be more than either one hundred dollars (\$100) or two-twelfths (2/12) of the average annual usage of water service and wastewater service for the applicant's specific customer class, whichever is greater. The district shall not be bound to supply water until this condition is fulfilled. In any case where a deposit is forfeited to pay service rates and charges which were delinquent at the time of disconnection or termination of service, no reconnection or reinstatement of service may be made by the district until another deposit as described above has been remitted to the district. This provision must be included in the utility's tariff filed with the Commission.

6.2.1.c. Return of deposit to customers. -- Except as otherwise provided in Water Rule 6.2.1.d., after a customer has paid bills for service for twelve (12) consecutive months without a delinquency the utility shall promptly and automatically refund the deposit plus accrued interest. Calculation of the above twelve (12) month period shall commence from the first regular payment or following the payment of a delinquent bill or bills. For a customer whose deposit remains with the utility at the time of the requested termination, any deposit plus interest held by the utility shall be credited against the final bill with the utility paying any remainder to the customer at the time of the final bill.

6.2.1.d. Return of deposit by public service districts and municipal systems only for a customer who is a tenant. -- By statute districts and municipal water systems are not required to return a deposit to a customer who is a tenant until the time the tenant discontinues service with the district or municipal system. After a customer who is a tenant discontinues service with the district or municipal system, the utility shall promptly and automatically refund the deposit plus accrued interest. The public service district or municipal system shall have a reasonable time, not to exceed thirty (30) days, to read and remove meters and to ascertain that the obligations of the customer have been fully performed before being required to return any deposit in the case where there has not been an automatic refund.

6.2.1.e. Interest paid on deposits will be established by the Commission by general order.

6.2.1.f. A current customer of a public service district or a municipal system who requests service at another location within the jurisdiction of the district and who has made payment of bills for the previous twelve (12) months without a delinquency is not required to pay a deposit for service at the new location because that customer is not a new applicant for service under W. Va. Code §§16-13A-9, 8-20-10 or 16-13-16. The preceding sentence shall not apply to multiple service locations. Multiple service locations shall require multiple deposits. In the event the customer of record has died or has become

incapable of being responsible for water service, that individual's spouse may become the customer of record without being required to complete a new application for water service, or paying a new deposit.

6.2.1.g. Record of deposit. -- Each utility holding a cash deposit shall keep a record showing: (i) the name and current address of each depositor; (ii) the amount and date of the deposit; (iii) each transaction concerning the deposit.

6.2.1.h. The receipt. -- Concurrently with receiving a cash deposit, the utility shall deliver to the applicant for service or the customer, a receipt showing: (i) the date thereof, (ii) the name of the applicant or customer and the address of the premises served or to be served, (iii) the service furnished or to be furnished, and (iv) the amount of the deposit and the fact that interest will be paid at a Commission determined rate. Each utility shall provide automatic means to refund the deposit of a customer, when he is so entitled, if the original receipt cannot be produced. A receipt of proof or payment will not be necessary under the provisions for an automatic refund.

6.2.1.i. Unclaimed deposits. -- The utility shall follow the provisions of the Uniform Unclaimed Property Act, codified at W. Va. Code §36-8-1, with regard to the disposition of any unclaimed deposit.

6.2.1.j. All utilities that collect security deposits must do so in a nondiscriminatory manner.

6.2.2. Guaranty agreement.

6.2.2.a. A utility, other than a public service district, may accept, in lieu of the cash deposit, a guaranty agreement signed by a financially responsible guarantor, whereby payment of a specified sum, not exceeding the cash deposit aforesaid, is guaranteed. The guarantor may, upon request, receive copies of disconnection notices sent to the customer whose account has been guaranteed: provided that the limitations herein fixed upon the terms of a guaranty agreement shall not apply to industrial customers.

6.2.2.b. A guaranty agreement shall terminate after the customer has satisfactorily paid bills for twelve (12) consecutive months, or when the customer gives notice to the utility of discontinuance of service at the location covered by the guaranty agreement, or six (6) months after discontinuance of service where no notice was given, or at the guarantor's request upon thirty (30) days' written notice to the utility. Upon termination of a guaranty agreement, or whenever the utility deems the same insufficient as to amount of surety, a cash deposit or a new or additional guaranty may be required upon reasonable written notice to the customer.

6.2.2.c. Application in case of receiver or trustee. -- The aforesaid provisions shall apply in the case of a receiver or trustee operating a business, under court order that requires utility service.

6.3. Billing information.

6.3.1. A utility shall render bills periodically. Each bill must show the readings of the meter at the beginning and end of the period for which the bill is rendered, the date of the meter readings, the number of cubic feet or gallons of water supplied, and the authorized rate. If the utility must, for any reason, render an estimated bill, the bill shall be clearly marked as an estimated bill. All bills shall state "This utility is regulated by the Public Service Commission of West Virginia" and "Rates available upon request."

6.3.2. No adjustment will be required in billing when the deviation from the standard billing period is not more or less than five (5) days in the case of monthly billing, ten (10) days in the case of bi-monthly billing, and fifteen (15) days in the case of quarterly billing. When the deviation exceeds these limits, either

for regular or periodic billing or for opening or closing bills, the water blocks and minimum charges shall be prorated on the basis of the ratio of the number of days in the period in question to the number of days included in the standard billing period, which will be taken at thirty (30) days for monthly billing, sixty (60) days for bi-monthly billing, and ninety (90) days for quarterly billing.

6.3.3. Utilities desiring to adopt mechanical billing of such nature as to render compliance with all the terms of Water Rule 6.3.2. impractical may make application to the Commission for relief from part of these terms. After consideration of the reasons given when asking for relief, the Commission may allow the omission of part of these requirements.

6.3.4. On all bills that include charges for items other than authorized water charges, the utility will clearly state other factors used in computing the bill so that the amount may be readily verified from the information appearing on the bill.

6.3.5. Each bill shall bear on its face the latest pay date and the date it shall be a delinquent bill if not paid. A utility may request a delayed payment penalty applicable to current usage billings not paid by the latest pay date, equal to ten percent (10%) of the net current amount unpaid. This delayed payment penalty is not interest and is to be collected only once for each bill where it is appropriate. This provision must be included in the utility's tariff filed with the Commission.

6.3.5.a. When a utility receives a customer payment at a time when both a delinquent bill and a current bill are outstanding, the utility will apply the payment first to the current bill, and apply any leftover amounts to the delinquency. Provided, that this rule shall not apply to payments from customers whose delinquencies have been addressed in a deferred payment agreement. If a termination notice has been issued then the payment should first be applied to the delinquent amount that is the subject of the termination notice.

6.4. Adjustment of bills.

6.4.1. Fast meters. -- If, upon test of any meter, the utility finds that a meter has an average error of more than two percent (2%) fast, the utility shall refund to the customer the overcharge, based upon the corrected meter reading for a period equal to one-half ($\frac{1}{2}$) the time elapsed since the last previous test, but not to exceed six (6) months. If it can be shown that the error was due to some cause, the date of which can be fixed, the overcharge shall be computed back to but not beyond such date. If the meter has not been tested in accordance with subsection 8.4, the period for which it has been in service beyond the regular test period shall be added to the six (6) months in computing the refund.

6.4.2. Dead meters. -- If a utility finds that a meter is not registering, or that remote metering equipment has failed, for any period, the utility shall compute the water used by taking the average of the water used for the meter-reading period preceding and the meter-reading period following the date when the meter was found to be dead, which amount shall be assumed to be the amount of water used by the customer during the billing period in which the meter was found dead. Exceptions will be made to this rule in case the facts clearly show that the above method does not give the correct consumption for the period. A utility may backbill the customer for the difference between the amount previously billed and the customer's estimated usage for a maximum of three (3) months preceding the date the dead meter is repaired or replaced. The utility should fix or replace dead or malfunctioning meters within thirty (30) days of the utility's discovery that a meter is dead or malfunctioning.

6.4.3. Leaks on the customer's side of the meter.

6.4.3.a. Each utility shall implement a written leak adjustment policy consistent with this rule. Where the bill reflects unusual usage in excess of 200% of the customer's historical usage that can be attributed to leakage on the customer's side of the meter the utility will adjust the bill. The policy shall be maintained in the utility's office for inspection by the public and shall be applied in a non-discriminatory manner to all customers. The policy shall be filed with the Commission as a part of the utility's tariff. The reasonableness of the utility's policy shall be subject to approval by the Commission and the reasonableness of the utility's practice with respect to implementing a policy shall be subject to Commission review in a formal complaint proceeding.

6.4.3.b. The recalculated bill shall reflect the utility's incremental cost of treating or purchasing the water, as contained in the utility's tariff, for all amounts above 200% of the customer's historic usage. Historic usage shall be defined as the average usage of the preceding twelve (12) months, or actual period of service if less than twelve (12) months. If using the historic usage would result in an unreasonable calculation, adjustments may be made. If such adjustments are made, the utility should advise its customer that a dispute regarding such adjustments may be taken to the Commission in the form of an informal complaint.

6.4.3.c. As an alternative to using the incremental cost of treating or purchasing the water, the utility may, at its option, use an adjustment that allows it to recover the Commission's estimate of "typical incremental" cost per thousand gallons of water on usage above the historic usage. The Commission shall from time to time establish its estimate of "typical incremental cost" by order.

6.4.3.d. In rate cases the Commission will determine the utility's incremental cost of treating or purchasing the water and require that the utility include the rate in an appropriate tariff as the leak adjustment rate. After the Commission approves a rate in a rate case, the utility shall not have the option to use the Commission's estimate of "typical incremental cost" found in Water Rule 6.4.3.c.

6.4.3.e. The water utility shall, after determining that a leak adjustment must be made, notify the sewer utility of the amount of the adjustment in gallons and the reason for making the adjustment.

6.5. Complaints.

6.5.1. Investigation of complaints. -- Each utility shall make a full and prompt investigation of all complaints made to it by its customers, either directly or through the Commission. In the event that the complaint is not adjusted, the utility shall notify the customer that he may file an informal or formal complaint with the Commission.

6.5.2. Records of complaints. -- The utility shall keep a record of all complaints received, which record shall show the name and address of the complainant, the date and character of the complaint, and the adjustment or disposal made thereof.

6.5.3. Disposition of records. -- Records of complaints shall not be destroyed until a summary has been prepared for permanent record, showing the character of complaints made, the number of each type received in each month, and the disposition of the complaints.

6.6. Disputed bills.

6.6.1. In the event of a dispute between the customer and the utility respecting any bill, the utility shall conduct an investigation and report the result thereof to the customer. In the event that the complaint

is not resolved, the utility shall, before service is discontinued, notify the customer of the customer's right to file an informal or formal complaint with the Commission.

6.7. Customer discontinuance of service.

6.7.1. Any customer requesting service to be discontinued shall give notice thereof to the utility, during regular business hours. Unless a different period shall be mutually agreed upon by written contract, the utility will discontinue service by the end of the next business day. Until the utility receives notice, the customer may be held responsible for all service rendered.

6.8. Utility discontinuance of service.

6.8.1. Notice of discontinuance.

6.8.1.a. The utility may not discontinue service sooner than ten (10) days following the date that a utility has mailed to a customer written notice of scheduled termination of service, in compliance with Water Form No. 1 attached to these rules. Where written notice is required the utility must send the notice by first class mail, address service requested. The written notice shall become void if the utility has not discontinued service within thirty (30) days of the date indicated on the notice.

6.8.1.b. Where (1) conditions hazardous to life or property are found to exist on the customer's premises, (2) the utility's regulating, measuring or distribution equipment or facilities have been tampered with, or (3) the customer's premises have been condemned through a condemnation proceeding under the laws of this state, the water may be shut off without notice in advance.

6.8.1.c. Prior to disconnecting water service for non-payment of a water, a stormwater, or a sewer bill, a utility is required to make at least two (2) attempts to notify the customer through personal contact unless it can be reasonably established that the premises are not permanently inhabited. For the purposes of this rule, personal contact includes both face-to-face meetings and telephone calls.

6.8.1.c.1. When the water service is being terminated for non-payment of a water bill, the two (2) attempts to notify by personal contact shall be made on two (2) separate business days at least twenty-four (24) hours prior to the scheduled termination unless it is reasonably established that the premises are not permanently inhabited. The inability to make personal contact shall not prevent the water utility from terminating service.

6.8.1.c.2. When water service is being terminated for non-payment of a sewer or stormwater bill, the sewer utility, the municipality or public service district owning the stormwater system, or the water utility is required to make two (2) attempts to notify by personal contact on two (2) separate business days at least twenty-four (24) hours prior to the scheduled termination unless it can be reasonably established that the premises are not permanently inhabited. The inability to make personal contact shall not prevent the water utility from terminating service.

6.8.1.d. Service shall not be discontinued on a Saturday, Sunday, any day that is a federal or state holiday, a day on which the utility's business office is not open to accept payment, or on the day before such days, unless an emergency exists.

6.8.1.e. All disconnections shall be performed between the hours of 8 a.m. and 4 p.m.

6.8.1.f. The utility may, but is not required to, accept payment at the customer's premises in lieu of discontinuing service for either a delinquent water or sewer bill.

6.8.1.g. If a customer has received notice of a scheduled termination, and, to avoid such termination, makes payment by check which is subsequently dishonored by the bank, the utility may then terminate service only after it has mailed notice, by first class mail, to the customer at least five (5) days, excluding Saturdays, Sundays, and state or federal holidays, prior to termination; provided that at the option of the utility, in lieu of mailing the notice, the utility may contact the customer either in person or by telephone. For purposes of this rule, if the utility elects to contact the customer either in person or by telephone, an attempt to contact shall not be considered sufficient -- actual contact must be made.

6.8.1.h. If a landlord of a single-unit dwelling or a master-metered mobile home park, apartment building, motel, hotel or other multiple or single-unit dwelling is responsible for payment of a utility bill, written notice of termination in the form of Water Form No. 2 shall be placed at a location readily available for public inspection on the premises at least five (5) days, excluding Saturdays, Sundays, and state or federal holidays, prior to the scheduled termination of service to that mobile home park, apartment building, motel, hotel or other multiple or single-unit dwelling. If the billing address for any single unit service is different than the service location, a written notice in the form of Water Form No. 2 shall be delivered or posted at a visible location on the premises where the service is to be terminated at least five (5) days, excluding Saturdays, Sundays, and state or federal holidays, prior to the scheduled termination. This notice shall inform the occupant(s) of the date on or after which termination of service will occur and shall state the steps the occupant(s) can take to avoid termination of service.

6.8.1.i. Deferred Payment Agreement. A water customer who has been notified that water service is to be terminated for non-payment of water bills shall be given the opportunity to enter into a deferred payment agreement: Provided, that the customer has demonstrated an ability to pay but only in installments. The customer shall be informed at the time a disconnect notice is issued of the availability of a reasonable payment plan.

6.8.1.i.1. The details of the deferred payment agreement are to be negotiated between the utility and the customer and may consider several factors, including, but not limited to the following: amount of the delinquency; ability of the customer to pay; payment history; time the delinquency has been outstanding; reasons why the delinquency has been outstanding; and any other relevant factors.

6.8.1.i.2. A standard deferred payment agreement will include a pay-off amount consisting of the delinquency balance in twelve monthly payments. If a residential customer desires a payment period that is shorter than twelve (12) months, the utility shall accept the shorter term. The deferred payment agreement shall include language informing the customer of the right to challenge the reasonableness of the proposed payments to the Commission.

6.8.1.i.3. During the challenge, the utility may not terminate service: provided that the current bill must be paid by the customer on time and in full in order to protect the customer's rights under this rule.

6.8.1.i.4. Once a deferred payment agreement has been established, the customer must pay the current bill on time and in full and make timely payments in accordance with the deferred payment agreement.

6.8.1.i.5. If the customer's financial condition significantly changes and the existing payment agreement results in hardship, the utility shall renegotiate the payment agreement, consistent with the provisions of Water Rule 6.8.1.i.1. The customer shall provide documentation in support of his claim that his financial condition has changed. During the renegotiation period the customer must continue to pay the current bill on time and in full and make some payment on the delinquency.

6.8.1.i.6. If the deferred payment is not received in accordance with the terms of the agreement or the payment is made with a check subsequently dishonored by the bank, the utility may terminate service only after it has mailed written notice, by first class mail, to the customer at least five (5) days, excluding Saturdays, Sundays, and state or federal holidays, prior to termination: provided that at the option of the utility, either personal contact or telephone contact with the customer may be substituted for contact by first class mail. If the customer makes the delinquent payment within that notice period, service shall not be terminated. However, if the customer has, during the previous twelve (12) months, attempted to make payment by a check which was subsequently dishonored by the bank the utility may refuse the customer's check and immediately terminate service without additional notice.

6.8.1.j. In the case of a sewer utility requesting termination of water service for non-payment of sewer service, the sewer utility shall provide the customer written notice complying with Sewer Form No. 1, ten (10) days before the effective termination that the sewer utility will request termination of water service by the water utility if payment is not made in full or a payment schedule is not established as provided by Sewer Rule 6.8.2.i. The written notice must be sent first class mail, address service requested. This notice shall contain a provision notifying the customer that in the event water is terminated the customer will be responsible for and required to pay the fees charged to the sewer utility by the water utility.

6.8.1.k. A sewer utility requesting termination of water service for non-payment of sewer bills shall provide the water utility with a copy of the notice to the customer required by Sewer Rule 6.8.1.a.

6.8.1.l. A sewer utility will provide the water utility with a written request for termination of water service for non-payment at least twenty-four (24) hours before the end of the ten (10) day notice period to the customer.

6.8.1.m. If a utility proposes termination rules that differ from the Commission rules, those termination rules must be filed with the Commission as a request to modify the utility's tariff.

6.8.2. Once a disconnected customer has paid his delinquency in full, or the utility has agreed to enter into a deferred payment agreement with the customer, and all disconnect and/or reconnect fees have been paid, the utility shall reconnect the customer's water service as soon as possible but no later than twenty-four (24) hours from the time the customer pays all disconnect and reconnect fees.

6.8.3. Charge for reconnection.

6.8.3.a. Whenever the supply of water is turned off for violation of rules, non-payment of bills, or fraudulent use of water, the utility may make a charge as set forth in its tariff for reestablishment of service.

6.8.3.b. If service is discontinued at the request of the customer, the utility may refuse service to such customer, at the same premises, if requested within eight (8) months of the date service was discontinued, unless the customer shall first pay the reconnection charge set forth in the utility's tariff.

6.8.4. The utility shall not refuse, deny, or discontinue service to an applicant or present customer due to a delinquency in payment for service by a previous occupant of the premises to be served unless such applicant or present customer and such previous occupant are members of the same household and were members of the same household at the time the delinquent bill was incurred.

6.8.5. Combined water and sewer public service districts. -- Any public service district providing water and sewer service to its customers shall have the right to terminate water service for delinquency in

payment of either water or sewer bills; provided that proper notice is given and procedures followed as set out in these Rules.

6.8.6. Inter-utility Agreements regarding discontinuance of water service for non-payment of sewer bills.

6.8.6.a. In the event that any utility, (whether public, private, city, incorporated town, municipal corporation or public service district) owns and operates either water facilities or sewer facilities, and a separate utility owns and operates the other kind of facilities, either water or sewer, then the two utilities shall covenant and contract with each other to shut off and discontinue the supplying of water service for the non-payment of sewer service fees and charges; provided that proper notice is given and procedures are followed as set forth in Water Rules 6.8.1.a. through 6.8.1.m.

6.8.6.b. Municipal sewer. -- When sewer facilities are municipally owned and water facilities are not, the municipality providing sewer service may require the water utility to discontinue water service to any customer who is delinquent in the payment of sewer service rates and charges to the municipality. The water utility shall discontinue water service upon demand of the municipality for this purpose; however, prior to discontinuance of any water service, the municipality shall contract with the water utility which contract shall provide that the municipality shall reimburse the water utility for all costs and expenses incurred in both the termination of water service to the delinquent sewer customer and the subsequent resumption of water service to such customer. The contract shall provide for reasonable methods and assurances so that the water utility will be protected and held harmless from claims and damages when water service is discontinued in error or in violation of the rights of the customer through the fault of the municipal sewer utility.

6.8.6.c. The inter-utility agreement should contain specific provisions regarding responsibilities of notice of termination, termination, reconnection, and reasonable fees based on fair and reasonable compensation.

6.8.6.d. Any inter-utility agreements pursuant to Water Rule 6.8.6.b. shall be submitted to the Commission for approval prior to any termination of water service for non-payment of sewer bills under such agreements.

6.8.6.e. A water utility that has terminated or reconnected service for non-payment of sewer bills or that has made a visit to the customer's premises to terminate service, may charge the sewer utility a fee pursuant to Water Rule 6.8.3. The sewer utility may include this charge in the billing to the delinquent customer; provided that such charge is included in the sewer utility's approved tariff.

6.8.7. A sewer customer who has been notified that water service is to be terminated for non-payment of sewer bills shall be given the opportunity to enter into a deferred payment on the same terms and conditions set forth in Water Rule 6.8.1.j.

6.9. Refusal to serve applicant. -- The utility should design its application form to reflect the following:

6.9.1. Non-compliance with rules. -- Any utility may decline to serve an applicant until he has complied with these rules and the Commission approved utility's rules set forth in a Commission approved tariff governing water service.

6.9.2. Applicant's facilities inadequate. -- The utility may refuse to serve an applicant if, in its judgment, the applicant's installation of piping equipment is regarded as hazardous or of such character that satisfactory service cannot be provided.

6.9.3. A bill which has been found to be contractually uncollectible by a court or could reasonably be found to be uncollectible by reason of an applicable statute of limitations shall not be used by a utility to deny or discontinue service.

6.9.4. Applicant's recourse. -- In the event that the utility refuses to serve an applicant under the provisions of this rule, the utility must inform the applicant that the applicant may file a complaint with the Commission for decision.

6.9.5. In the case of the establishment of a new utility and/or extensions planned by an existing utility, where the utility has received applications for service and has accepted the tap-fee for same from the applicants, the utility will immediately upon receiving bids for such installation determine the feasibility of serving the areas in question and immediately advise the applicants. In the event an area is deemed infeasible to serve, the tap-fee deposit will be returned to the applicant immediately.

6.10. Change in character of service. -- When a utility makes a substantial change in water pressure, or other conditions affecting the efficiency of operation or adjustment of appliances, the utility shall inspect and readjust the appliances of all customers in the district affected, if necessary, without charge. Where circumstances require, the utility shall furnish and install suitable pressure regulating devices.

6.11. Access to property.

6.11.1. The utility shall at all reasonable times have access to meters, service connections and other property owned by it on customer's premises, for the purpose of maintenance and operation. Neglect or refusal on the part of customers to provide reasonable access to meters, service connections and other property owned by the utility for the above purposes shall be deemed to be sufficient cause for discontinuance of service.

6.11.2. Identification for employees. -- Every employee, whose duties regularly require work on or near the property of a customer, shall wear a distinguishing uniform or insignia, identifying the person as an employee of the utility and shall carry an identification card which will identify the person as an employee of the utility, containing a photograph of said employee. The identification card shall contain the telephone number of the utility as well as other pertinent information necessary to identify the employee. All other employees, whose duties require occasional entry into the homes or premises of customers, shall carry an identification card containing information as herein required.

6.12. Service interruptions.

6.12.1. Records of interruptions. -- Each utility shall keep a record of all interruptions of service affecting its entire system or major divisions thereof, including a statement of the time, duration, and cause of the interruptions.

6.12.2. Notification to customer for scheduled interruptions. -- A utility will notify every affected customer in advance of contemplated work that will result in an interruption of service.

6.12.3. Curtailment or restriction service policy. -- Prior to putting any curtailment or restriction policy affecting customers into effect, a utility shall file its contemplated policy with the Commission and supply the following information:

6.12.3.a. Reason for curtailment or restriction of service.

6.12.3.b. Date curtailment or restriction policy requested to begin.

6.12.3.c. Duration of policy and projected correction programs with time parameters for completion.

6.12.4. Notice required for unscheduled interruptions. -- In the event of an unscheduled service interruption, a utility shall notify the Bureau for Public Health and the Commission as soon as possible upon a utility becoming aware of an unscheduled service interruption. Additionally, a utility will make customers and the general public aware of any unscheduled service interruption by utilizing one or more of the following acceptable methods of public notification as appropriate:

6.12.4.a. Fax/e-mail notification to local radio and television stations, cable systems, newspapers and other print and news media in the affected area as soon as possible after the event occurs. The notification must provide relevant information about the event, such as the affected location, its potential impact including possible adverse health effects and the population or subpopulation particularly at risk, and a description of actions affected ratepayers/occupants should take to ensure their safety, with updates as often as needed.

6.12.4.b. Use of the utility's own Internet web site and 24/7 emergency phone line and integrated voice response system to provide relevant information about the event, such as the affected location, its potential impact including possible adverse health effects and the population or subpopulation particularly at risk, and a description of actions affected ratepayers/occupants should take to ensure their safety, with updates as often as needed.

6.12.4.c. Other types of notice at the discretion of the utility, including, but not limited to, doorknob flyers distributed to affected ratepayers/occupants, e-mail, text message, automated dialing system (outbound dialing).

6.12.5. Actual notice must be provided to affected health care and childcare facilities and other facilities, for example, schools and restaurants, as determined by consultation with the Commission, the Bureau for Public Health, the Department of Environmental Protection and other state agencies as necessary.

6.12.6. A utility shall coordinate with state and local emergency management agencies, as needed, to use any emergency alert system available for qualifying situations.

6.12.7. Public Notice Templates. -- Utilities should have public notice templates prepared and available in advance to avoid wasting critical time developing materials when confronted with an unscheduled service interruption. The notices should cover all possible scenarios from water conservation to boil water alerts to contaminants of concern and associated health effects.

6.12.8. Utility Contact Person. -- To ensure that the public is informed in the case of an unscheduled interruption occurring due to an emergency situation, utilities should have a knowledgeable contact person stationed onsite during the emergency, if possible, to communicate to the public and media on behalf of the company.

6.12.9. In the case of an unscheduled interruption occurring due to an emergency situation, water utilities should make a reasonable effort to ensure that adequate quantities of alternative supplies of water essential for domestic use are made available in a sufficient number of conspicuous and predetermined locations relative to the number of customers affected by the incident. This includes the use of water tankers or free bottled water, or both. Utilities should ensure that customers are adequately notified of the times

available and locations of alternative water supplies. When bottled water is used, utilities should have plans in place, based on prior coordination with local vendors, to have adequate supplies to last for the duration of the outage. The Commission encourages utilities to work proactively with community-based organizations that would have readily available information on the location and special needs of affected elderly or homebound customers in the area.

6.13. Moratoria.

6.13.1. Conditions. -- The Commission may impose a moratorium on a system, either entire or apportioned, whenever sufficient evidence exists that the existing facilities are operating in excess of design capacity, that the system capacity necessary for future demand does not exist, or when an increase in customers will result in the degradation of service to existing customers.

6.13.2. Petition. -- A utility, Commission Staff, or governmental entity may petition the Commission in writing for the imposition of a moratorium on a system. The petition should include evidence of the existence of conditions outlined in Water Rule 6.13.1. If the utility is the petitioner, it must state the utility's plan to remediate those conditions.

6.13.3. Imposition by state agency other than the Commission. -- A utility must immediately notify the Commission in writing if a State agency other than the Commission imposes a moratorium on the utility's system.

6.13.4. Public notification of petition. -- A party petitioning for a moratorium shall notify the public that such request is being made, through a Class II legal advertisement in the form of Water Form No. 3, "Public Notice of Filing of a Petition for Imposition of a Moratorium" attached to these Rules, published no later than fifteen (15) calendar days from the date such request is made to the Commission. The notification shall clearly state which areas of the utility's system are affected, and that interested parties may submit comments to the Commission for consideration.

6.13.5. Exemptions. -- Any prospective customer or group of prospective customers may apply to the Commission for an exemption from an existing moratorium. The prospective customer(s) shall make the requests in writing to the Commission, and include justification for the proposed exemption.

6.13.6. Refusal of Service. -- A utility may not deny service to a prospective customer on grounds of a moratorium until the Commission has imposed a moratorium. Any utility denying service to a prospective customer or group of customers due to a moratorium shall notify, in writing, all applicants for service of their right to file with the Commission a request for exemption from the moratorium.

6.13.7. Improvements to System. -- A utility upon which a moratorium is imposed shall continue to seek improvements to its system necessary to lift the moratorium. The Commission may, at its discretion, require the utility to submit reports outlining all progress made toward system improvements.

6.14. Local water rationing plans.

6.14.1. Authority. -- Upon giving notice to the Commission and the general public, any water utility declaring a temporary shortage of water, and that it is necessary for the health and welfare of the utility's customers to restrict the consumption and use of the existing water supply, shall be authorized to enforce the following Local Water Rationing Plan ("Plan") to restrict use of water to human consumption and for sanitary purposes. If a utility wishes to adopt a Plan different from the following Plan, it may petition the Commission for permission to do so.

6.14.2. Definitions.

6.14.2.a. “Emergency service area” -- the area or areas within which the utility has declared a state of drought and water shortage emergency.

6.14.2.b. “Excess use” -- the usage of water by a water customer in excess of the water allotment provided under the Local Water Rationing Plan for that customer, over any applicable period.

6.14.2.c. “Service area” -- the territory and the customers serviced by the utility.

6.14.2.d. “Service interruption” -- the temporary suspension of water supply, or reduction of pressures below that required for adequate supply, to any customer, portion of a water supply system or an entire system.

6.14.3. Purpose. -- This Plan is intended to establish measures for essential conservation of water resources, and to provide for equitable distribution of limited water supplies, to balance demand and available supplies and to assure that sufficient water is available to preserve public health and safety within an emergency service area.

6.14.4. Scope. -- This Plan shall apply to all water uses within a utility’s emergency service area including uses by customers of wholesale customers of the utility.

6.14.5. Objective of the Plan.

6.14.5.a. It is imperative that water customers within an emergency service area reduce water use in order to extend existing water supplies, and to assure that sufficient water is available to preserve the public health and sanitation, and provide fire protection service and electric power generation.

6.14.5.b. This Plan requires equitable reductions in water usage, and for equal sacrifice on the part of each water customer, insofar as such restrictions do not interfere with the public health, adequate fire protection and the generation of electric power. The success of this Plan depends on the cooperation of all water customers in the emergency service area.

6.14.6. Measures to implement the water rationing plan. -- Each water supply purveyor, including resellers, within the emergency service area, will develop and adopt necessary and appropriate measures to assure compliance with requirements of this Plan.

6.14.7. Prohibiting non-essential water uses. -- The following water uses are non-essential and are prohibited within an emergency service area:

6.14.7.a. Watering of outside shrubbery, trees, lawns, grass, plants or any other vegetation, except from a watering can or other container not exceeding three (3) gallon capacity. This limitation shall not apply to vegetable gardens, greenhouse or nursery stocks and newly established lawns or sod less than five (5) weeks old, which may be watered in the minimum amount required to preserve plant life before 8:00 a.m. or after 6:00 p.m.

6.14.7.b. The watering of golf course fairways.

6.14.7.c. The washing of automobiles, trucks, trailers or any other type of mobile equipment except in vehicle wash facilities operating with a water recycling system with a prominently displayed sign in public viewing so stating, or from a bucket or other container not exceeding three (3) gallons.

6.14.7.d. The washing of streets, driveways, parking lots, service station aprons, office buildings, exteriors of homes or apartments or other outdoor surfaces.

6.14.7.e. The serving of water in restaurants, clubs or eating places unless specifically requested by the individual.

6.14.7.f. Ornamental water use, including but not limited to fountains, artificial waterfalls and reflecting pools.

6.14.7.g. The use of water for flushing sewers or hydrants by municipalities or any public or private individual or entity except as deemed necessary in the interest of public health or safety by the utility.

6.14.7.h. The use of fire hydrants by fire companies for testing fire apparatus and for fire department drills except as deemed necessary in the interest of public safety and specifically approved by the municipal governing body.

6.14.7.i. The use of fire hydrants by municipal road departments, contractors and all others, except as necessary for fire fighting or protection purposes.

6.14.7.j. The filling of swimming or watering pools requiring more than five (5) gallons of water, or the refilling of swimming or wading pools which were drained after the effective date of the order, except that pools may be filled to a level of two (2) feet below normal, or as necessary to protect the structure from hydrostatic damage, as to pools constructed or contracted for on or after the date of the final order.

6.14.8. Recourse. -- Any person aggrieved by a utility's decision relating to these rules may file a complaint with the Commission.

6.14.9. Penalties. -- Any person who violates the provisions of this Plan, who fails to carry out duties and responsibilities imposed by this Plan or who impedes or interferes with any action undertaken or ordered pursuant to this Plan, shall be subject to the following penalties:

6.14.9.a. For the first excess use, the utility shall issue a warning of possible discontinuation of service.

6.14.9.b. For the second or subsequent excess use, the utility may interrupt or shut off service to the customer without notice, or the utility may add a surcharge of ten percent (10%) to the end user's monthly bill for the month of the infraction.

6.14.10. Effective period. -- This Plan shall remain in effect until terminated by action of the utility declaring an end to the emergency condition or until terminated by order of the Commission, whichever comes first.

6.14.11. Effective date. -- This Plan shall take effect immediately upon adoption by the utility.

6.15. Resale of water.

6.15.1. A utility customer may not resell or cause to be resold water furnished by a public utility on approved rates or contracts unless the customer is engaged in the business of distributing water as a public utility.

§150-7-7. Utility Facilities; Service Pipes; Extension of System.

7.1. Adequacy of facilities.

7.1.1. Construction and maintenance of plant. -- A utility shall at all times construct and maintain its entire plant and system in such condition that it will furnish safe, adequate and continuous service.

7.1.2. Inspection of plant. -- A utility shall inspect its plant and facilities in such manner and with such frequency as is necessary to ensure a reasonably complete knowledge as to their conditions and adequacy at all times. Such inspections must comply with the requirements of the legally applicable Minimum Federal Safety Standards (Federal Occupational Health and Safety Administration) and the standards of the Bureau for Public Health and the Department of Environmental Protection (as applicable).

7.1.3. Records of conditions. -- Records necessary for the proper maintenance of the system and in accordance with the Bureau for Public Health and the Department of Environmental Protection (as applicable), and the Minimum Federal Safety Standards shall be kept of the conditions found. In special cases, a more complete record may be specified by the Commission.

7.1.4. Records of operation. -- A utility shall keep a record of the operation of its plant, which, so far as practical, shall show sufficient details of plant operation as is necessary to substantially reproduce the daily history of its operation. The utility shall also maintain the records in accordance with the requirements of the Minimum Federal Safety Standards and Bureau for Public Health and Department of Environmental Protection (as applicable).

7.1.5. Reports to Commission. -- A utility shall, upon request of the Commission, file with the Commission a statement regarding the condition and adequacy of its plant, equipment, and facilities, and of its operations and service in such form as the Commission may require.

7.1.6. Bureau for Public Health Standards. -- All extensions, service connections and modifications to a utility's plant must meet applicable design standards established by the West Virginia State Bureau for Public Health in addition to these rules.

7.1.7. Dead ends. -- A utility should avoid "dead ends" in the utility's distribution mains so far as possible. If "dead ends" exist the utility shall provide facilities for flushing.

7.2. Utility Service Pipe.

7.2.1. Where the service pipe is required for the immediate and continuous use for general service to premises abutting the public street or right-of-way in which mains are located, the utility will furnish, install, and maintain the utility service pipe and appurtenances between the main in the street up to the customer's point of service at or near 90 degrees to the main. Provided, all utility service pipes and appurtenances shall be installed only by the utility unless by prior written agreement.

7.2.2. The utility shall determine the location of the utility service pipe.

7.2.3. The utility will specify the size, kind, quality and location of all materials used in the utility service pipe.

7.2.4. The utility shall install and maintain, at its own cost and expense, all of the utility service pipe regardless of the side of the road on which the customer is located in reference to the main line. The utility shall designate the point of service on the customer's side of the road.

7.2.5. The utility shall not make any charge for furnishing and installing any permanent service connection, meter or other appliance necessary to deliver and measure the water furnished unless the utility has prior approval of the Commission to charge a tap fee and the same is set forth in the utility's tariff on file with the Commission.

7.2.6. The utility's service pipe shall remain under the utility's sole control and jurisdiction.

7.2.7. The customer shall not attach any fixtures to, or make any branches in, the utility service pipe between the point of service and the distribution main. Violation of this rule may result in termination of service pursuant to these rules.

7.2.8. A utility shall install temporary service connections for construction or other temporary purposes or connections for private fire service at the cost of the applicant.

7.2.9. A water utility shall adopt standard methods of meter installations where practicable and file a written description and drawings to provide a clear understanding of the requirements.

7.3. Customer Service Pipe.

7.3.1. No customer, plumber, company owner or any agent shall connect to the utility's main or to any utility service pipe, or extend the pipes therefrom to any premises for the purpose of securing water service, until application has been made therefor to the utility as provided in these rules and the utility has granted permission in writing.

7.3.2. Once a utility grants an application for service, the customer shall install and maintain the customer service pipe.

7.3.3. The utility's authorized employee shall inform the customer of the location of the point of service. The customer shall install the customer service pipe to the point of service after which the utility will install the utility service pipe from the distribution main to the point of service.

7.3.4. The customer shall also install and properly maintain in good working condition a stop and waste cock of a type approved by the utility on the customer's service pipe immediately inside the foundation wall in a readily accessible location and in a place protected from the possibility of freezing and so placed that it will shut off and drain all plumbing within any and all buildings in the premises.

7.3.5. Where the utility's service pipe is already installed to the point of service, the customer shall connect with the utility service pipe as installed.

7.3.6. The customer's service pipe shall be installed in a workmanlike manner, shall conform to all reasonable rules and regulations of the utility, and shall be maintained by the customer at his own expense.

7.3.7. The utility will specify the size, kind, quality and location of all materials used in the customer's service pipe and the customer shall comply with those specifications.

7.3.8. A customer must maintain his service pipe in good condition and free from all leaks and defects, at the customer's cost and expense. A customer's failure to comply with this rule may result in termination of service pursuant to these Rules.

7.3.9. The customer's service pipe shall: be laid below the frost line at all points; be placed on firm and continuous earth so as to give unyielding and permanent support; and be installed in a trench at least two (2) feet in a horizontal direction from any other trench wherein gas pipe, sewer pipe, or other facilities, public or private, are or are to be installed.

7.3.10. Except in the case of long-service lines, a customer's service pipe shall not pass through or across any premises or property other than that to be served. If a property served as of September 14, 2021 is later subdivided resulting in the original customer's service pipe crossing the subdivided property that will be occupied by a new customer, the original customer and new customer must have separate service pipes. The original customer must obtain a right-of-way for the original customer's service pipe on subdivided sections of property before title of such section passes to a new owner.

7.3.11. The customer's service pipe and all connections and fixtures attached thereto shall be subject to the inspection of the utility before the water will be turned on, and all premises receiving a supply of water and all service pipes, meters and fixtures, including any and all fixtures within the said premises, shall at all reasonable hours be subject to inspection by any duly authorized employees of the utility.

7.3.12. The utility shall make changes and bear the full costs of changes in the customer's service pipe or meter location required due to changes in grade, relocation of mains, and other causes not related to the customer. The customer shall bear the full costs of changes in service pipe or meter location desired by the customer for the customer's convenience.

7.3.13. The customer shall not attach any fixtures to, or make any branches in, the customer service pipe between the point of service and the premises served. Violation of this rule may result in termination of service pursuant to Water Rule 6.8.

7.3.14. There shall be no more than one (1) customer service pipe required to serve a single premises and each premises shall be supplied through an independent customer service pipe, unless otherwise approved by the utility in writing.

7.4. Long service lines.

7.4.1. To assure the orderly development of its system, and to provide adequate service to its customers, the utility should ordinarily provide water service only at the property line of the customer requesting service, and in those instances where the utility's service does not extend to the customer's property line, the utility should construct an extension in accordance with Water Rule 7.5. In unusual and exceptional cases where the property line of the customer requesting service is an excessive distance from the existing main of the utility, and the cost to be borne by the prospective customer under Water Rule 7.5. is prohibitive, and there is no reasonable prospect of further growth and development in the area, or for any one of the above reasons, the utility may serve the customer by installing a meter in the utility's right-of-way at its main nearest the customer's property, and connecting the meter to the customer's privately owned service line. The customer shall extend his customer service line to an existing distribution main of the utility and shall be solely responsible for service beyond the meter. The utility shall not serve other customers from a long service line.

7.4.2. If a road crossing is necessary to serve the customer, the utility shall install that portion of the line crossing under the road and shall locate the meter on the customer's side of the road; provided that

the utility's distribution main lies within or adjacent to the existing road right-of-way. The customer shall be required to provide evidence to the utility that proper easements or rights-of-way have been obtained. Standards of service received by the customer shall be determined at the metering point. The customer shall not permit others to connect to the customer's water lines or receive water service from the customer's privately owned service line. In the event the utility's main is later extended to the customer's property line under Water Rule 7.5., the customer shall discontinue the use of his privately owned service line and shall pay all costs and charges authorized by the rules of the Commission and the rules and tariffs of the utility for water service from such extension, the same as if the customer had not previously laid and received service through a private service line. The provisions of this rule shall apply to all persons now or hereafter receiving water service through a privately owned service line extending from the utility's main to the property to be served.

7.5. Extension of mains to serve new customer(s) and customers currently served under Water Rule 7.4.

7.5.1. A water utility, whether publicly or privately owned, is under a public service obligation to extend its mains, and its plant and facilities to serve new customers within its service area who may apply for service.

7.5.2. The utility shall make extensions in all cases in which the public convenience and necessity require the service, construction problems are not unusual or burdensome, and the extensions appear to be economically feasible, except that a utility shall first consider an application for an alternate main extension when applicable.

7.5.3. For any proposed extension of mains to be installed by a utility, a reasonable relationship should exist between the per customer investment to serve new customers and the per customer net investment to serve existing customers.

7.5.4. A utility shall make every effort to install its distribution main in the public road right-of-way or in a utility right-of-way abutting the public road right-of-way.

7.5.5. Extensions for general water service.

7.5.5.a. The utility will respond to all inquiries regarding new water service, whether oral or written, by explaining all available options for obtaining service under these rules, including the option of an alternate main extension agreement, pursuant to Rule 7.5.8.g.

7.5.5.b. When extensions other than those made pursuant to Rule 7.5.8.g. are built, the customer pays for the customer service pipe and the utility pays for the utility service pipe.

7.5.5.c. The utility will, upon written request for service in the form of Water Form No. 4, by a prospective customer or group of prospective customers located in the same neighborhood, or a customer currently served under Water Rule 7.4., determine the necessary size of main required to give service and make an estimate of the cost of providing the requested service, using the form of Water Form No. 5, including pipe, valves, fittings, necessary materials, permits, costs incurred by the utility when the utility externally contracts for the construction of the extension, or internal labor costs, provided such internal or external costs are not recovered in existing rates, and other applicable related costs. When a road crossing(s) is (are) necessary to serve the customer(s) requesting service, the cost estimate shall not include costs attributable to extending the main across the first road (closest to the already existing main), but shall include the costs of installing the main across a second and any subsequent road(s). The utility will provide the written estimate calculated using Water Form No. 5 to the customer in the form of Water Form No. 6,

no more than forty (40) days from the receipt by the utility of the written request for service, except that the utility will provide the written estimate to the customer no more than twenty (20) days following a denial of a request for an alternate main extension agreement pursuant to Rule 7.5.8.g. The written estimate shall include an estimated construction start date and an estimated time of construction. If the prospective customer believes that any part of the estimate is unreasonable, the customer is free to pursue an informal request for assistance from the Commission staff or to file a complaint with the Commission. Further, the utility and the customer shall execute a Main Line Extension Agreement. Commission Staff may be consulted to provide assistance and sample forms. The agreement must include as an attachment a copy of this extension rule. The utility shall keep an executed copy of their agreement for at least six (6) years. The length of the extension required shall be that length required to extend from the new proposed service area to the nearest point of connection to the utility system having sufficient excess capacity to provide service at maximum demand.

7.5.5.d. Unless service is to be provided by a long service line pursuant to Water Rule 7.4., whenever the utility is required to extend service from an existing distribution main to property that does not immediately abut the utility's right-of-way or the public road that contains the distribution main, the extension shall be considered a main extension and cost responsibility shall be determined under Water Rule 7.5.5.

7.5.5.e. Where the cost of the extension does not exceed the estimated total net revenue, as calculated below, from hydrants and prospective customers whose service pipes will immediately be connected directly to the extension and from whom the utility has received applications for service upon forms provided by the utility for this purpose, the utility will install, at its own cost and expense, the necessary extension; provided that the patronage or demand will be of such permanency as to warrant the capital expenditure involved.

7.5.5.e.1. Net annual revenue shall be gross annual revenue minus an amount equal to the excess usage leak adjustment rate approved for the utility times the applicant's usage used for purposes of this rule, with this difference further reduced for any revenue based taxes.

7.5.5.e.2. The utility will base revenue on the average usage by customer class at the time of the extension, unless circumstances of the applicant show this would result in significant error. For non-residential units, the utility will base annual revenue on typical consumption for comparable units published by the American Water Works Association.

7.5.5.e.3. Estimated total net revenue for private, for profit, utilities will be initially calculated as six (6) times estimated net annual revenue. Each such utility shall file for a line extension multiplier within twelve (12) months of the effective date of these rules.

7.5.5.e.4. The utility-specific line extension multiplier for private, for-profit, utilities shall be based on one (1) divided by the utility's net fixed charge rate. The net fixed charge rate shall equal a function of the utility's weighted cost of capital, applicable income tax rates, and the Commission approved depreciation accrual rate.

7.5.5.e.5. Estimated total net revenue for associations, municipal, and public service district utilities will be calculated as five (5) times estimated net annual revenue. If the Commission approved excess leak adjustment for the utility fails to include all of the incremental costs of serving a new customer that should properly be netted out from the total revenues of the utility, the utility may apply to the Commission for a determination of the proper amount to be deducted from gross revenues to arrive at an appropriate determination of net revenue.

7.5.6. Extensions beyond the limit of utility-financed extensions of general water service and public fire service.

7.5.6.a. If the utility-estimated cost of the proposed extension required in order to furnish general water service exceeds the utility's estimate of total net revenue as determined by Water Rule 7.5.5.d., the utility will make the extension if the applicant or the applicant's authorized agent contracts for the extension and deposits in advance with the utility the estimated cost of the extension over and above the limit of the utility-funded portion of the extension. The utility shall not pay nor be liable for any interest on such cash deposits. The utility shall make the extension after receiving the cash deposit. The utility shall, for each bona fide new customer who, within a period of ten (10) years from the making of such extension, directly connects to the extension between its original beginning and the original terminus, refund to the original depositor(s), an amount equal to the estimated total net revenue of the new customer as determined by Water Rule 7.5.5.d., but in no event shall the aggregate refund made to the depositor(s) exceed the original deposit. Provided that associations, public service districts and municipal water utilities may elect to refund the estimated amount over a period of five (5) years making payments no less frequently than every six (6) months.

7.5.7. Alternate depositor-financed extension plan.

7.5.7.a. Qualifying utilities. -- The above requirements notwithstanding, the utility may decline to finance the portion of a requested extension that would be utility-funded if it can demonstrate that it has no prospect of any reasonable internal or external financing through commercial loans, grants, or through an installment arrangement with an entity installing the extension or providing the necessary materials.

7.5.7.a.1. If the utility declines to finance the portion of a requested extension that would be the financial responsibility of the utility, the utility shall file for a waiver of the extension rule within sixty (60) days of the written request.

7.5.7.a.2. Before filing for a waiver, the utility must first estimate the extension costs.

7.5.7.a.3. A request for a waiver by a utility shall be accompanied by supporting documentation justifying its request, including cost estimates, documentation of inability to finance, internally or externally, through commercial loans, grants or an installment arrangement with an entity installing the extension or providing the necessary materials, and the proposed agreement.

7.5.7.a.4. If the Commission finds that the utility has reasonably declined to finance the portion of the requested extension that would otherwise be utility-funded, the Commission shall authorize the use of the alternate depositor-financed extension plan as described below.

7.5.7.b. Description of alternate depositor-financed extension plan. -- Under the alternate depositor-financed extension plan, the utility shall make the extension after:

7.5.7.b.1. receiving a cash deposit equal to the full amount of the extension cost; and

7.5.7.b.2. agreeing to give the depositor(s), who is a customer, a monthly bill credit totaling one hundred percent (100%) of the actual net bill(s) from the date service is initiated and until the total credits given equal the estimated total net revenue as defined in Water Rule 7.5.5.d.; and

7.5.7.b.3. agreeing to refund to the original depositor(s) an amount equal to the estimated total net revenue as defined in Water Rule 7.5.5.e. of each bona fide customer, other than the depositor(s),

who, within a period of ten (10) years from the construction of the extension, directly connects to the extension between its original beginning and the original terminus. The refund may be spread out over a five (5) year period with the utility making payments no less frequently than every six (6) months. The refunds shall continue until the total refunds given equal the estimated total net revenue as defined in Water Rule 7.5.5.d.

7.5.7.c. In no event shall the total refund made to the depositor(s) under Water Rule 7.5.7. exceed the original deposit of the depositor(s).

7.5.7.d. The utility shall not pay nor be liable for any interest on the cash deposits associated with line extensions.

7.5.8. General Provisions.

7.5.8.a. If the actual cost of the extension is less than the estimated cost, the utility will refund the difference as soon as the actual cost is ascertained, but in no event later than ninety (90) days after completion of construction of the extension. When the actual cost of the extension exceeds the estimated cost, the utility will bill the depositor for the difference between the estimated and the actual cost. The utility will not pay interest on the applicant's payment or on any balance that is refunded.

7.5.8.b. In estimating the cost of an extension, the utility will base the estimate on the diameter of the pipe to be used; provided that the estimated cost to the customer or customers shall not be based on a pipe diameter greater than the diameter of the main from which the extension is to be made, unless actual consumption estimated for the proposed customer or customers requires a larger pipe.

7.5.8.c. Extensions made under this rule shall be and remain the property of the utility.

7.5.8.d. The utility reserves the right to further extend its distribution mains from and beyond the extension made under this rule, and the depositor or the depositor's agent paying for an extension shall not be entitled to any refund for customers attaching to such further extension or branch mains.

7.5.8.e. In determining the length of water line to be installed in an urban area when land is subdivided into lots, the main, or water line (if installed by an entity other than a utility), shall be extended to fully cover the frontage of the property, and if the last lot to be served is a corner lot the terminal point of the extension made hereunder shall be located so that the water line ties in with the intersecting street. If there is no main located in the intersecting street, the terminal point of the extension shall be located at the nearest street line of the intersecting street. In rural areas or open land areas, the extension required will be that length necessary to adequately serve the applicant.

7.5.8.f. Before water lines are laid in any new subdivision, the road surface shall be brought to the established sub-grade as determined by the agency having jurisdiction.

7.5.8.g. Alternate Main Extension Agreements.

7.5.8.g.1. A utility may enter into an agreement with an applicant that complies with the Commission approved checklist attached hereto as Water Form No. 7, providing an alternate plan for a main extension. Commission Staff may be consulted to provide assistance and sample forms.

7.5.8.g.2. An applicant desiring to enter into an alternate main extension agreement should submit a written request to the utility.

7.5.8.g.3. A utility will, within twenty (20) days of receipt of the written request to enter into an alternate main extension agreement, consider the request and submit a response to the applicant indicating the utility's approval or denial of the request.

7.5.8.g.4. If the utility denies the request to enter into an alternate main extension agreement, the utility will provide the applicant with a detailed explanation of its decision and explain the available options for obtaining service under these rules. If the applicant believes that a denial is unreasonable, the applicant is free to pursue an informal request for assistance from the Commission staff or to file a complaint with the Commission.

7.5.8.g.5. In providing an alternate plan for main extensions a utility may not discriminate between customers whose service requirements are similar.

7.5.8.g.6. An alternate main extension agreement shall be filed with and approved by the Commission prior to implementation or execution of the agreement by any of the parties. The agreement shall include the name, address and phone number of the parties to the agreement. The agreement shall also include a provision explaining why the utility is not funding the extension. The agreement must attach a copy of Water Rule 7.5 and a statement signed by the prospective customer that the customer has reviewed and understands the provisions of Water Rule 7.5.7. which entitle a customer to refunds and that the customer knowingly waives such rights, if applicable. Failure to obtain Commission approval will result in the loss of the right to obtain reimbursement from the utility. If an entity other than the utility constructs the extension, upon completion of construction and proper utility inspection of the extension, the utility shall initiate service only after proper transfer of title to all facilities including property, plant and rights-of-way incidental to the furnishing of utility service.

7.5.8.h. Contract for service. -- A utility is not required to make free extensions or refunds as described in this rule unless those to be served by such extension shall guarantee to the utility that they will take water service at the premises within thirty (30) days after water service is available or as otherwise mutually agreed in a user's agreement.

7.5.8.i. Construction conditions. -- A utility will undertake construction of line extensions, as provided in this rule, promptly after all applications are completed, necessary right-of-way agreements or rights of entry are delivered to the utility, and all prospective customers have signed contracts.

7.5.8.j. Right-of-Way.

7.5.8.j.1. If construction of an extension involves the acquisition of a private right-of-way, then the prospective customer shall attempt to secure the right-of-way and deliver it to the utility free of cost before construction of the extension begins.

7.5.8.j.2. If, however, it is not reasonably possible for the prospective customer or customers to secure the right-of-way, and the construction of an extension involves the utility's incurring expense for right-of-way easements, either by purchase or condemnation, the utility will add those costs to the total cost of the extension.

7.5.8.j.3. As a condition to obtaining a main extension, property owner or developer must grant the utility the necessary easements to allow the utility to make future extensions into unserved areas. The property owner or developer will grant the necessary easements without requiring the utility to pay additional consideration for the additional easements to the property owner or developer. If the property owner or developer is unwilling to grant the additional easements, the utility shall not be required to extend its main to serve the property owner or developer.

7.5.8.k. Upon the proper filing of a Tariff Rule 42A, 42R, 42T, 19A, or 19R rate case or a certificate case filed pursuant to W. Va. Code §24-2-11 by the utility, the utility may seek to include in its tariff a Capacity Improvement Fee, Capacity Assurance Fee or such other fee or charge designed to raise capital to cover the cost of future capacity expansion to be assessed against customers or entities creating those costs.

7.5.9. Community infrastructure investment agreements with municipal utilities and public service districts.

7.5.9.a. Municipal utilities and public service districts may enter into “community infrastructure investment agreements” in accordance with the provisions of W. Va. Code §22-28-1 et seq.

7.5.9.b. A utility that has entered into “community infrastructure investment agreements” pursuant to W. Va. Code §22-28-1 et seq. shall maintain separate books and records for the project areas involved in the agreements. For purposes of this section, the project areas for which separate books and records are required include plant upgrades and stand alone systems.

7.5.9.c. A utility that has entered into “community infrastructure investment agreements” pursuant to W. Va. Code §22-28-1 et seq. shall file (i) a copy of the certificate of appropriateness, (ii) a copy of the community infrastructure investment agreement, and, if necessary, (iii) a new tariff containing rates applicable to the new service area. The utility shall file the required documents with the Commission no later than thirty (30) days of the date the project is transferred to the utility.

7.5.9.d. If rates for the new customers served by a public service district project are higher than the rates for the public service district’s existing customers, the public service district shall, within ninety (90) days of the date the project is transferred to the public service district, make a formal rate application with the Commission in order to justify the higher rates to the new customers. A municipality shall enact an ordinance increasing rates, if necessary, within ninety (90) days of the date the project is transferred to the municipality.

7.6. Water Losses.

7.6.1. Each utility shall determine either by actual measurement or by estimate the amount of “Water Losses” as defined in Water Rule 3.17. in each division of its system and report, separately, to the Commission in its annual report. If the reported Water Losses are in excess of fifteen percent (15%) of the water supply delivered into the transmission and distribution system on an annual basis, the utility will state the remedial actions it proposes to take. A utility may seek assistance from the Commission regarding remediation of water losses in excess of fifteen percent (15%).

7.7. Cross connections and back flow prevention regulations.

7.7.1. See West Virginia Bureau for Public Health legislative rules pertaining to cross-connections and backflow prevention codified at 64CSR15 (effective March 13, 2004).

7.7.2. All utilities that have adopted a standard or uniform cross-connection and backflow program pursuant to §64-15-8.2 of the *West Virginia Code of State Rules* must file the details of such programs with the Commission. Such programs will be approved as filed unless it can be shown that the program violates an existing Commission rule.

7.8. Standard pressure.

7.8.1. The utility shall ensure that every utility customer receives a “standard pressure” within the Commission-established minimum and maximum pressure limits. When possible, a “standard pressure” shall be calculated as the static pressure based on the difference in elevation between the base of the storage tank and meter box or point of service. Where this method of calculating a customer’s “standard pressure” is not practical, the utility will use the actual engineering design of the system or common engineering methods to determine the “standard pressure” at the point of service. A utility shall not allow pressure to fluctuate more than fifty percent (50%) above or fifty percent (50%) below such “standard pressure” during normal operating conditions. Pressure variations outside the limits specified are not a violation of this rule if they are infrequent and arise from unusual or extraordinary conditions, or arise from the operation of the customer’s equipment. This rule shall be interpreted to permit a different “standard pressure” calculation for each customer due to varying elevations.

7.8.2. A utility should establish an elevation in each pressure district above which it cannot provide the minimum pressure required by this rule. A utility shall post notice of that elevation in a prominent place in the public offices of the utility. A utility may furnish new service to customers above this elevation if the customer is fully advised of the conditions under which average service may be expected, and the customer’s agreement is secured in writing. The utility may require in the agreement that its terms shall be binding on future customers served at the same location under similar circumstances; provided that the agreement be recorded with the appropriate county clerk. This waiver shall not prevent the Commission from requiring a better service when, upon investigation, it appears that improvements should be made.

7.8.3. A utility shall not make changes to the standard pressure or pressures adopted for its customers without the approval of the Commission.

7.8.4. A customer’s pressure shall be no less than twenty (20) p.s.i. at peak demand on system or thirty (30) p.s.i. static pressure at the terminus of the utility’s service line (meter box or curb box) unless the customer has waived this requirement. For all new customers desiring service on and after October 24, 2003, a customer’s pressure shall be no greater than one hundred thirty-five (135) p.s.i. unless the customer has waived this requirement. The utility shall keep on file all the aforesaid waivers, in accordance with Water Rule 4.1.

7.9. Quality of water.

7.9.1. Purity. -- All water furnished by a utility for domestic use, shall be pure, wholesome, potable and in no way dangerous to the health of the consumer.

7.9.2. Health Department. -- Every water utility shall comply with the rules of the Bureau for Public Health governing purity of water, testing of water, operation of filter plants and such other rules they may prescribe, pursuant to law, having as their ultimate end the purity of water.

§150-7-8. Inspections and Tests.

8.1. Meter testing facilities and equipment.

8.1.1. Testing facilities. -- A utility shall provide or have access to laboratory meter-testing facilities that are necessary to perform the tests required by these rules or by orders of the Commission. The testing facilities are subject to the approval of the Commission, and shall be available at all times for inspection or use by any member or authorized representative of the Commission.

8.1.2. Tests required; Reports to Commission. -- A utility shall, as a minimum requirement, conduct the tests required by these rules with such frequency, and in such manner, and at such places as provided herein or as may be approved or ordered by the Commission. A utility shall make yearly reports, in accordance with the requirements of the Commission, in the annual report, of meter tests, number of customers and amount of refunds. These reports must be filed not later than thirty (30) days after the expiration of the period covered by the reports.

8.1.3. General testing equipment. -- A utility furnishing metered water service shall own and maintain the equipment necessary to accurately test all types and sizes of meters employed for the measurement of water unless the utility has made arrangements to have the testing done in a shop or laboratory containing equipment acceptable to the Commission. The utility shall promptly report in writing to the Commission all alterations or repairs to meter testing equipment that might affect the accuracy or method of operation of such equipment.

8.1.3.a. The utility shall hold for all testing instruments and other equipment, a certificate signed by a proper authority giving the date when the instrument was last certified and adjusted, and certificates, when superseded, shall be kept on file in the office of the utility.

8.1.3.b. Shop testing equipment. -- Testing equipment shall consist of calibrated tanks large enough to hold the equivalent volume needed to move the test dial one or more complete revolutions. It is recommended that the calibrated tanks hold not less than the quantity needed to test meters in accordance with the test requirements of the American Water Works Association (AWWA) found in the Water Meters Section of Manual M6, Denver (1986). The equipment shall have the proper valves, gauges, and flow devices to determine the flow rate in gallons per minute and to check the pressure on the intake side of the meter.

8.1.3.c. Field testing equipment "Prover Meter". -- Testing equipment shall consist of a calibrated meter(s) with proper discharge valves and gauges to adjust the flow on the outlet side of the prover meter. The utility shall test and calibrate the field testing equipment against a certified calibrated tank not less than once each year, or more frequently if circumstances warrant, and ensure that a record of testing accompanies the field test equipment when in use. It is recommended that the test record be plotted as an accuracy curve in graph form so that operating error may be determined easily. The error of the prover meter as a correction factor when computing final accuracy of meters tested in place by using the following formula:

$$\text{TESTED METER ACCURACY} = \frac{MV}{PV} \times PA$$

where: MV= volume recorded on meter tested
 PV = volume recorded on prover meter
 PA = accuracy of prover meter at tested flow rate (in %).

8.2. Tagging, sealing and capping meters.

8.2.1. Tagging meters. -- A utility shall maintain a record of each meter showing the type, brand, serial number, registration reading, test date, flow rates, and test results. A utility shall maintain this record, which may be kept on paper or electronically, after installation of the meter and for so long as the meter remains in service.

8.2.2. Sealing meters. -- The meter tester performing a test shall seal all meters in which the accuracy can be adjusted or which could otherwise be easily altered or tampered with at the time of the test. Pulse generator remote type meters shall have the remote counter sealed.

8.2.3. Capping meters. -- A utility will place caps on the inlet and outlet ports of all meters removed from service and awaiting testing. A utility will cap and seal all meters that have been tested and sealed or are ready for installation until installed.

8.3. Accuracy requirements for water meters.

8.3.1. Installation accuracy. -- Before a utility installs a water meter for the use of any customer, whether new, repaired, or removed from service for any cause, the utility shall ensure that the meter is in good order and is adjusted or repaired to be as nearly correct as is commercially practical. However, a manufacturer's certified test may be accepted in lieu of utilities' test of new meters of the positive displacement type.

8.3.2. Whenever, on installation, periodic or any other test, a utility finds a meter to exceed a limit of two percent (2%) fast or slow, the utility must adjust the meter to register as nearly one-hundred percent (100%) as is commercially practicable. For displacement, multi-jet, propeller, and turbine meters, the normal test-flow-percent accuracy shall be the average of the accuracy results at the intermediate and maximum test-flow rates. For compound and fire-service meters, the normal test-flow-percent accuracy shall be the average of the accuracy results at the maximum test-flow rate of the main line meter and the intermediate and maximum test-flow rates of the bypass meter.

8.3.3. After a utility makes all necessary repairs, adjustments and final tests so that the meter registers accurately, the utility shall seal the meter. It is recommended that all meters of the disc or displacement type, two inch (2") or less in size, be tested before being installed on the premises of any customer.

8.3.4. A utility shall always test a meter of the turbine type, two inch (2") and larger, after installation. A utility shall install these meters with a "Test Tee" and valve for use in testing.

8.3.5. Meters of the turbine type can be tested and calibrated more accurately in place. The accuracy of turbine meters is affected by changes in distribution of velocities through the meter. Such variation of velocity may occur to an appreciable degree through change of nature of inlet piping.

8.3.5.a. A Commission certified meter prover shall perform all tests to determine the accuracy of registration of any water meter.

8.3.6. Meter Test Flow. -- Flow rates shall be in accordance with "American Water Works Association" standards.

8.3.7. Tests -- How Made. -- The testing procedures shall be in accordance with American Water Works Association standards.

8.4. Periodic test.

8.4.1. Meters shall be periodically tested as follows:

3/4" or less in size at least once every 10 years.

1" in size at least once every 7 years.

1-1/4", 1-1/2", 2" in size at least once every 5 years.

3" in size at least once every 3 years.

4" and larger in size at least once each year.

8.4.2. "Periodic test periods" for testing meters in the system of utilities supplying water of high turbidity, or of peculiar characteristics, will be determined by the Commission from time to time.

8.4.3. The time frame for periodic tests may be modified by the Commission from time to time upon the submission of evidence by the utility to substantiate any request for modification.

8.5. Request tests.

8.5.1. Action required. -- If any customer requests in writing to the utility a test of the accuracy of his or her meter, and the meter is not due for periodic testing, the utility shall notify the customer of the conditions under which the test will be made by the utility or by a referee. If the customer requests that the utility proceed with the test and remits an amount equal to the estimated cost to be incurred by the utility, but not less than ten dollars (\$10), the utility shall make the test promptly. The meter tester shall provide a report giving results of the test to the customer and the utility, and a complete record of the test shall be kept within the applicable Division of the Commission. If, when tested, the meter is found to be more than two percent (2%) in error, the utility will refund the amount advanced to the customer. If the meter is not found to be more than two percent (2%) in error, the utility shall retain the amount advanced by the customer for the test.

8.5.2. Customer's privilege. -- A customer may be present when the utility conducts the test on the customer's meter or, if the customer desires, may send an expert or other representative appointed by the customer.

8.5.3. If the customer files a complaint with, or makes a request for assistance from, the Commission regarding the accuracy of his or her meter, the Commission will notify the utility and the utility shall have a representative present to remove the meter and assist a Commission inspector with the test. This test shall be made at the expense of the utility.

8.5.4. Report to customer. -- Within ten (10) days after the completion of the test, a utility will provide to the customer a report giving the name of the customer requesting the test, the date of the request, the location of the premises where the meter had been installed, the type, make, size and serial number of the meter, the date of removal, the date tested, and the result of the test.

8.6. Meter testers.

8.6.1. Meter tester required. -- A utility shall have in its employ or have access to the services of one or more competent meter testers whose duty is to perform tests to determine the accuracy of the utility's meters.

8.6.2. Certification of meter tester. -- A utility desiring to certify an employee as a meter tester must secure a qualification card from the Commission in the form of Water Form No. 9; have same executed by the applicant and returned to the Commission; together with a certification by a responsible representative of the utility as to the facts contained on the card. The Commission will then schedule a certification test consisting of a written examination and demonstration test of the applicant's meter testing skills on certified testing equipment. If the applicant's qualifications are satisfactory, the Commission will then issue a card to the employee in the form of Water Form No. 10, authorizing the employee to test meters of the type and size shown on the card.

8.6.3. Experience required. -- No employee of a utility is authorized to test meters unless the employee has had at least six (6) months' experience in a utility water-meter shop, or equivalent experience,

part of which time must have been spent working on the type meter for which authority to test has been requested. All tests must be made by an authorized meter tester.

8.6.4. Reports to Commission.

8.6.4.a. A utility shall file on or before February 1st, each year, a list of the individuals in its employ authorized to test meters.

8.6.4.b. A utility shall notify the Commission and shall take up and return the meter tester's card when a certified meter testers ceases to be in its employ.

§150-7-9. Safety Requirements.

9.1. Accidents. -- A utility shall keep a record of every accidental happening in connection with the operation of its plant, station, property, and equipment, whereby any person is killed, or seriously injured, or any property damaged or destroyed, with full statement of the cause of the accident, and the precautions taken to prevent similar accidents in the future.

§150-7-10. Creation or Alteration of Public Service Districts.

10.1. Creation or alteration of a public service district.

10.1.1. A county commission upon entering an order on its own motion, or upon receipt of a petition, or upon receipt of a recommendation of the Commission, proposing the creation, enlargement, reduction, merger, dissolution, or consolidation of a public service district pursuant to W. Va. Code §16-13A-2, shall:

10.1.1.a. At the same session, fix a date of hearing in the county which date shall be not more than forty (40) days nor less than twenty (20) days from the date of the action;

10.1.1.b. Within ten (10) days, provide the Executive Secretary of the Commission with a copy of the order or petition and notification of the time and place of the hearing to be held by the county commission;

10.1.1.c. If the territory proposed to be included is situated in more than one county, when fixing the date of hearing, provide for notifying the county commission and clerk thereof of each of the other counties into which the territory extends of the date so fixed;

10.1.1.d. Publish, at least ten (10) days prior to the hearing, a Class I legal advertisement meeting the requirements stated in W. Va. Code §16-13A-2, giving notice of the hearing;

10.1.1.e. Post notice in at least five (5) conspicuous locations in the proposed public service district as required by W. Va. Code §16-13A-2; and

10.1.1.f. File with the Executive Secretary of the Commission affidavits of publication pursuant to Water Rule 10.1.1.d., and affidavits of posting pursuant to Water Rule 10.1.1.e. as soon as the same are available.

10.2. Notification to the Commission of county commission action.

10.2.1. If the county commission enters an order creating, enlarging, reducing, merging, dissolving, or consolidating a public service district, the county commission shall, within ten (10) days of entering such order, file a copy of such order with the Executive Secretary of the Commission. If the county commission declines to enter such an order, the county commission shall, within ten (10) days of declining, file with the Executive Secretary of the Commission notice that it has declined to enter any such order.

10.3. Notice of Filing.

10.3.1. Upon the receipt of a county commission order proposing the creation, enlargement, reduction, merger, dissolution, or consolidation of a public service district pursuant to W. Va. Code §16-13A-2, the Commission may provide notice of the proceeding through the issuance of a Class I legal advertisement in the form prescribed by the Commission, in the county or counties affected by the proposed order. The notice shall include the right of any customer of the proposed public service district or other interested party to file a written protest. See Water Form No. 8 for example of notice to be published.

10.4. Commission hearing.

10.4.1. The Commission may hold a hearing or hearings in each county affected by a county commission order(s) filed pursuant to Water Rule 10.1.1. If the Commission holds a hearing, the Commission shall publish a Class I legal advertisement giving notice of the hearing or hearings.

10.5. Commission consideration of proposed creation or alteration.

10.5.1. After public comment and hearing, if held, the Commission shall, by order, approve, disapprove or modify a county commission order creating, expanding, merging, consolidating, reducing or dissolving a public service district. In deliberating on approval, modification or disapproval the Commission may consider, among other things:

10.5.1.a. the public convenience and necessity;

10.5.1.b. the economic feasibility, including sources of funding, costs and related benefits of the county commission's order;

10.5.1.c. the adequacy of facilities;

10.5.1.d. other facilities in the area; and

10.5.1.e. other possible alternatives.

§150-7-11. Distressed and Failing Water or Wastewater Utilities.

11.1. Definitions -- These definitions are specific to Section 11 of this rule.

11.1.1. "Distressed Utility" -- a water or wastewater utility that for financial, operational or managerial reasons:

(1)(a) Is in continual violation of statutory or regulatory standards of the Bureau for Public Health, the Department of Environmental Protection, or the Commission, which affect the water quality, safety, adequacy, efficiency or reasonableness of the service provided by the water or wastewater utility;

(b) Fails to comply within a reasonable period of time with any final, nonappealable order of the Department of Environmental Protection, Bureau for Public Health or the Commission concerning the safety, adequacy, efficiency or reasonableness of service, including, but not limited to, the availability of water, the potability of water, the palatability of water or the provision of water at adequate volume and pressure and the collection and treatment of wastewater;

(2) Is no longer able to provide adequate, efficient, safe and reasonable utility services; or

(3) Fails to timely pay some or all of its financial obligations, including, but not limited to, its federal and state tax obligations and its bond payments to the West Virginia Water Development Authority, the United States Department of Agriculture (USDA) or other bondholders; fails to maintain its debt service reserve; or fails to submit an audit as required by its bond or loan documents or state law.

11.1.2. "Failing water or wastewater utility" -- a public utility that:

11.1.2.a. Meets the definition of a distressed water or wastewater utility; and either:

11.1.2.b. Has not, after a reasonable time period, been stabilized and improved by corrective measures put in place under W. Va. Code §24-2H-7; or

11.1.2.c. Has had the corrective measures suspended for good cause shown by an order of the Commission.

11.1.3. "Capable proximate water or wastewater utility" -- a public utility that regularly provides adequate, safe and reasonable service of the same type as the distressed utility and is situated close enough to the facilities of a distressed utility that operational management is reasonable, financially viable, and not adverse to the interests of the current customers of the non-distressed utility.

11.2. Potentially unstable water and wastewater utilities.

11.2.1. Commission Staff will review annual reports, rate case filings and other financial data available from public information or from the utility directly and prepare a list of water and wastewater utilities that appear to be financially unstable. This list will be updated annually. Commission Staff will provide the list to the Commission by interoffice memorandum by November 1st of each year.

11.2.1.a. After receipt of the list, the Commission may request from any water and wastewater utility current financial information, including bank statements, detail of accounts payable, detail of current and delinquent taxes payable, detail of pension funds, current debt payment and reserve fund status, and any other pertinent information that the Commission requires.

11.2.2. After the Commission finalizes the list, Commission Staff will contact each utility placed on the list to discuss the stability of the utility.

11.2.3. Each utility contacted shall respond to staff contacts in a timely manner, but in no less than 60 days. The utility shall indicate measures it plans to undertake to address the concerns of the Commission Staff regarding the potential instability of the utility.

11.2.4. Commission Staff will offer to provide advice and assistance to resolve any financial, managerial or operational issues that are contributing to the utility's potential instability.

11.2.5. Commission Staff shall periodically report as directed by the Commission regarding the status of the unstable utility and any measures undertaken by the utility to address the potential instability.

11.3. Determination of whether a utility qualifies is a distressed or failing utility and the identification of one or more capable proximate public or private utilities.

11.3.1. The Commission may on its own motion, or upon a petition by Commission Staff or any other person or entity having a legal interest in the financial, managerial or operational condition of the utility, open a General Investigation proceeding to investigate whether a utility is distressed or failing and to identify any capable proximate public or private utilities that may be able to acquire the utility.

11.3.1.a. The Commission will name as respondents the utility under investigation and any public or private utilities that may be a capable proximate utility.

11.3.2. The Commission will provide notice to named respondents by Order.

11.3.3. The Commission may, by Order, require any named respondent to file specific information in the form of documents, affidavits or prepared testimony.

11.3.4. The Commission will provide Commission Staff and other interested parties the opportunity to file testimony, participate in evidentiary hearings and file briefs in the proceeding.

11.3.5. To determine if a utility is a distressed or failing utility, the Commission will consider:

11.3.5.a. The financial, managerial and technical ability of the utility;

11.3.5.b. The level of expenditures necessary to make improvements to the water or wastewater utility to assure compliance with applicable statutory and regulatory standards concerning the adequacy, efficiency, safety or reasonableness of utility service and the impact of those expenditures on customer rates;

11.3.5.c. The opinion and advice, if any, of the Department of Environmental Protection and the Bureau for Public Health as to steps that may be necessary to assure compliance with applicable statutory or regulatory standards concerning the adequacy, efficiency, safety or reasonableness of utility service;

11.3.5.d. The status of the utility's bond payments and other financial obligations;

11.3.5.e. The status and result of any corrective measures previously put into place; and

11.3.5.f. Any other relevant matter presented by the respondent utilities, Commission Staff or other interested party.

11.3.6. To determine if a utility is a capable proximate utility, the Commission will consider:

11.3.6.a. The financial, managerial and technical ability of all proximate public utilities providing the same type of service;

11.3.6.b. Expansion of the franchise or operating area of a potential acquiring utility to include the service area of the distressed utility;

11.3.6.c. The financial, managerial, operational and rate demands that may result from the current proceeding and the cumulative impact of other demands where the utility has been identified as a capable proximate utility; and

11.3.6.d. Any other relevant matter presented by the respondent utilities, Commission Staff or other interested party.

11.4. Hearings and public notice.

11.4.1. The Commission will hold evidentiary and public comment hearing(s) in the service area of the utility under investigation as a potential distressed or failing utility.

11.4.1.a. The Commission will conduct the public comment hearing(s) to receive public comments, including, but not limited to, comments regarding possible options available to bring the potential distressed or failing utility into compliance with appropriate statutory and regulatory standards.

11.4.1.b. The Commission will conduct the evidentiary hearing to receive evidence to determine if the utility is a distressed or failing utility and whether a capable proximate utility should acquire the utility. If there is more than one proximate utility the Commission will also receive evidence to allow the Commission to determine the appropriate capable proximate utility.

11.4.2. The Commission will give notice of the time, place and subject matter of the hearing as follows by:

11.4.2.a. placing a Class I legal publication in a qualified newspaper pursuant to W. Va. Code §59-3-2(a) in the county or counties where the utility is located no more than 10 days before the date of the hearing;

11.4.2.b. issuance of a press release; and

11.4.2.c. providing written notice by certified mail or registered mail to the utility under investigation; the Consumer Advocate Division; any proximate utility that was made a party to the proceeding; the county commission if the utility under investigation is a public service district; and the municipality if the utility is owned and operated by a municipality.

11.4.3. The Commission will, by Order, direct the utility under investigation to give notice to its customers of the time, place and subject matter of the hearing either as a bill insert or in print on its monthly bill statement or, if neither form of notice is reasonably possible, by a separate mailing.

11.4.4. Following the evidentiary hearing, the Commission shall enter an order stating whether the utility is a distressed or failing utility and identifying the capable proximate utilities, if any.

11.5. Alternative, intermediate remedies for distressed or failing utilities.

11.5.1. Before designating a utility as failing, the Commission must determine if one or more of these alternative remedial actions, is reasonable and cost effective for the distressed utility or the capable proximate utility:

11.5.1.a. reorganization of the utility under new management or a new board, subject to the approval of the applicable county commission(s) or municipal government;

11.5.1.b. operation of the distressed utility by another public utility or management or service company under a mutually agreed arms-length contract subject to approval by the Commission pursuant to W. Va. Code §24-2-12;

11.5.1.c. appointment of a receiver to manage the operations of the utility;

11.5.1.d. immediate merger of utility with one or more other public utilities, subject to the approval of the applicable county commission(s) or municipal government;

11.5.1.e. acquisition of the distressed utility through a mutual agreement made at arms-length subject to Commission approval pursuant to W. Va. Code §24-2-12; and

11.5.1.f. any viable alternative other than an ordered acquisition by a capable proximate utility.

11.5.2. The alternative remedial action or actions that may be ordered by the Commission are not mutually exclusive. The Commission may order an interim remedial action or actions pending subsequent final actions. The Commission may also order intermediate objectives within set time limits for certain actions and a time limit for achieving final objectives to remedy financial, managerial, or operating problems that are contributing to the utility being distressed or failing.

11.6. Commission ordered acquisition of a failing utility.

11.6.1. If the goals and objectives set by the Commission pursuant to Water Rule 11.5. are not met, the Commission may, without further hearing, determine that the utility is failing and direct an acquisition.

11.6.2. If the Commission determines that the utility is a failing utility and decides that it is in the public interest to forego any alternative remedial action, then the Commission may order the acquisition of the failing utility by the most suitable capable proximate utility, if there is more than one proximate utility.

11.6.2.a. If the distressed or failing utility is a public service district the Commission shall notify the respective county commission(s) with regard to the acquisition of the distressed or failing utility as provided in W. Va. Code §16-13A-2(a)(2).

11.6.2.b. If the distressed or failing utility is a municipal corporation, then the Commission shall notify the respective municipal council with regard to the acquisition of the distressed or failing utility as provided in W. Va. Code §8-12-17 .

11.6.3. If the Commission orders an acquisition, the Commission will provide a timeframe for the failing utility and acquiring utility to agree on acquisition terms, timing, and acquisition price.

11.6.4. Preceding the final acquisition, the Commission may order the capable proximate utility to assume control of the management and operations of the failing utility under a temporary management and operating agreement subject to Commission approval.

11.6.4.a. The Commission may direct a date for the filing of an agreement for Commission approval.

11.6.4.b. If the agreement is not filed when directed, the Commission may direct the capable proximate utility to file a proposed temporary management and operating agreement.

11.6.4.c. The failing utility may respond to the proposed agreement within the time limits set by the Commission,

11.6.4.d. The Commission may, without further filings or hearing establish the terms of an agreement, direct the capable proximate utility to immediately assume management and operations of the failing utility pending an acquisition and direct the failing utility to turn over its management and operations to the capable proximate utility.

11.6.5. Prior to acquisition, the failing utility shall cooperate with the capable proximate utility in negotiating agreements with state and federal agencies, including, but not limited to, negotiation of hold harmless agreements, consent orders or enforcement moratoria during any period of remediation.

11.6.6. The parties to an acquisition may propose to the Commission such methods of determining the acquisition price as they can support as being reasonable and in the public interest.

11.6.6.a. The acquisition price must, at a minimum, satisfy all outstanding loans, tax obligations, required grant repayment, liens and indebtedness owed by the failing utility or the acquiring utility may agree to assume the indebtedness if legally permitted.

11.6.6.b. The acquiring utility may propose to pay failing utility outstanding obligations directly, as part of the acquisition consideration, and shall consult with the lenders or lienholders regarding payment in full or the assumption, to the extent legally permissible, of such obligations.

11.6.7. If bondholder consent is required to finalize an acquisition, the failing utility must cooperate with the acquiring utility in obtaining the consent of bondholder(s).

11.6.8. The acquiring utility must submit a financing plan that includes documentation on how the failing utility's indebtedness will be paid or assumed.

11.6.9. If the parties are unable to agree on an acquisition price or any other terms related to the acquisition within the time allowed by the Commission, the Commission may, on its own motion, or upon a petition by either the failing or capable proximate utility, conduct an evidentiary hearing to determine the acquisition price and any other issues related to the acquisition.

11.7. Rates pertaining to recovery of costs for acquisition, operation, repairs and improvements to distressed or failing utility facilities.

11.7.1. The acquiring utility shall propose the rates to be charged after acquisition.

11.7.2. Without a separate rate or tariff filing and without further notice to customers, the acquiring utility may adopt the rates of the acquired utility not subject to true-up but subject to adjustment in future rate proceedings.

11.7.3. The Commission may approve an appropriate and reasonable cost recovery mechanism to allow the capable proximate utility to recover its acquisition costs and projected cost of service of operating, maintaining and improving the facilities of the failing water or wastewater utility or its net costs incurred to operate, maintain and improve the distressed utility under a Commission approved operating agreement.

11.7.4. Subject to Commission approval in a separate rate or tariff proceeding, which shall be considered by the Commission on an expedited basis without the need for a full base rate proceeding the acquiring utility may request:

11.7.4.a. that it be permitted for a reasonable period of time after the date of acquisition to apply a surcharge on the adopted rates or to establish a surcharge on the acquiring utility's tariff applicable only to customers of the acquired utility;

11.7.4.b. a surcharge or surcharges on acquired customers and existing customers;

11.7.4.c. that it be allowed to charge the customers of the acquired utility pursuant to a separate tariff which may be higher or lower than the existing tariff of the acquired utility; or

11.7.4.d. a surcharge on its existing customers related to its costs as a capable proximate utility.

11.7.5. Subject to Commission approval and other rate provisions of this rule, if requested by the acquiring utility, a cost recovery mechanism determined by the Commission to be appropriate, reasonable and in the public interest may include:

11.7.5.a. A surcharge above existing rates that allows recovery of incremental costs, net of recovery through existing rates necessary to operate, maintain and improve the failing utility's service level to an acceptable level and into compliance with all applicable regulatory standards;

11.7.5.b. A rate base acquisition adjustment to private for-profit utilities as an incentive to acquire a failing utility;

11.7.5.c. An increased return on investment as an incentive to acquire a failing utility; or

11.7.5.d. Any other incentive method proposed by the acquiring utility if the method is determined by the Commission to be appropriate, reasonable and in the public interest.

11.7.6. Rate increments and surcharges, other than adoption of existing rates, approved by the Commission shall be subject to adjustment on an annual basis to reflect changes in costs, additional projected capital and operating costs and true-up of any over or under recoveries of costs.

§150-7-12. Inspection, Flow Testing, and Marking of Public Fire Hydrants.

12.1. Scope. -- These rules govern the inspection, flow testing, and marking of public fire hydrants subject to the jurisdiction of the Public Service Commission pursuant to W. Va. Code §24-2-1r.

12.2. General.

12.2.1. These rules are intended to promote adequate service to the public and to provide standards for uniform practices for the inspection, flow testing, and marking of public fire hydrants.

12.2.2. Adoption of these rules in no way precludes the Commission from altering or amending them, in whole or in part, or from requiring any other or additional service, equipment, facility, or standard either upon complaint or upon its own motion, or upon the application of any utility.

12.2.3. These rules shall not relieve a utility from any of its duties under the laws of this State.

12.3. Other Code Provisions incorporated by reference into Water Rule 12.6. et. seq.

12.3.1. W. Va. Code § 8-19-22 “Identification requirement for fire hydrants that are inoperable or unavailable for use in emergency situations” (sometimes referred to as the “hydrant-bagging rule”).

12.3.2. Bureau for Public Health Standards. -- All extensions, service connections, and modifications to a utility’s plant must meet applicable design standards established by the West Virginia State Bureau for Public Health, in addition to these rules.

12.4. Implementation.

12.4.1. A utility shall, within twelve (12) months from the effective date of these rules, complete the annual inspection for each public fire hydrant, as provided in Water Rule 12.8 and detailed in Water Form No. 12. Thereafter, a utility shall inspect each hydrant on an annual basis.

12.4.2. A utility is required, within sixty (60) months from the effective date of these rules, to complete flow testing on each public fire hydrant. Thereafter, a utility shall flow test each public fire hydrant on a five-year basis.

12.4.3. A utility shall mark (color code) a public fire hydrant for identification pursuant to Water Rule 12.10 within thirty days of completing the required flow testing.

12.5. Applicability.

12.5.1. Water Rule 12.1. et. seq. apply to all regulated public water utilities that own, operate, and/or maintain public fire hydrants.

12.6. Practice Standards.

12.6.1. The editions of NFPA 291 and AWWA M17 defined herein shall remain in effect for the purposes of Water Rule 12.1. et. seq. unless the Commission orders otherwise.

12.6.2. Where a conflict exists between the requirements of NFPA 291 and/or AWWA M17 a utility may elect to use either standard. Upon selecting which standard to follow, the utility shall incorporate said provision into its hydrant program and shall apply such standard uniformly and consistently.

12.6.3. Where a conflict exists between the requirements of NFPA 291 and/or AWWA M17 and any requirement of these rules, the practice established by these rules shall apply.

12.7. Records, Reports and Other Information to be Supplied to the Commission.

12.7.1. A utility shall compile and maintain a complete record for each public fire hydrant on its system. A utility shall maintain a hydrant record for the entire life of a hydrant and shall keep the record current. At a minimum, a utility shall update a hydrant record annually following a hydrant inspection or more often in the event of flow testing, maintenance, damage, repair, removal, replacement, or other events.

12.7.2. A public hydrant record shall include, at a minimum, the following:

12.7.2.a. Hydrant Master Record. A hydrant master record containing hydrant identifier, manufacturer information, historical data, and a log of inspection, maintenance, and flow testing

information. The hydrant master record must provide the location of a hydrant with specificity, including the GPS coordinates (latitude and longitude) of a hydrant, and a photo.

12.7.2.b. Annual hydrant inspection reports. A utility shall maintain a record of inspection in accordance with these rules. The annual hydrant inspection report shall provide all necessary information to verify that a utility inspected a hydrant fully in conformance with the procedures established in these rules and Water Form No. 12.

12.7.2.c. Hydrant maintenance reports.

12.7.2.d. Hydrant flow test reports (A sample flow test record is provided in Water Form No. 11.)

12.7.2.e. A log of all flow tests for a hydrant.

12.7.3. Hydrant Program -- A water utility shall have a comprehensive, written program detailing the inspection, flow testing, marking, and maintenance of public fire hydrants. This program shall include detailed procedures for conducting annual inspections and for maintaining all public hydrants owned by the utility. Inspection and maintenance procedures shall reflect the differences between the various types and manufacturers of hydrants. A sample copy of all hydrant inspection, testing, and maintenance logs and other records required by this rule shall be included in the program. The utility shall update and retain a master copy of its hydrant program in the utility's office.

12.7.4. Annual Reporting to the Commission -- A water utility shall provide the following information to the Commission as part of its Annual Report, using the forms included with these rules.

12.7.4.a. Number of public fire hydrants at the beginning of the year.

12.7.4.b. Number of public fire hydrants removed from service during the year. (See also, Water Rule 12.7.4.h.)

12.7.4.c. Number of public fire hydrants added during the year. (See also, Water Rule 12.7.4.h.)

12.7.4.d. Number of public fire hydrants at the end of the year.

12.7.4.e. Number of public fire hydrants inspected during the year.

12.7.4.f. Number of public fire hydrants flow-tested during the year.

12.7.4.g. Number of sub-standard (Class S) hydrants.

12.7.4.h. A utility is not required to report hydrants that are relocated and reinstalled in the vicinity of their original location.

12.8. Annual Inspection Requirements.

12.8.1. Inspection Procedure. For dry-barrel hydrants a utility shall follow the inspection procedure contained in Water Form No. 12. For any type of hydrant, other than the dry-barrel type, a utility shall follow the appropriate recommended practices contained in either AWWA M17 or the hydrant manufacturer's recommended inspection procedure.

12.8.2. Frequency. A utility shall inspect a public fire hydrant:

12.8.2.a. At a minimum of once per year (annually).

12.8.2.b. After a utility is notified or becomes aware of hydrant use, damage, malfunction, or other event impacting the hydrant.

12.8.3. Location Data. A utility shall include in an annual hydrant inspection the GPS coordinates (Latitude and Longitude) of the hydrant. Hydrant coordinates shall be based upon the most accurate data available. If surveys or other more accurate hydrant location data are unavailable, GPS data from cell phones shall be used. GPS coordinate data shall be recorded on the annual inspection report and on the hydrant master record.

12.8.4. Hydrant Flushing. During performance of the annual inspection, a utility shall flow a hydrant at a rate sufficient to flush dirt and debris from the hydrant. A flow test is not required during each annual inspection.

12.8.5. Hydrant Photography. During an annual inspection, a utility shall digitally photograph a hydrant and include the photo with the annual inspection report.

12.8.6. Service and Repair of Out-of-Service Hydrants. A utility shall promptly service, maintain, repair or replace Out-of-Service fire hydrants. Hydrants shall be restored to service within ninety (90) days, unless a different time period for restoration has been approved by the Commission, or the utility shows good cause for delay.

12.8.7. Notification of Scheduled Inspections. Whenever feasible, a utility shall notify the local 911 Call Center at least 24-hours prior to conducting scheduled hydrant inspections. The participation of local fire departments is encouraged during hydrant inspection.

12.9. Flow Testing Requirements.

12.9.1. Flow-Testing Procedures. A utility shall have written flow testing procedures, which are substantially compliant with the procedures set forth in Water Form No. 13, as part of its comprehensive hydrant program.

12.9.2. Frequency. A utility shall flow-test a public fire hydrant, at a minimum, every five (5) years.

12.9.3. Whenever feasible a utility shall notify the local 911 Call Center at least 24-hours prior to conducting scheduled flow testing. The participation of local fire departments is encouraged during hydrant flow testing.

12.9.4. A utility shall provide reasonable notice to customers in those areas of the distribution system where flow testing is scheduled.

12.9.5. To evaluate the capacity of a single hydrant, a utility may perform flow on a single-hydrant basis using the same hydrant for the flowing, static and residual hydrant in accordance with Water Form No. 13 and established practices. Otherwise, flow testing may be conducted using multiple hydrants with one or more flowing hydrants and one static/residual hydrant.

12.9.6. Notification of Changes in Hydrant Status. A utility shall notify the local 911 Call Center within 24-hours of changes in hydrant classification, of deficiencies discovered during inspection or flow-testing, or upon receiving information adversely impacting hydrant condition or serviceability.

12.10. Marking Requirements.

12.10.1. A utility shall use the color code provided in Water Form No. 14 for all public hydrants.

12.10.1.a. The marking of fire hydrants is based on a flow test conducted at a single point in time. Water utilities are not in any manner insurers of property or persons by virtue of providing and labelling hydrants.

12.10.1.b. Marking (color coding) of hydrants – A utility shall mark a public hydrant by using one of the acceptable methods set forth by these rules.

12.10.1.b.1. A utility may mark a hydrant by painting the entire hydrant bonnet using an appropriate, high-quality, outdoor enamel. Nozzle caps may also be painted for color-coding purposes in addition to the bonnet, but is not required.

12.10.1.b.2 A utility may mark a hydrant by means of commercially available, high-visibility, reflective hydrant marking rings placed behind the cap of the largest nozzle on each hydrant. If all nozzles on a hydrant are of the same size, the reflective ring shall be placed so as to offer the best visibility.

12.10.2. For sub-standard hydrants (Class S) where flow testing indicates a flow less than 250 gpm, the hydrant color code shall be black with a clearly contrasting hydrant body color.

12.10.2.a. A utility is cautioned to differentiate the marking of hydrants that are out of service and marked as such pursuant to W. Va. Code § 8-19-22 (which requires that the hydrant either be covered with a bag or that it be painted entirely black) and the marking of sub-standard (Class S) hydrants which cannot provide fire flows of at least 250 gpm, but which remain in service pursuant to these rules and which are identified by painting the bonnet black or by using a black nozzle-marking ring.

12.10.3. Out-of-Service Hydrants.

12.10.3.a. A utility may mark an out-of-service hydrant by painting the entire hydrant black or by placing a heavy-duty, commercially available black bag, intended specifically as a hydrant cover, over the hydrant. Black plastic garbage bags of any type are not an acceptable substitute for a hydrant cover except in exigent circumstances.

12.10.3.b. Alternatively, for the purposes of these rules, a bag used to mark an out-of-service hydrant may be of a color other than black, provided that the bag is a heavy-duty, commercially available product intended as a hydrant cover and is clearly marked in easily visible, contrasting, pre-printed letters reading "OUT OF SERVICE", "NOT IN SERVICE" or similar language clearly indicating that the hydrant is not to be used.

12.10.4. A utility desiring to deviate from the marking requirements of these rules shall make application to the Commission for a temporary or permanent waiver. Provided, that an application for waiver will not be considered by the Commission unless a utility submits a full and complete justification for such action.

12.11. Penalties.

12.11.1. Penalties — A water utility that the Commission determines is not in compliance with these rules may be subject to penalties pursuant to the Commission's authority under W.V. Code §24-4-3. A monetary penalty may be modified by the Commission.

Water Form No. 1
(Water Rule 6.8.1.)

(Insert Company Name Here)

**NOTICE OF SCHEDULED TERMINATION OF SERVICE
AND CUSTOMER RIGHTS**

We have scheduled your water service provided at _____
(address) for termination on or after _____ (date).
This action has been taken for the following reason(s):

(Include reason and facts resulting in decision to terminate service).

If your service is terminated you may be subject to additional charges involving reconnect fees and deposit requirements in order to restore service.

(Include all applicable charges.)

**YOU HAVE THE RIGHT TO CHALLENGE THE TERMINATION IF YOU BELIEVE ANY
OF THE FOLLOWING CONDITIONS APPLY TO YOU:**

1. Any portion of the bill is in dispute
2. You are being charged for service not received
3. The information above is incorrect
4. You are unable to pay the bill in accordance with the billing, and termination of service would be especially dangerous to the health or safety of a member of your household.
5. You are able to pay only installments

If the reason for your challenge is 1, 2 or 3 above, you will have to pay any amount not in dispute. If the reason for your challenge is 4 or 5, we will attempt to negotiate a deferred payment agreement with you.

**YOU MUST NOTIFY US BEFORE THE DATE OF TERMINATION IN ORDER TO PROTECT
YOUR RIGHTS UNDER THIS RULE:**

(Provide instructions for contacting the appropriate utility
personnel by telephone and mail, including business hours)

You should also inform us if you are 65 years or older, or regardless of age, if you are physically, mentally, or emotionally incapacitated.

Once you have notified us of your challenge, we will schedule a meeting at the business office nearest to your residence and try to resolve your problem. At your option, the discussion of your challenge may be made over the telephone. **IF YOU ARE NOT SATISFIED WITH OUR DECISION AT THIS MEETING, YOU WILL HAVE SEVEN DAYS IN WHICH TO FILE A CHALLENGE WITH THE PUBLIC SERVICE COMMISSION OF WEST VIRGINIA.** You will be required to pay your current bill while the challenge is pending. There is no charge associated with filing a challenge and you may do so without the assistance of an attorney.

Water Form No.1
Page 2 of 2

To file a challenge with the PSC, you may call this toll free telephone number 1-800-642-8544 or write to this address:

Utility Challenge
Public Service Commission of West Virginia
P. O. Box 812
Charleston, W. Va. 25323

If you are in need of assistance to pay your bill, you should contact the following agencies: (List agencies in service area).

If you desire the assistance of a lawyer with regard to the scheduled termination and are unable to pay for legal counsel, contact one of the following low income legal assistance organizations: (List agencies in service area).

Water Form No. 2
(Water Rule 6.8.1.h.)

NOTICE OF SCHEDULED TERMINATION

We have scheduled water service provided at _____
(address)
for termination on or after _____ because of your landlord's delinquent water bill.
(Date)

To notify the Public Service Commission, you may call this toll free telephone number, 1-800-642-8544,
or write to this address:

Public Service Commission of West Virginia
P.O. Box 812
Charleston, WV 25323

If you desire the assistance of a lawyer with regard to the scheduled termination and are unable to pay
for legal counsel, contact one of the following low income legal assistance organization: (List agencies in
service area).

Water Form No. 3
(Water Rule 6.13.4.)

**PUBLIC NOTICE OF FILING OF A PETITION
FOR THE IMPOSITION OF A MORATORIUM**

Case No. _____

NAME OF UTILITY _____,
a public utility.

Petition for consent and approval for
the imposition of a moratorium on the
utility system.

PUBLIC NOTICE

On _____, the _____
(Date) (Name of Utility, Commission Staff, or governmental entity)
filed a petition with the Public Service Commission for approval of the imposition of a moratorium on

_____’s _____ system serving
[name of utility] [water, sewer, or other]
system serving _____. If approved, the moratorium would mean that
(describe areas served)
no new customers could be served by the utility in these areas until the Commission lifts the moratorium.

The _____ claims that the imposition of a moratorium is appropriate because
(name of petitioner)

[describe reasons and describe any plans to alleviate the circumstances giving rise to the petition, and any
estimate of a date when it would be appropriate for the Commission to lift the moratorium.]

Any person wishing to protest, support, make comment, or request a public hearing about the proposed
moratorium should do so in writing. Written statements should be addressed to the Executive Secretary,
Public Service Commission, P.O. Box 812, Charleston, WV, 25323.

NAME OF UTILITY

Water Form No. 4
(Water Rule 7.5.5.b.)

Form of written request for service by a prospective customer or
a group of prospective customers located in the same neighborhood

Water () Water and Sewer ()

Previous Customer () If so, when _____ New customer ()

Name _____

Mailing address _____ Phone _____

Property location _____

Rent () Own () Other _____

If rent: Property owners name _____

Property owner's mailing address _____ Phone _____

Type of service: Residential () Number in household _____

Commercial () Type _____

Industrial () Type _____

Applicant's place of employment _____

Employment address _____ Phone _____

Name of spouse _____

Spouse's place of employment _____

Spouse's employment address _____ Phone _____

I HEREBY AUTHORIZE SERVICE TO BE ESTABLISHED IN MY NAME AT THE ABOVE
PROPERTY LOCATION AND AGREE TO PAY FOR SERVICE UNTIL DISCONTINUED BY MY
REQUEST IN WRITING. I UNDERSTAND THAT THIS APPLICATION IS ACCEPTED SUBJECT
TO THE AVAILABILITY OF SERVICE AT THIS LOCATION.

Applicant's signature _____

Date _____

Utility representative _____ Date _____

Water Form No. 4
Page 2 of 2

For office use only

Name _____ Account No. _____
Applicant ID _____

Deposit amount _____ Tap fee amount _____
Meter Size _____ Meter No. _____
Meter Route _____ Meter reading _____
Date on _____ Date off _____
Customer request () Termination ()

Water Form No. 5
(Water Rule 7.5.5.b.)

Form for use in determining cost estimate
to extend water service

Date _____

The following estimate is in response to a request to extend the Utility's water facilities approximately
_____ feet along _____
to serve a customer or customers who desire water service.

Cost Estimate

Water line (_____ - inch PVC) _____	feet	@	\$ _____ /foot	=	\$ _____
Excavation/installation _____	feet	@	\$ _____ /foot	=	\$ _____
Materials (fittings, valves, stone, etc.)		=	\$ _____		
Permits/rights-of-way (Health, Highways, etc.)		=	\$ _____		
Restoration (seeding, gravel, etc.)		=	\$ _____		
Related cost (engineering, legal, etc.)		=	\$ _____		
	TOTAL	=	\$ _____		

Cost Share of Customers and Utility

- A. Total estimated cost of extension \$ _____
- B. Utility Share: (estimated total net revenue per customer calculated pursuant to Rule paragraph 5.5.e.4.)
\$ _____ per customer x _____ customers = \$ _____
- C. Customer share: estimated cost to be paid by _____ customers (A-B) = \$ _____

Conditions

If the potential customers shall deposit with the Utility, in advance, the total sum of \$ _____ (customers share from "C" above), a tap fee of \$ _____ per customer, and a \$ _____ security deposit per customer, the Utility will apply for the necessary permit applications and begin construction as soon as possible.

If the actual cost to construct the extension is less than the estimated cost, the Utility will refund the difference to the original depositors. If the actual cost exceeds the estimated cost the Utility will bill the depositors for the difference.

The customers will be required to sign an application for service and/or a users agreement when the tap fees and deposits are made.

This main line extension estimate is made in accordance with Rule 7.5. of the *Rules for the Government of Water Utilities*.

Water Form No. 6
(Water Rule 7.5.5.b.)

Form of cost estimate to be provided to applicants for service

Dear Customer:

We have received a petition for a water main extension and have estimated the construction cost to extend the main to serve the properties of the _____ (insert number) petitioners. This estimate is summarized below:

Water _____ feet at \$ _____ / foot	_____
Excavation/Installation _____ feet at \$ _____ / foot	_____
Materials (fittings, valves, stone, etc.)	_____
Permits/Rights-of-way (Health, Highways, etc.)	_____
Restoration (seeding, gravel, etc.)	_____
Related Cost (engineering, legal, etc.)	_____
Total Estimated Extension Construction Cost	_____
Minus Utility's Share (estimated total net revenue per customer pursuant to Water Rule 7.5.5.d.)	_____
Estimated Cost to be Paid by Customers	_____
Estimated Cost per Customer	_____

When the "customer's share" referenced above is deposited with the Utility, the Utility will apply for the necessary permit applications and begin construction as soon as possible. If the actual cost to construct the extension is less than the estimated cost, the Utility will refund the difference to the original depositors. If the actual cost exceeds the estimated cost, the Utility will bill the depositors for the difference. This difference must be settled before service can actually be connected.

All customers will be required to sign an extension agreement and an application for service and/or a users agreement and pay a tap fee of \$ _____ , and a security deposit of \$ _____ prior to receiving service. The security deposit is refunded with interest following twelve consecutive months of full and timely payments for services rendered.

The estimated start date of construction is _____.
The estimated duration of construction is _____ days.

Should you have any questions, you may contact _____ at _____ between 9:00 a.m. and 4:00 p.m., Monday through Friday.

Sincerely,

Water Form No. 7
(Water Rule 7.5.8.g.)

Form of Commission Check-List for Alternate Main Extension Agreements

This form sets forth the minimum amount of information that should be included in a proposed alternate main extension agreement.

- 1. Name of developer, mobile home park owner or prospective customers(s).
- 2. General location or description of area to be served.
- 3. Indication that the developer, owner or prospective customer(s) has/have read Water Rule 7.5., Sewer Rule 7.4., or both.
- 4. Indication that the developer, owner or prospective customer(s) understand(s) the Rules.
- 5. Having read and understood the Rules, the developer, owner or prospective customer(s) choose(s) to enter into the alternate main line extension agreement.
- 6. If the developer, owner or prospective customer(s) waive(s) reimbursement, the agreement should contain the waiver.
- 7. A copy of the applicable Rule(s) must be attached to the agreement.
- 8. A statement as to who will bear the cost of inspection, if any.
- 9. If the customer is to bear the cost of inspection, a statement of the maximum amount of the cost of inspection.
- 10. If the developer, owner or prospective customer(s) wish(es) to waive the right of receiving an estimate of the cost of the extension if constructed by the utility, a statement reflecting the waiver.
- 11. A statement as to the type of testing to be required.
- 12. A statement as to who will bear the cost of testing, if any.
- 13. If the customer is to bear the cost of the testing, a statement of the maximum amount of the cost of the testing.
- 14. A statement as to who will install the service connections.
- 15. If the developer, owner or prospective customer(s) is/are to install the service connections, a statement that the utility will not charge a tap fee.
- 16. A statement that the tap fee, if any to be charged, is the approved tap fee in the utility's tariff.

Water Form No. 7

Page 2 of 2

- 17. A statement that the utility is to be indemnified and held harmless against any and all claims for injuries and/or damages which may arise from problems associated with the construction of the extension by the developer, owner or prospective customer(s).
- 18. A statement that the ownership of the extension will be conveyed to the utility prior to its connection to the utility's system.
- 19. A statement indicating who will be responsible for preparing the plans for the extension.
- 20. If the developer, owner or prospective customer(s) is/are to be responsible for the preparation of the plan for the extension, a statement that the developer, owner or prospective customer(s) will provide plans to the Staff of the Public Service Commission if required.
- 21. The number of prospective customers to be served by the extension, the number of lots to be served, or some other general indication of the size of the area to be served by the extension.
- 22. If the initial cost estimate has not been waived, the estimate must be set forth in the agreement.
- 23. A warranty indicating that the developer, owner or prospective customers will warrant the system for a period of one year after completion of the construction, or after system is placed into service.
- 24. The agreement should not be executed before being sent to the Commission for approval.
- 25. A statement as to who will obtain and pay for necessary permits.
- 26. A statement as to who is responsible for the cost of the construction.
- 27. A statement as to who is responsible for the cost of the material.
- 28. A statement describing the extension, including length, diameter and any major components such as fire hydrants, etc.

NOTE: A paragraph such as “The Developer/Customer waives his rights under paragraph 7.4 or 7.5 of the Commission’s Rules” will not be acceptable as a catch-all for the requirements listed above. Each item must be addressed in the agreement.

Water Form No. 8
(Water Rule 10.3)

**PUBLIC SERVICE COMMISSION
OF WEST VIRGINIA
CHARLESTON**

At a session of the Public Service Commission of West Virginia, in the City of Charleston, on the ____ day of [month], [year].

[Case No.]

[Case Name]

NOTICE OF FILING

On [date], the [name of party] filed a petition for consent and approval to [type of creation/alteration] the boundaries of the [description of area to be created, enlarged, reduced, merged, dissolved or consolidated] pursuant to W. Va. Code §16-13A-2. A complete description of the boundaries is on file with the [identify entity with which information is filed (for example, county commission and/or public service district)] and the West Virginia Public Service Commission.

Anyone desiring to protest or intervene should file a written protest or notice of the intervention within 30 days following the date of this publication. All protests or requests to intervene should briefly state the reason for the protest or intervention. Requests to intervene must comply with the Commission's rules on intervention, set forth in the Commission's *Rules of Practice and Procedure*. All protests and interventions should be addressed to Executive Secretary, P. O. Box 812, Charleston, West Virginia 25323. If no substantial protest is filed, the Commission may approve the County Commission's Order without hearing.

[Name of Party]

Water Form No. 9
(Water Rule 8.6.2.)

(Front)
QUALIFICATION CARD FOR WATER METER TESTER

Name _____ Age _____ Date _____
Address _____
Title _____
Employer _____ Shop Location _____
Supervisor-Name _____ Title _____

GENERAL EXPERIENCE

Type of Work	Company	Years
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

***METER EXPERIENCE**

Type Meter	Nature of Work	Company	Years
Testing	_____	_____	_____
Disc or Displacement	_____	_____	_____
Current	_____	_____	_____
Compound	_____	_____	_____
Fire Protection	_____	_____	_____
Testing & Repairing-	_____	_____	_____
Disc	_____	_____	_____
Current	_____	_____	_____
Compound	_____	_____	_____
Fire Protection	_____	_____	_____

Remarks: _____

*State, under remarks, in detail the type or kind or work done on meters.

Should this application be approved, I will test all water meters in accordance with the Rules for the Government of Water Utilities of the Public Service Commission of West Virginia, and will not seal or approve for installation any meter that does not meet all of the requirements of the Rules for the Government of Water Utilities.

Signature

(Back of Water Form No. 9)

CERTIFICATE BY RESPONSIBLE REPRESENTATIVE OF THE UTILITY

I, _____, _____ of the
(Name) (Title)
(Water Company) certify that I have read the questions and answers on this
card, relative to the experience of _____ and that they are true
(Name of Employer)
and correct to the best of my knowledge and belief. I further certify that the above employee is competent
to test and repair _____ (Disc) _____ (Current) _____ (Compound) meters and will,
faithfully and honestly discharge the duties of meter tester.

Signature

TO BE FILED BY THE PUBLIC SERVICE COMMISSION

The above employee has been authorized to test Water Meters as shown below:

Table with 3 rows (Disc, Current, Compound) and 2 columns (Testing, Testing and Repairing)

PSCWV Employee

date

Water Form No. 10
(Water Rule 8.6.2.)
(Front)

WATER METER TESTER'S CARD

PUBLIC SERVICE COMMISSION OF WEST VIRGINIA
Charleston, West Virginia

No. _____ Date _____

Name of Employee

is hereby authorized to test and repair the following type or types of water meters:

	Testing	Testing and Repairing
Disc	_____	_____
Current	_____	_____
Compound	_____	_____
Utility	_____	_____
Shop Location	_____	_____

PSCWV Employee

(over)

(Back)

This card must be returned to the Public Service Commission of W. Va. by the
_____ when _____ leaves the employee of the
company or ceases to serve as meter tester.

Water Form No. 11
(Water Rule 12.7.2.d.)

SAMPLE FLOW TEST RECORD

Utility Name: _____
 Location/Address: _____

Date: _____ Time: _____

Size of Main Line: _____ Dead-End or Looped: _____

Location of:

Residual Hydrant: _____ GPS Coordinates: Lat _____
 Long _____

Flow hydrant A: _____ GPS Coordinates: Lat _____
 Long _____

Flow hydrant B: _____ GPS Coordinates: Lat _____
 Long _____

Test Results

Test No.	No. of Outlets	Orifice Size (in)	Orifice Coefficient	Residual Pressure	Pitot Pressure	Flow (gpm)	Comments
1							
2							
3							
4							
5							
6							
7							

Calculated results @ 20 psi: _____

Certified by: _____
 (Signature)

Date: _____

Water Form No. 12
(Water Rule 12.8.)

HYDRANT INSPECTION PROCEDURE
(DRY-BARREL)

1. Hydrant Appearance.
 - a. Remove obstructions around the hydrant
 - b. Paint/mark the hydrant if needed
 - c. Check the hydrant's clearance from the surface of the ground. If the hydrant needs to be raised or lowered due to surface changes then ensure the work is performed or scheduled.
2. If the hydrant is a traffic model, check the breakaway device for any damage.
3. Remove one outlet-nozzle cap and use a listening device to check for main valve leaks.
4. Check for the presence of water or ice in the hydrant barrel by use of a plumb-bob or other suitable means.
5. Attach a section of fire hose or other deflector to protect the street, traffic, and private property from water expelled at high velocity.
6. Open the hydrant and flush to remove foreign material from the interior and lead.
7. Close the hydrant.
 - a. Remove the deflector and check the operation of the drain valve by placing the palm of one hand over the outlet nozzle.
 - b. Drainage should be sufficiently rapid to create noticeable suction.
 - c. For no-drain hydrants, pump the water from the barrel.
8. Using a listening device, check the main valve for leakage.
9. Replace the outlet-nozzle cap. Leave it loose enough to allow air to escape.
10. Open the hydrant only a few turns. Allow air to vent from the outlet-nozzle cap.
11. Tighten the outlet-nozzle cap.
12. Check hydrant lubrication.
 - a. Open hydrant fully, check for ease of operation.
 - b. Check for hard-water buildup on the threads or stem threads.
 - c. Check for stuck packing and bent stems.
13. With the hydrant fully open, check for leakage at flanges, around outlet nozzles, at packing or seals, and around the operating stem. Repair as needed.
14. Partially close the hydrant so the drains open and water flows through under pressure for approximately 10 seconds, flushing the drain outlets.
15. Close the hydrant completely. Back off the operating nut enough to take pressure off of the thrust bearing or packing.

Water Form No. 12

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16. Remove all outlet-nozzle caps, clean the threads, check the condition of the gaskets, and lubricate the threads. Check the ease of operation of each cap.
17. Check outlet-nozzle cap chains or cables for free action on each cap. If the chains or cables bind, open the loop around the cap until they move freely. This will keep the chains or cables from kinking when the cap is removed during an emergency.
18. Replace the caps. Tighten them, and then back off slightly so they will not be excessively tight. Leave them tight enough to prevent their removal by hand.
19. Check the lubrication of operating-nut threads. Lubricate per the manufacturer's recommendations.
20. Locate and exercise the auxiliary valve. Leave it in the open position.
21. If the hydrant is inoperable, bag it and notify the local 911 Call Center. Schedule the hydrant for prompt repair.

Water Form No. 13
(Water Rule 12.9.)

HYDRANT FLOW-TESTING PROCEDURE

1. Determine location and select the flow hydrant(s) for testing. Make notifications as required by these rules.
2. Determine number of flow hydrants:
 - a. This will depend on the flows required, and/or the strength and capacity of the local distribution system.
 - b. The number of flow hydrants should be sufficient to achieve a drop in residual pressure, measured at the residual hydrant, of at least ten (10) percent of the static pressure.
 - c. Where the system pressure and flows may increase due to pump operation during testing, an artificial drop in the static pressure of ten (10) percent may be necessary for theoretical supply curve calculations.
3. For multiple-hydrant tests:
 - a. Designate one hydrant as the residual hydrant:
 - b. This is where the static pressure will be observed during static conditions (all other flow hydrants closed) and residual conditions (all other test hydrants flowing).
 - c. The residual hydrant should be located such that it is positioned between the flow hydrant(s) and that portion of the distribution system which supplies fire flows to the immediate area.
4. For single-hydrant tests:
 - a. The same hydrant serves as both residual and flow hydrant.
 - b. Static and residual pressures are measured at one of the 2 1/2" nozzles on the hydrant.
 - c. A separate 2 1/2" nozzle on the same hydrant should be used for flow measurement.
5. Flow-test procedure:
 - a. Slowly open each hydrant or hydrants used in the test and flush them individually to remove debris or sediment that may damage the pressure gauge or flow instruments.
 - b. Attach a pressure gauge to one of the 2.5-inch outlets on the residual hydrant.
 - c. Open the cock on the gauge piping.
 - d. Slowly open the residual hydrant to the full-open position.
 - e. Once all air is vented from the barrel, close the vent cock on the gauge piping.
 - f. Record the static pressure reading when the pressure gauge needle is stabilized.
 - g. For each flow hydrant to be used - measure and record the identification of the outlet nozzle from which the flow is measured. The identification measurement is taken to the nearest 1/16 inch. Note the type of outlet (e.g. smooth-and-rounded, square-and-sharp, sharp-and-projecting, etc.) for calculation purposes.
 - h. Install one pitot tube with a pressure gauge to each flow hydrant. Alternative flow measurement methods, other than pitot tubes, may be used provided that they give flow measurement results equal in accuracy to the pitot tube method.
 - i. Slowly open the flow hydrant. If multiple flow hydrants are being used, slowly open each flow hydrant one at a time. While opening flow hydrant(s) always observe the residual pressure drop. Under no circumstances should the residual pressure be allowed to fall below 20 psi.
 - j. When the flow hydrant(s) are flowing, allow enough flow to remove debris and sediment.

Water Form No. 13
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- k. Record the pitot pressure of each flow hydrant(s) while simultaneously recording the pressure at the residual hydrant,
- l. To ensure accurate results, the pressure drop between the static and residual pressures should be at least ten percent (10%) of the static pressure.
- m. After recording all readings, close each flow hydrant slowly, one at a time.

6. Determine the flow rate.

The formula to calculate the flow rate Q (gpm) is as follows:

$$Q = 29.84cd^2 \sqrt{p}$$

Where: Q = flow (gpm)
 c = coefficient of discharge*
 d = diameter of flow hydrant outlet (inches)
 p = pitot pressure (psi)

*The following general values are used for the coefficient of discharge based on the outlet types:

Smooth and rounded	c = 0.90
Square and sharp	c = 0.80
Square and projecting into barrel	c = 0.70
When using flow tubes/straighteners	c = 0.95 (or known value)

In situations where the pressure drop between static and residual pressures is less than the desired pressure drop, the calculated flow rate at the desired pressure is as follows:

$$Q_r = Q_f \times \frac{h_r^{0.54}}{h_f^{0.54}}$$

Where: Q_r = flow predicted at desired residual pressure (gpm)
 Q_f = total flow measured during test (gpm)
 h_r = pressure drop to desired residual pressure* (psi)
 h_f = pressure drop measured during test (gpm)

* For the purposes of marking, hydrants are rated at a residual pressure of 20 psi.

Water Form No. 14
(Water Rule 12.10.)

HYDRANT MARKING CODE

All public hydrants shall be marked (color coded) in accordance with their capacity at 20 psi residual pressure pursuant to the table below.

Hydrant Classification	Hydrant Capacity (GPM)	Color Code
AA	> 1,500	Light Blue
A	1,000 — 1,499	Green
B	500 - 999	Orange
C	250 - 499	Red
S*	<249	Black*

*Sub-standard (Class S) hydrants are a special class of hydrants established by these rules. They shall be identified by painting only the bonnet black or by using a black nozzle-marking-ring. To avoid confusion with Out-of-Service hydrants, do not paint sub-standard (Class S) hydrants entirely black.