Title 15 - Mississippi Department of Health

Part III – Office of Health Protection

Subpart 72 – Bureau of Public Water Supply

CHAPTER 01 MISSISSIPPI PRIMARY DRINKING WATER REGULATION

100 GENERAL PROVISIONS

100.01 **Legal Authority**. This regulation has been promulgated under the authority of and pursuant to the Mississippi Safe Drinking Water Act of 1997 (Section 41-26-1 through Section 41-26-101, Mississippi Code of 1972, Annotated).

100.02 **Definitions**.

1. **Department** shall mean the Mississippi State Department of Health.

2. **Director** shall mean the Executive Officer of the Mississippi State Department of Health or his authorized agent.

3. **Municipality** shall mean a city, town, village, or other public body created by state law, or an Indian tribal organization authorized by law.

4. **Federal Agency** shall mean any department, agency, or instrumentality of the United States.

5. **Administrator** shall mean the Administrator of the U.S. Environmental Protection Agency or his authorized representative.

6. **Federal Act** shall mean the Safe Drinking Water Act of 1974, cited as Public Law 93-523, or any subsequent revisions thereto.

7. **Regulations** shall mean primary drinking water regulations promulgated by the administrator pursuant to the federal act.

8. **Backflow** shall mean the reversal of normal flow direction where water flows from the intended point of delivery towards the public water supply.

9. **Cross Connection** shall mean any direct interconnection between a public water system and a non-public water system or other source which may result in the contamination of the drinking water provided by the public water system. This definition includes any arrangement of piping where a potable water line is connected to non potable water; it may be a pipe-to-pipe connection where potable and non potable water lines are directly connected or a pipe-to-water connection where the potable water outlet is submerged in non potable water. If the potable and non-potable source are

separated by gate valves, check valves or devices other than the appropriate backflow preventer as outlined by this regulation, a cross connection exists. By-pass arrangements, jumper connections, swivel or change over assemblies, or other temporary or permanent assemblies through which, or because of which, backflow may occur are considered to be cross connections.

10. **Public water system** means a system for the provision to the public of water for human consumption through pipes or, after August 5, 1998, other constructed conveyances, if such system has at least fifteen service connections or regularly serves an average of at least twenty-five individuals daily at least 60 days out of the year. Such term includes: Any collection, treatment, storage, and distribution facilities under control of the operator of such system and used primarily in connection with such system; and any collection or pretreatment storage facilities not under such control which are used primarily in connection with such system. Such term does not include any "special irrigation district." Service connection, as used in the definition of public water system, does not include a connection to a system that delivers water by a constructed conveyance other than a pipe if:

    a. The water is used exclusively for purposes other than residential uses (consisting of drinking, bathing, cooking, or other similar uses);

    b. The Director or Administrator determines that alternative water to achieve the equivalent level of public health protection provided by the applicable national primary drinking water regulation is provided for residential or similar uses for drinking and cooking; or

    c. The Director or Administrator determines that the water provided for residential or similar uses for drinking, cooking, and bathing is centrally treated or treated at the point of entry by the provider, a pass-through entity, or the user to achieve the equivalent level of protection provided by the applicable national primary drinking water regulation.

    Special irrigation district means an irrigation district in existence prior to May 18, 1994, that provides primarily agricultural service through a piped water system with only incidental residential or similar use where the system or the residential or similar users of the system comply with the exclusion provisions in Section 1401(4)(B)(i)(II) or (III) of the Federal Safe Drinking Water Act.

11. **Professionally installed** shall mean installed in a workmanlike manner with no apparent errors in installation.

12. The definitions as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.2 are hereby adopted.

100.03 **Coverage**. This regulation shall apply to each public water system in the State, except that it shall not apply to a public water system:

1. Which consists only of distribution and storage facilities which does not have any collection and treatment facilities; and

2. Which obtains all of its water from, but is not owned or operated by, a public water system to which such regulation applies; and

3. Which does not sell water to any person; and

4. Which is not a carrier which conveys passengers in interstate or intrastate commerce.

100.04 **Variances and Exemptions**. Variances and exemptions may be issued by the Director in accordance with Sections 1415 and 1416 of the federal act. Treatment utilizing best available technology, as stipulated in Title 40 Code of Federal Regulations, Part 142, Subparts F and G, may be required in order to grant variances and exemptions under this regulation. Variances and exemptions shall not be issued if not allowed by the National Primary Drinking Water Regulations.

100.05 **Preconstruction and Treatment Requirements**.

1. **Siting Requirements**. Before a person may initiate construction of a new community or non-transient non-community public water system or increase the capacity of an existing community or non-transient non-community public water system, he shall submit sufficient information to the Director for evaluation of the proposed site, to determine whether the site and design of the proposed construction or modification will enable the system to comply with this regulation.

2. **Plans and Specifications Approval**. Prior to advertising for bids and/or initiating construction of a new community or non-transient non-community public water system or making significant extensions or alterations to an existing community or non-transient non-community public water system which may effect the operation of that system, plans and specifications for the proposed construction shall be approved by the Director. Plans and specifications submitted to the Director for approval shall be prepared by a professional engineer licensed to practice in the State of Mississippi.

3. **Operation and Maintenance Plans**. Each applicant for a new community or non-transient non-community public water system shall submit an operation and maintenance plan for review and approval by the Director. The plan must be approved by the Director prior to beginning construction.

4. **Financial and Managerial Viability**. Each applicant for a new community or non-transient non-community public water system shall submit financial

and managerial information as required by the Public Utilities Staff. Plans and specifications shall not be approved by the Director until written certification of the financial and managerial viability of the new water system is received from the Executive Director of the Public Utilities Staff.

5. **Changes to Existing Public Water Systems**. Plans and specification for changes to an existing community or non-transient non-community public water systems shall not be approved if the Director determines the changes would threaten the viability of the water system or if the changes may overload the operational capabilities of the water system.

6. **Non-Centralized Treatment Devices**. Public water systems may utilize point-of-entry devices to comply with maximum contaminant levels as stipulated in the National Primary Drinking Water regulations as published at Title 40 Code of Federal Regulations Sections 141.100 and 141.101.

7. **Ban of Use of Lead Products**. Any pipe, solder, or flux used in the installation or repair of any public water system, or any plumbing in a residential or nonresidential facility providing water for human consumption which is connected to a public water system shall be lead free. Solders and flux are defined as "lead free" when they contain not more than 0.2 percent lead. Pipes and pipe fittings are defined as "lead free" when they contain not more than 8.0 percent lead. Plumbing fittings and fixtures intended by the manufacturer to dispense water for human ingestion are defined as "lead free" when they comply with standards established in accordance with 42 U.S.C. 300g-6(e).

8. **Lead Service Line Replacement**. It shall be the responsibility of each supplier of water to comply with the lead service line replacement requirements and lead service line reporting requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.84 and 141.90.

9. **Overloaded Public Water Systems**. Public water systems that are serving customers in excess of the design capacity as determined by the Director shall be identified as overloaded and shall immediately, upon written notification by the Director, cease adding new customers. Public water systems identified as overloaded shall not add new customers until notified, in writing, by the Director that the system's design capacity has been increased and that the water system can resume adding new customers.

101 MAXIMUM CONTAMINANT LEVELS

101.01 **Microbiological**. All microbiological maximum contaminant levels shall apply to public water systems as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.52 and 141.63.

101.02 **Inorganic Chemicals**. All inorganic chemical maximum contaminant levels and action levels shall apply to public water systems as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.6, 141.11, 141.23 (d & e), 141.51, 141.60, 141.62 (b, c & d) and 141.80.

101.03 **Organic Chemicals**. All organic chemical maximum contaminant levels shall apply to public water systems as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.50, 141.60 and 141.61.

101.04 **Turbidity**. The maximum contaminant levels for turbidity shall apply to public water systems as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.13, 141.73 and 141.173.

101.05 **Radionuclides**. All radionuclide maximum contaminant levels and maximum contaminant level goals shall apply to public water systems as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.15, 141.16, 141.55 and 141.66.

101.06 **Disinfectant Residuals**, Disinfection Byproducts, and Disinfection Byproduct Precursors. All disinfectant residuals, disinfection byproduct and disinfection byproduct precursor maximum contaminant levels and operational evaluation levels shall apply to public water systems as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.12, 141.53, 141.54, 141.64, 141.65, 141.130, 141.620 and 141.626.

101.07 **Miscellaneous Contaminants**. All maximum contaminant levels not previously referenced in this regulation shall apply to public water systems as stipulated in the latest revision of the National Primary Drinking Water Regulations.

102 MONITORING, ANALYTICAL, AND TREATMENT TECHNIQUE REQUIREMENTS

102.01 **Coliform Sampling and Analyses**. It shall be the responsibility of each supplier of water to comply with the Coliform Monitoring and Analytical Requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.21 or any subsequent revisions thereto except that the following optional provisions of Title 40 Code of Federal Regulations Section 141.21 are not adopted:

1. The provision of Title 40 Code of Federal Regulations Section 141.21 (a)(2) concerning the reduction of the monitoring frequency for community water systems serving 1,000 or fewer persons;

2. The provision of Title 40 Code of Federal Regulations Section 141.21 (a)(5) concerning waiver of the time limit for sampling after a turbidity sampling result exceeds 1 NTU;

3. The provision of Title 40 Code of Federal Regulations Section 141.21 (b)(3) concerning collection of large volume repeat samples in containers of any size;

4. The provision of Title 40 Code of Federal Regulations Section 141.21 (d) concerning agents other than State personnel conducting sanitary surveys;

5. The provisions of Title 40 Code of Federal Regulations Section 141.21 (e)(2) with respect to waiver of fecal coliform or E. Coli testing on a total coliform positive sample;

102.02 **Inorganic Chemical Sampling and Analyses**. It shall be the responsibility of each supplier of water to comply with the inorganic chemical sampling/analysis requirements, analytical techniques, and water quality parameters as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.6, 141.23, 141.86, 141.87, 141.88 and 141.89 except that the following optional provisions of Title 40 Code of Federal Regulations are not adopted: Section 141.23 (a)(4) and Section 141.88(a)(1)(iv) which allow compositing of samples. The provisions of Title 40 Code of Federal Regulations, Section 141, Subpart I – Control of Lead and Copper are hereby incorporated by reference including any subsequent amendments and editions.

102.03 **Organic Chemical Sampling and Analyses**. It shall be the responsibility of each supplier of water to comply with the organic chemical sampling and analysis requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.6, 141.24, 141.30 and 141.40 except that the following optional provisions of Title 40 Code of Federal Regulations are not adopted: Sections 141.24 (f)(14) and (h)(10) and Section 141.40 (n)(9) which allow compositing of samples.

102.04 **Radionuclides**. It shall be the responsibility of each supplier of water to comply with the radionuclide sampling and analysis requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.25 and 141.26.

102.05 **Turbidity and Source Water Sampling and Analyses.** It shall be the responsibility of each supplier of water to comply with the turbidity sampling and analysis requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.22, 141.174, 141.560 – 141.564, 141.701 – 141.704, 141.707 and Appendix B to Subpart Q of Part 41.

102.06 **Disinfectant Residuals, Disinfection Byproducts, and Disinfection Byproduct Precursors Sampling and Analyses**. It shall be the responsibility of each supplier of water to comply with the disinfection byproduct sampling and analysis requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.131, 141.132, 141.531, 141.600-605, 141.620-625, 141.627, and 141.628. Compliance with this section shall be determined as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.133 and 141.620.

102.07 **Ground Water Microbial Sampling and Analyses.** It shall be the responsibility of each supplier of ground water to comply with the source microbial monitoring and analytical requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.400 and 141.402.

102.08 **Filtration and Disinfection**. It shall be the responsibility of each supplier of water to comply with the filtration and disinfection analytical and monitoring requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.70, 141.73, 141.74, and 141.174.

102.09 **Miscellaneous Contaminants**. It shall be the responsibility of the supplier of water to comply with the special monitoring requirements of the National Primary Drinking Water Regulation Title 40 Code of Federal Regulations Section 141.41 (special monitoring for sodium) and Section 141.42 (special monitoring for corrosivity characteristics). It shall also be the responsibility of the supplier of water to comply with all other monitoring and analysis requirements not previously addressed in this regulation as stipulated in the National Primary Drinking Water Regulations.

102.10 **Sanitary Surveys**.

1. **Surface Water Systems:** The Mississippi State Department of Health shall make periodic on-site surveys of each public surface water system

for the purpose of determining the adequacy of the water source, facilities, equipment, watershed control program, operation and maintenance procedures and monitoring and compliance as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.522 and 141.723. These surveys include the right to inspect all records, take water quality samples, or verify procedures, to determine compliance with this regulation. Significant deficiencies, as determined by the Department utilizing current EPA guidance manuals, shall be identified by Department staff during the conduct of sanitary surveys. Public water systems shall, upon receipt of the sanitary survey report, provide a written response to all significant deficiencies identified in the report to the Department within 45 days of receipt of the report. In this written response, the public water system shall outline its plan to correct the significant deficiencies identified in the survey report. After reviewing the public water system's written response, the Director shall require, by means of a written order, that the public water system correct the significant deficiencies within a reasonable period of time as determined by the Department.

2. **Ground Water Systems:** The Mississippi State Department of Health shall make periodic on-site surveys of each public ground water system for the purpose of determining the adequacy of the water source, treatment, distribution, storage, pumps, reporting, management and operator compliance as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.401. These surveys include the right to inspect all records, take water quality samples, or verify procedures, to determine compliance with this regulation. Significant deficiencies, as determined by the Department utilizing current EPA guidance, shall be identified by Department staff during the conduct of sanitary surveys. Public water systems shall, upon receipt of the sanitary survey report, provide a written response to all significant deficiencies identified in the report to the Department within 30 days of receipt of the report. In this written response, the public water system shall outline its plan to correct the significant deficiencies identified in the survey report. After reviewing the public water system's written response, the Director shall require, by means of a written order, that the public water system correct the significant deficiencies within 120 days or within a reasonable period of time as determined by the Department.

102.11 **Treatment Techniques**. It shall be the responsibility of each supplier of water to comply with the treatment techniques as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.76, 141.81, 141.82, 141.83, 141.110, 141.111, 141.135, 141.403, and 141.404.

103 REPORTING, RECORDS, AND PUBLIC NOTIFICATION

103.01 Reporting Requirements.

1. The supplier of water shall provide the results of all water quality analyses to be utilized for compliance with this regulation to the Director as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.31, 141.35, 141.73, 141.75, 141.76, 141.90, 141.134, 141.173, 141.175, 141.405, 141.570, 141.601, 141.602, 141.629, 141.706, 141.710 and 141.712.

2. The supplier of water shall report to the Director the failure to comply with these regulations, including failure to comply with monitoring and analytical requirements, and failure to meet maximum contaminant levels as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.31, 141.35, 141.73, 141.75, 141.76, 141.173, 141.175 and 141.405.

3. The supplier of water shall provide proof of public notification to the Director as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.31(d), 141.90(f) and 141.405.

4. The supplier of water shall maintain records and submit to the Director copies of all required records as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.31 (e), 141.91, 141.75, 141.76, 141.175, 141.405 and 141.721.

5. The state shall be responsible for submitting to the Administrator all information stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 142.15.

103.02 **Public Notification and Education**. Each supplier of water shall provide public notification or education as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.35, 141.71, 141.73, 141.74, 141.85, 141.90(f), 141.170-141.174, 141.201-141.211, 141.402(g) and (h), 141.500-141.553, 141.560-141.564 and Appendices A-C to Subpart Q of Part 141. Public notification of fluoride content is required of all public water suppliers as stipulated in Title 40 Code of Federal Regulations Section 143.5.

103.03 **Record Maintenance**. Each supplier of water shall retain records and make such records available to the Director as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal

Regulations Sections 141.33, 141.35, 141.75, 141.76, 141.134, 141.155, 141.175, 141.571, 141.601, 141.602, 141.629, and 142.62.

103.04 **Records Kept by States**. Records of currently applicable or most recent tests, measurements, analyses, decisions, and determinations performed on each public water system, including all supporting information and an explanation of the technical basis of each decision to determine compliance with applicable provisions of the Mississippi Primary Drinking Water Regulations will be maintained in accordance with the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 142.14.

103.05 **Laboratory Certification**.

1. The Director may prescribe minimum requirements for a laboratory to be certified by the Mississippi State Department of Health to perform water quality analyses required under this regulation.

2. Each supplier of water must utilize the services of certified laboratory to complete all water quality analyses as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.28 and 141.705.

103.06 **Filtration and Disinfection - Surface Water Treatment Rule**.

1. **General Requirements**: Each public water system that uses a surface water source or a ground water source under the direct influence of surface water must comply with the treatment technique requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.70.

2. **Criteria for Avoiding Filtration**: In order to avoid filtration, a public water system that uses a surface water source or a ground water source under the direct influence of surface water must comply with the criteria for avoiding filtration as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.71.

3. **Disinfection**: A public water system that uses a surface water source or a ground water source under the direct influence of surface water must comply with the disinfection requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.72.

4. **Filtration**: A public water system that uses a surface water source or a ground water source under the direct influence of surface water and does not meet all of the criteria in Title 40 Code of Federal Regulations Section 141.71 for avoiding filtration must comply with the treatment

requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.73.

5. **Recycle Provisions**: A public water system that uses a surface water source or a ground water source under the direct influence of surface water must comply with the recycle provisions as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.76.

103.07 **Enhanced Filtration and Disinfection - Surface Water Treatment Rule**.

1. **General Requirements**: Each public water system that uses a surface water source or a ground water source under the direct influence of surface water must comply with the treatment technique requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.170, 141.500-141.503, 141.510-141.511, 141.520, 141.700, 141.710-141.713, and 141.715 – 141.720.

2. **Criteria for Avoiding Filtration**: In order to avoid filtration, a public water system that uses a surface water source or a ground water source under the direct influence of surface water must comply with the criteria for avoiding filtration as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.171 and 141.521.

3. **Disinfection**: A public water system that uses a surface water source or a ground water source under the direct influence of surface water must comply with the disinfection, profiling and benchmarking requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.172, 141.530-141.536, 141.540-141.544, 141.708 and 141.709.

4. **Filtration**: A public water system that uses a surface water source or a ground water source under the direct influence of surface water and does not meet all of the criteria in Title 40 Code of Federal Regulations Section 141.171 for avoiding filtration must comply with the treatment requirements as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Sections 141.173, 141.550-141.553, and 141.560-141.564. A public water system that uses a surface water source or a ground water source under the influence of surface water shall arrange for the conduct of a comprehensive performance evaluation by the Department or a third party approved by the Department within 30 days of exceeding the filter performance triggers stipulated by the National Primary Drinking Water Regulations published under Title 40 Code of Federal Regulations

Section 141.175 (b)(4). Based upon the results of this comprehensive performance evaluation, the public water system shall arrange for the completion of a composite correction program developed in accordance with current EPA guidance documents. This composite correction program shall be submitted to the Department for review and approval prior to actual implementation. The Director, after reviewing and approving the composite correction program, shall, by means of a written order, require the public water system to implement the approved composite correction program on a time schedule approved by the Department as stipulated in Title 40 Code of Federal Regulations Section 142.16(g)(1) and 142.16(j)(1).

104 CROSS CONNECTIONS

104.01 **Cross Connections Prohibited**. No person shall install, permit to be installed or maintain any cross connection between a public water system and any other non-public water system or a line from any container of liquids or other substances, except as specifically authorized by this regulation, unless a backflow prevention assembly is installed between the public water system and the source of contamination. Direct connections between a public water supply and sewer or storm sewer are prohibited.

104.02 **Low Hazard Cross Connection**.

1. A connection between a public water system and a service or other water system not hazardous to health but not meeting established water quality standards for public water systems and not cross connected within its system with a potentially dangerous substance shall be considered a low hazard category cross connection. An appropriate backflow prevention assembly or device recommended by the Department for low hazard cross connections shall be installed except as provided in section 104.02(2).

2. Pursuant to Section 41-26-14(2)(b) of the Mississippi Code of 1972, as amended, the following cross connections shall be considered as low hazard posing a very low risk and shall not be required to have a backflow preventer device:

   a. Any lawn sprinkler system or lawn irrigation system that is connected to a public water system and was professionally installed regardless of whether the system is underground or above ground or whether the system has pop-up sprinkler heads.

   b. Any swimming pool that is connected to a public water system and was professionally installed or any swimming pool that is connected to a public water system and has a fill line with an anti-siphon air gap.

c. Any water fountain or cooler that provides drinking water for human consumption that is connected to a public water system and was professionally installed.

d. Any fire sprinkler system that contains only water or a dry pipe and no chemicals that is connected to a public water system and was professionally installed.

e. Any commercial establishment that is connected to a public water system that contains no cross connections directly with a dangerous or hazardous substance or material.

104.03 **High Hazard Cross Connection**.

1. A connection between a public water system and a non-public water system or other source of contamination which has or may have any material in the water dangerous to health, or connected to any material dangerous to health, that is or may be handled under pressure, or subject to negative pressure, shall be considered a high hazard category cross connection. The cross connection shall be eliminated by air gap separation or shall be protected by the installation of an appropriate backflow prevention assembly or device recommended by the Department for high hazard cross connections.

2. Any lawn sprinkler system or lawn irrigation system that is connected to a public water system and either injects or stores lawn chemicals or is connected to a wastewater supply shall be considered a high hazard cross connection and shall be protected by the installation of a backflow prevention assembly or device.

3. Additional backflow prevention assemblies or devices shall not be required for carbonated beverage dispensers if 1) the water supply connection to the carbonated beverage dispenser is protected against backflow by a backflow prevention assembly or device that conforms to ASSE 1022 or by an air gap, and 2) the backflow prevention assembly or device and the piping downstream from the device are not affected by carbon dioxide gas.

104.04 **Distinction Between Low and High Hazard Cross Connection**. The distinction between low hazard cross connection and high hazard cross connections shall be made by an authorized representative of the public water system subject to review by the Department.

105 RESPONSIBILITY OF PUBLIC WATER SYSTEMS TO ESTABLISH CROSS CONNECTION CONTROL PROGRAMS

105.01 **Cross Connection Control Program**. All public water supplies shall adopt and enforce a cross connection control policy or ordinance that is no less stringent

than the provisions of this regulation; however, the adopted policy or ordinance shall not be more stringent than the provisions of House Bill 692 enacted by the 2001 Mississippi Legislature, as codified in Section 41-26-14 et. seq. of the Mississippi Code of 1972, Annotated. This policy or ordinance shall establish a cross connection control program consisting of the following:

1. Locating and eliminating unprotected cross connections.

2. Preventing the occurrence of new cross connections with the public water system.

3. Maintaining records pertaining to the location of existing backflow prevention assemblies, type and size of each assembly and results of all tests of backflow prevention assemblies by a tester certified by the Department.

105.02 **Cross Connection Surveys**. It shall be the responsibility of each public water system to conduct surveys and on-site visits as necessary to locate existing cross connections. Single family dwellings and multi-family dwellings shall not be included in this survey unless the officials of the public water system have reason to believe that a cross connection exists. This survey shall be performed by an authorized representative of the public water system utilizing established written guidelines as published by the Department.

1. Each public water system shall complete an initial cross connection survey by December 31, 2000.

2. Upon completion of the required cross connection survey, the responsible official of each public water system shall certify to the Department, on forms provided by the Department, that the required survey has been properly completed in accordance with the written guidelines published by the Department.

105.03 **Installation of Backflow Preventers**. When a cross connection is identified, the public water system shall require that the property owner eliminate the cross connection or install the proper type backflow prevention assembly.

1. When a cross connection is identified, the public water system shall notify the property owner, in writing and within ten (10) days, of the existence of the cross connection and that the cross connection must be eliminated or protected.

2. If the public water system determines that the cross connection is a high hazard category cross connection, it shall be eliminated or protected by the appropriate backflow preventer by June 30, 2001. If a public water system identifies an existing high hazard cross connection after June 30, 2001, the high hazard cross connection shall be eliminated or protected by the property owner within ninety (90) days of written notification by

the public water system. If the property owner has an existing backflow preventer, the public water system shall allow the backflow preventer to remain in place until it fails to function properly.

3. If the public water system determines that the cross connection is a low hazard cross connection, it shall be eliminated or protected by the property owner by installing an appropriate backflow preventer by June 30, 2004. If an existing low hazard cross connection is identified by a public water system after June 30, 2004, the cross connection shall be eliminated or protected by the property owner by installing an approved backflow preventer within one (1) year of written notification by the public water system. If the property owner has an existing backflow preventer, the public water system shall consider the backflow preventer approved and shall allow the installed backflow preventer to remain in place until the backflow preventer fails to function properly.

105.04 **Public Water System Enforcement Actions**. In the event a customer refuses to comply with the cross connection control provisions of this regulation, the public water system is authorized to discontinue water service to the customer until such time as the customer complies with this regulation.

106 RECOMMENDED BACKFLOW PREVENTERS

106.01 **List of Recommended Backflow Preventers**. The Department shall prepare and publish a list of backflow prevention assemblies recommended for use in the State of Mississippi. The Department shall routinely update this list as necessary.

1. **Recommended Devices for High Hazard Cross Connections**.

   a. Reduced Pressure Principle Backflow Prevention Assemblies. Backflow prevention assemblies recommended to protect high hazard cross connections shall include reduced pressure principle backflow prevention assemblies.

   b. Pressure Vacuum Breaker Assemblies. Backflow prevention assemblies recommended to protect high hazard cross connections shall include pressure vacuum breaker assemblies. Pressure vacuum breaker assemblies shall not be used in locations where the vacuum breaker may be subject to back pressure and shall not be used in locations where the vacuum breaker is not higher than all downstream connections.

   c. Atmospheric Vacuum Breakers. Backflow prevention devices recommended to protect high hazard cross connections shall include atmospheric vacuum breakers. Atmospheric vacuum breakers shall not be installed in locations that may be subject to back pressure, shall not be installed in locations where the vacuum breaker is not higher

than all downstream locations, shall not be installed in locations with valves downstream and shall not be installed in locations of continuous use.

2. **Low Hazard Cross Connections**. Backflow prevention assemblies recommended to protect low hazard cross connections shall include reduced pressure principle assemblies, pressure vacuum breaker assemblies, atmospheric vacuum breaker assemblies, and double check valve assemblies. Pressure vacuum breaker assemblies shall not be used in locations where the vacuum breaker may be subject to back pressure and shall not be used in locations where the vacuum breaker is not higher than all downstream connections. Atmospheric vacuum breakers shall not be installed in locations that may be subject to back pressure, shall not be installed in locations where the vacuum breaker is not higher than all downstream locations, shall not be installed in locations with valves downstream and shall not be installed in locations of continuous use.

106.02 **Installation Requirements**.

1. Reduced pressure principle backflow prevention assemblies, double check valve assemblies, and pressure vacuum breaker assemblies shall be installed in a location that provides adequate access for testing and repair of the assembly.

2. Reduced pressure principle backflow prevention assemblies and double check valve assemblies shall not be subject to possible flooding. Reduced pressure principle backflow prevention assemblies and double check valve assemblies shall not be located in a pit below ground level.

107 TESTING OF BACKFLOW PREVENTION ASSEMBLIES

107.01 **Testing By Certified Tester**. When a reduced pressure principle backflow prevention assembly, double check valve assembly, or pressure vacuum breaker assembly is installed to protect a public water system against the possibility of a backflow from a customer's water service, inspection and testing of the assembly, where required by this regulation, shall be performed by an individual who has been licensed as a Certified Tester by the Department.

1. Each backflow prevention assembly shall be inspected and tested by a Certified Tester after installation and before use by the customer. Reduced pressure principle backflow prevention assemblies and pressure vacuum breakers shall be inspected and tested at least once a year by a Certified Tester.

2. The Certified Tester shall provide the property owner and the public water system with a written report of the inspection and test results on each assembly tested. This written report shall be on a form provided by the Department. The report shall be prepared and submitted by the

Certified Tester making the inspection and test. The Certified Tester and the public water system shall retain all backflow prevention assembly test and inspection results for at least five (5) years from the date of test and inspection.

3. Reduced pressure principle backflow prevention assemblies and pressure vacuum breaker assemblies that fail to function properly or fail the routine required test shall be repaired or replaced within thirty (30) days of identification of the failure. Double check valves that fail to function properly shall be repaired or replaced within ninety (90) days of identification of the failure.

107.02 **Licensing of Certified Testers**. Each Certified Tester shall be licensed by the Department. All tester training shall be submitted to the Department for approval at least 45 days prior to the scheduled date of training. The Department shall review the instructors and course curriculum for all proposed tester training. The Department shall approve proposed tester training if it determines that the proposed training program and instructor(s) meets the Department's minimum guidelines. The Department shall develop and administer the backflow tester certification test at the conclusion of each approved tester training program. A minimum score of 70% on the Department's written examination and successful performance of prescribed tests on a reduced pressure principle backflow prevention assembly, double check valve assembly, and pressure vacuum breaker assembly will be required for certification. Any applicant not successfully completing both the written and performance tests must attend a Department approved tester training program before taking the certification tests again. Under special circumstances and upon receipt of a written request by the applicant, the Department may allow an applicant to take the written and performance tests without attending a Department approved tester training program.

1. The Department may issue, solely at its discretion and without testing, certification to a Tester possessing certification from a nationally recognized backflow prevention assembly tester certification program.

2. Each Tester's certification will expire three (3) years from the date issued. To become re-certified, the Tester must successfully complete a recertification examination developed by the Department and administered by the Department or an authorized representative of the Department.

3. The Certified Tester shall maintain the accuracy of the testing equipment to be used to test backflow prevention devices. The testing equipment shall be checked for proper calibration and shall be recalibrated, as needed, in accordance with the recommendations of the manufacturer. Only properly trained individuals shall perform calibration adjustments or repair or testing equipment. Calibration standards utilized in the testing

or repair of this testing equipment shall have their accuracy checked and adjusted to within allowable tolerances against standard instruments traceable to the National Institute for Standards and Technology (NIST).

107.03 **Suspension or Revocation of Tester's Certificate**.

1. A Tester's Certificate may be revoked or suspended by the Department for just cause. Causes include, but are not limited to, the following:

   a. Fraud, deception, or misrepresentation of a material fact to either the public or the Department ;

   b. Misfeasance, malfeasance or nonfeasance;

   c. Failure to file any official reports required by the Department;

   d. Failure to maintain all official records required by the Department;

   e. Failure to respond to any official correspondence from the Department;

   f. Failure to obey a lawful order of the Director or any duly appointed Administrative Hearing Officer of the Department;

   g. Failure to exercise reasonable care or judgment in the testing of backflow prevention devices;

   h. Failure to comply with the terms of a suspension of a certificate issued by the Department;

2. No Tester's Certificate will be suspended or revoked without notice to the Certificate holder and an opportunity for a hearing. Hearings shall be held in conformity with Sections 41-26-17 and 41-26-21 Mississippi Code of 1972 Annotated.

3. Notwithstanding the requirement for a hearing, the Director may, if he determines that public health is threatened, issue any such orders as are deemed necessary to protect the public health, including, but not limited to, orders to individual(s) to cease all actions as a Certified Tester of backflow prevention devices in the State of Mississippi.

108 CROSS CONNECTION CONTROL WAIVERS

108.01 **Waivers**. The Director may issue a waiver to a public water system to any part or parts of the cross connection control provisions of this regulation if the Department deems such waiver to be appropriate and will not potentially jeopardize public health.

109 APPLICATION AND FEES FOR CERTIFIED TESTER

109.01 Filing Application.

1. A tester desiring certification shall file an application with the Department on forms provided by the Department.

2. The Department shall review the application and supporting documents, determine the eligibility of the applicant, and issue a certificate when the minimum requirements are met.

109.02 Backflow Prevention Assembly Tester Certification Fees.

1. An initial fee of fifty dollars ($50.00) shall be charged for certification as a Backflow Prevention Assembly Tester. The Department shall invoice each applicant for the $50 fee and the certificate will not be issued until the fee is received by the Department.

2. A fee of thirty dollars ($30.00) shall be charged for the renewal of a certificate. The Department shall invoice each applicant for the $30 fee and the renewal certificate will not be issued until the fee is received by the Department.

110 CONSUMER CONFIDENCE REPORTS

110.01 **Purpose and Applicability**. Each community public water system shall prepare and deliver to their customers an annual consumer confidence report as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.151.

1. **Effective Dates**. The effective dates for community public water supplies to prepare and deliver annual consumer confidence reports shall be as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.152.

2. **Content of the Reports**. The content of the Consumer Confidence Reports prepared by community public water supplies shall be as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.153.

3. **Required Additional Health Information**. It shall be the responsibility of each community public water supply preparing a consumer confidence report to include the required additional health information as stipulated in the National Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.154.

4. **Report Delivery**. Delivery of Consumer Confidence Reports prepared by community public water supplies shall be as stipulated in the National

Primary Drinking Water Regulations as published under Title 40 Code of Federal Regulations Section 141.155.

111 EMERGENCY CONDITIONS AND ENFORCEMENT

111.01 **Emergency Conditions**. The Director is authorized to develop and implement a plan for the provision of safe drinking water in emergency circumstances for any public water system.

111.02 **Enforcement**. Violations of any requirement of this regulation shall be subject to the enforcement provisions of the Mississippi Safe Drinking Water Act of 1997 as found at Sections 41-26-1 through 41-26-101, Mississippi Code of 1972, Annotated.