61-58.7
Operation and Maintenance

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A. Applicability.

This regulation applies to all public water systems, no matter when constructed, and establishes minimum requirements for the operation and maintenance of the system in order to ensure the delivery of safe, potable water to the public. Existing systems may be required to upgrade to comply with regulations 61-58.2, 58.3, or 58.4:

(1) when no construction permit exists, or;

(2) when required by the Department as the result of a sanitary survey.

B. General Requirements for Operation and Maintenance of Public Water Systems.

(1) All water systems must be operated and maintained in accordance with their construction and operating permit(s) and any approved modifications.

(2) Each system shall have and maintain up-to-date written Standard Operating Procedures for the operation and maintenance of its system. These procedures shall include but not be limited to:

(a) detailed instructions for the operation of all major components of the water system, including wells and/or intakes, pumps, chemical feed equipment, etc.

(b) detailed instructions on starting and stopping any treatment plant;

(c) preventive maintenance schedules on equipment;

(d) reporting and public notification requirements;

(e) water quality monitoring, including frequency of monitoring and sampling and analytical procedures for any monitoring conducted by the water system;

(f) sample siting plans;

(g) disinfection requirements for the new construction of, or the repair of, wells, tanks and water lines;

(h) valve and fire hydrant maintenance;

(i) distribution system flushing program;

(j) leak detection and repair program;

(k) cross connection control program; and,

(*l*) safety procedures.

(3) All chemical feed systems that are in operation shall be monitored as often as necessary to ensure proper operation. Documentation must be maintained.

(4) The water from each treatment process shall be sampled and analyzed as often as necessary to ensure that the treatment process is functioning properly, but in no case less than once a day. The operator shall

maintain a written record of all analyses conducted. These records shall be kept for a minimum of three (3) years. Except where otherwise noted, any analyses conducted for compliance with the monitoring requirements of R.61-58.5, R.61-58.10, R.61-58.11 and R.61-58.13, shall be performed by a laboratory certified by the Department and the records of these analyses kept on file in accordance with the retention schedules outlined in the regulations. All other monitoring conducted for the purpose of process control shall be performed using equipment and methodology acceptable to the Department.

(5) If a combined phosphate or poly-phosphate chemical is used, total phosphate residual monitoring may be conducted once every two weeks in lieu of the daily monitoring as required in R.61- 58.7(B)(4).

(6) The operator shall measure the amounts of chemicals used each day and calculate the dosages. The operator shall maintain a written record of all measurements and dosage calculations. These records shall be kept for a minimum of 3 years.

(7) The system shall have immediate access to parts for routine repairs and shall repair any malfunctioning equipment as soon as possible.

(8) Chemical spills shall be cleaned up promptly and disposed of properly. Any chemical spills which are not contained and reach the environment shall be reported to the Department immediately.

(9) Where chlorine gas is used, the following shall apply:

(a) Chlorine gas feed and storage rooms shall be maintained in a reasonably air tight condition. The louvers on the air inlet and on the discharge side of the ventilating fan shall be maintained to ensure proper closure when the fan is not in use. Weather striping on the door shall be maintained in good condition and no opening shall be allowed to exist between the rooms and other parts of the treatment plant. If a floor drain is provided, a water seal or removable plug must be maintained to prevent escaped gases from exiting through the building sewer.

(b) The doors to the chlorine gas feed and storage rooms shall be kept closed except while being occupied by authorized personnel.

(c) The chlorine gas feed and storage rooms shall be well lighted.

(d) Ammonia shall not be stored in the same room with chlorine gas cylinders or feed equipment.

(e) The ventilating fans for the chlorine gas feed and storage rooms shall work properly at all times, and be manually controlled only. If the fans should ever malfunction, they shall be repaired or replaced promptly.

(f) The vents from the feeders and storage shall be maintained free of any debris.

(g) All cylinders (full and empty) shall be restrained.

(h) The chlorinator room shall be heated to maintain proper temperature for operation.

(i) There shall be no equipment housed in the chlorine feed room except chlorinators, chlorine cylinders, weighing scales, heater, ventilation fan, light(s), chlorine gas leak detector(s), and chlorinator appurtenances.

(j) Scales for weighing cylinders shall be calibrated yearly and properly maintained.

(k) The chlorine feed system shall be operated to ensure continuous feed of chlorine when the plant is operating.

(*l*) A chlorine leak detection and alarm system shall be in service at all times.

(m) The public water system shall have an emergency action plan for addressing chlorine leaks.

(10) Where ammonia gas is used, the following shall apply:

(a) Ammonia gas feed and storage rooms shall be maintained in a reasonably air tight condition. The louvers on the air inlet and on the discharge side of the ventilating fan shall be maintained to ensure proper closure when the fan is not in use. Weather striping on the door shall be maintained in good condition and no opening shall be allowed to exist between the rooms and other parts of the treatment plant.

(b) The doors to the ammonia gas feed and storage rooms shall be kept closed except while occupied by authorized personnel.

(c) The ammonia gas feed and storage rooms shall be well lighted.

(d) The ventilating fans for the ammonia gas feed and storage rooms shall work properly at all times, and be manually controlled only. If the fans should ever malfunction, they shall be repaired or replaced promptly.

(e) Chlorine shall not be stored in the same room with ammonia gas cylinders or feed equipment.

(f) The vents from the feeders and storage shall be maintained free of any debris.

(g) All cylinders (full and empty) shall be restrained.

(h) The ammoniator room shall be heated to maintain proper temperature for operation.

(i) There shall be no equipment housed in the ammonia feed room except ammoniators, ammonia cylinders, weighing scales, heater, ventilation fan, light(s), ammonia gas leak detector(s), and ammoniator appurtenances.

(j) Scales for weighing cylinders shall be calibrated yearly and properly maintained. Where bulk storage tanks are installed a pressure gauge shall be maintained.

(k) The ammonia feed system shall be maintained and operated to ensure continuous feed of ammonia when the plant is operating.

(*l*) An ammonia leak detection and alarm system shall be in service at all times.

(m) The public water system shall have an emergency action plan for addressing ammonia leaks.

(11) Where fluoride is added to the water the following shall apply:

(a) The fluoride content of the water shall be maintained between eight-tenths (.80) and one and two-tenths (1.20) milligrams per liter.

(b) Finished water shall be analyzed daily for fluoride content in accordance with methodology specified in Section C(17) of R.61-58.5.

(c) Should a public water system cease fluoridating for any reason the Department shall be notified immediately.

(d) A public water system which fluoridates must notify their service population and all local dental and public health practices prior to ceasing fluoridation.

(12) Adequate safety equipment for handling of chemicals used in treatment shall be provided.

(13) Chemical dosages shall not exceed the maximum dosage specified by the Department.

(14) All emergency power equipment shall be operated at least once per month under load and records of this operation kept on file with the water system.

(15) All chemicals and products added to a public water supply as part of the treatment process shall be certified as meeting the specifications of the American National Standard Institute/National Sanitation Foundation Standard 60, Drinking Water Treatment Chemicals - Health Effects. The certifying party shall be accredited by the American National Standards Institute.

(16) All materials and products installed in a public water system after December 31, 1995, which comes into contact with drinking water during the treatment, storage, transmission or distribution of the water, shall be certified as meeting the specifications of the American National Standard Institute/National Sanitation Foundation Standard 61, Drinking Water System Components - Health Effects. The certifying party shall be accredited by the American National Standards Institute.

(17) All storage and de-watering facilities for water treatment plant residuals shall be maintained in good operating condition. Equipment shall be cleaned and lubricated according to manufacturer's recommendations and the operation and maintenance manual for the plant. Records shall be kept of maintenance performed. There shall be no bypassing of any treatment process to the environment. The facilities shall be monitored in accordance with any operating permit(s) issued by the Department.

(18) Security shall be provided and maintained for all intake, treatment, storage and pumping facilities so as to prevent the entrance of unauthorized persons.

(19) Sampling taps shall be maintained so that representative water samples can be obtained from:

(a) each raw water source;

(b) appropriate locations throughout the treatment process so that the operator can maintain proper control of the treatment process;

(c) effluent from each filter and the combined filter effluent prior to any post chemical addition;

(d) the entry point(s) to the distribution system

(20) All required flow meters shall be maintained and operated in accordance with design criteria.

(21) Secondary containment systems shall be maintained for all liquid chemical storage tanks and solution tanks, capable of receiving and containing accidental spills or overflows. Incompatible chemicals shall not be stored in the same secondary containment area.

C. Surface Water Treatment Plants.

(1) All surface water treatment plants shall have an operator of the appropriate grade present at the plant and responsible for its operation, when the plant is producing water for public consumption.

(2) All enclosed filters shall be opened and inspected per manufacturer's recommendation or as required to ensure proper operation.

(3) All water, chemical and waste lines shall be labeled and color coded to identify line contents and direction of flow (if applicable).

(4) The treatment facility shall be operated such that the Department approved filtration rate is not exceeded at any time, and the pretreatment retention times are not reduced below those times approved by the Department. The treatment facility shall be operated such that hydraulic surges through the filters are minimized during flow rate changes and when filters are removed from service for backwashing.

(5) The use of chemicals for the control of aquatic weeds, algae and water borne organisms in rivers, lakes and reservoirs which are used as a source of water by a public water supply, shall be approved by the Department prior to their use.

(6) Intake screens shall be cleaned as often as is necessary for the proper functioning of the intake station.

(7) All plants shall have an on-site laboratory with the necessary equipment and methodology acceptable to the Department for process control monitoring. If the on-site laboratory is to conduct any analyses for compliance with the monitoring requirements of R.61-58.5, R.61-58.10 , R.61-58.11 and R.61-58.13, it must be certified by the Department.

(8) The following analyses shall be conducted as often as necessary, but no less than once a day, to ensure the treatment plant is functioning properly.

(a) Raw water shall be analyzed for pH, alkalinity, temperature, turbidity and total or fecal coliform bacteria.

(b) The coagulated water shall be analyzed for pH and alkalinity. If a pre- disinfectant and/or oxidant is added, the coagulated water shall be analyzed for the disinfectant and/or oxidant.

(c) The settled water shall be analyzed for turbidity and for disinfectant residual if a pre-disinfectant is used. If the pretreatment unit is used as a disinfectant sequence, the disinfectant concentration, pH and water temperature shall be measured in accordance with the requirements of R.61-58.10 for calculating CT values.

(d) The filtered water shall be analyzed for turbidity. If a pre-filter disinfectant is used, the filtered water disinfectant residual shall be measured.

(e) The finished water (water entering distribution system) shall be analyzed for pH, alkalinity, temperature, disinfectant residual, calcium hardness and turbidity.

(f) The system shall analyze for any additional parameter that the Department may require for a specific plant for special concerns.

(9) The effluent weirs of the sedimentation basins shall be maintained so there is a uniform flow of water over the entire length of the weir.

(10) Flocculation and sedimentation basins and clarifiers shall be cleaned as often as necessary to keep the settled material and algae growths to a minimum.

(11) The reliable capacity of a surface water treatment plant shall be based on the lowest capacity in the treatment train. This shall include, but not be limited to, the capacity of the source, capacity of the raw water pump station with the largest pump out of service, capacity of the rapid mix chamber(s), flocculator(s), sedimentation basin(s), clarifier(s) and filters(s) and the capacity of the high service pump station with the largest pump out of service. If the reliable capacity of a plant is exceeded on a consistent basis during the peak water use months, the Department may elect not to issue any construction permits for new water line construction until the reliable capacity of the plant is increased.

(12) When the average daily demand during any month exceeds eighty (80) percent of the public water system's reliable capacity, as specified in R.61-58.7.C(11), the system shall submit a preliminary engineering report to the Department within one hundred eighty (180) days addressing in detail any upgrade necessary to keep up with any growth in demand on the system. When the average daily demand during any month exceeds ninety (90) percent of the public water system's reliable capacity as specified in R.61-58.7.C(11), the system shall submit to the Department plans and specifications along with an application for a permit to construct the upgrade within one hundred eighty (180) days, unless a longer time period is specified by the Department.

D. Groundwater Sources and Treatment Plants.

(1) All well heads and associated piping shall be inspected at a minimum of once a week. Stand-by wells shall be inspected and exercised at least quarterly. Documentation of these inspections must be maintained.

(2) All groundwater treatment plants shall be monitored by an operator of the appropriate grade, at a frequency to ensure proper operation, but in no case less than once a day. Such monitoring may be accomplished through site visits and/or remote monitoring equipment approved by the Department.

(3) All pressure filters and enclosed aeration devices shall be opened and inspected per manufacturer's recommendation or as required to ensure proper operation.

(4) Valves provided for the isolation of each well shall be maintained to ensure proper operation.

(5) The check valve and blow-off on the well head piping shall be maintained.

(6) Adequate freeze protection for the well head piping shall be maintained.

(7) A flow meter shall be maintained for each well serving a community water system and each well which is equipped with chemical treatment. The meter shall be periodically calibrated to ensure accuracy in accordance with the manufacturer's recommendations. Calibration records shall be kept on file for a minimum of three (3) years.

(8) Drainage systems shall be maintained so that surface water flows away from the well head.

(9) All wells shall be maintained so the sanitary seal, the casing, the screened vent and the concrete pad are in good repair and can prevent the entrance of contamination into the well.

(10) If a well is no longer used, does not meet the requirements of a stand-by or emergency well, and is not converted to another active use (e.g. irrigation), it shall be properly abandoned in accordance with R.61-58.2.B(15).

(11) Public water systems using ground water as its drinking water source shall maintain compliance with R.61-58.2B(1).

(12) The capacity of a public water system which uses groundwater as its only drinking water source, shall be based on all operable wells pumping 16 hours a day or all operable wells minus the largest well pumping 24 hours a day, which ever is less. If the system has an additional source (surface water plant or metered connection from another public water system), the additional capacity from that source shall be used in determining the total capacity of the system. If the capacity of the system is exceeded on a consistent basis during the peak water use months, the system shall submit a preliminary engineering report to the Department within ninety (90) days addressing in detail any upgrade necessary to keep up with any growth in demand on the system. Construction plans and specifications for a new well may be submitted in lieu of the preliminary engineering report. In addition, the Department may elect not to issue any construction permits for new water line construction until the capacity of the system is increased.

(13) The public water system shall conduct monitoring as specified in R.61-58.2(B)(14)(c) when required by the Department to determine if the ground water source is under the direct influence of surface water.

(14) Stand-by wells must be exercised and sampled for total coliform on at least a quarterly basis. In addition, stand-by wells must be sampled annually for nitrate and nitrite. This monitoring is conducted by the water system and records must be maintained for Department inspection. Whenever a stand-by well is put in service, the system must notify the Department as soon as possible, but in no case later than the end of the next business day.

(15) Emergency wells must be exercised on an annual basis to ensure that they are operable. Whenever an emergency well is placed into service, the system must notify the Department as soon as possible, but in no case later than the end of the next business day. In addition, the system must immediately issue a Boil Water Advisory for all portions of the system being served by the emergency well.

E. Distribution Systems and Storage Tanks.

(1) Operator Certification

(a) All distribution treatment plants (e.g. booster chlorination stations) shall be monitored by an operator of appropriate grade, at a frequency to ensure proper operation, but in no case less than once a day. Such monitoring may be accomplished through site visits and/or remote monitoring equipment approved by the Department.

(b) All community and non-transient non-community water systems must designate an operator(s) of appropriate grade as the operator responsible for the operation and maintenance of their distribution system.

(c) All community and non-transient non-community water systems must be operated such that all personnel making decisions which could affect water quality, water quantity, or distribution system integrity be certified distribution system operators. Certified water treatment plant operators that make such decisions as a part of their routine treatment plant operation duties (e.g. starting and stopping distribution pumps) are not required to have dual certification.

(2) All elevated, hydropneumatic and ground storage tanks shall be inspected at a minimum of once a week for the purpose of checking on the security of the tank(s) and insuring that proper air/water ratios are being maintained in hydropneumatic storage tanks. Vent screens, hatches and other openings on atmospheric tanks must be inspected annually to ensure sanitary protection.

(3) The drainage system on any storage tank lot shall be maintained to channel water away from the tank foundations.

(4) Valves provided for the isolation of each tank shall be maintained to ensure proper operation.

(5) Screens shall be maintained on all storage tank vents.

(6) Screens or flap valves shall be maintained on all storage tank overflows.

(7) The minimum pressure in the distribution system under normal operating conditions shall be twenty-five (25) pounds per square inch at a customer's service connection. A minimum pressure of twenty (20) pounds per square inch shall be maintained at all service connections during unusually heavy flows (i.e., fire or flushing).

(8) Each public water system shall maintain a map of the distribution system which shows the location of water lines and their sizes as well as the location of all valves, hydrants and blow-offs. The location of all water sources and all pumping, treatment and storage facilities shall also be included on this map.

(9) Valves and hydrants shall be exercised and maintained in accordance with the system's valve and hydrant maintenance program to ensure operability. Any valves or hydrants that malfunction shall be repaired promptly. Records shall be kept on this maintenance program.

(10) A flow test shall be conducted on all fire hydrants at a minimum of once every three years. The flow from the hydrant shall be measured and recorded along with the static and residual pressure and time of day the test was conducted. The system shall keep a record of the latest test of each hydrant on file.

(11) All community water systems shall initiate and carry out a program aimed at detecting leaks in the distribution system. At a minimum, a leak detection program shall include a comparison of water produced to water sold or used for other purposes. Any leaks found through this program or any leaks discovered through other means shall be repaired promptly. Records shall be kept of the leaks detected and the repairs made.

(12) When a break occurs in a system's distribution line, the repairs to that line must be made promptly and in accordance with good sanitary practices. Precautions shall be taken throughout the repair process to make sure that customers affected by the break will be assured of safe water after the line is placed back into service.

(13) All public water systems shall develop and maintain a flushing program in order to prevent customer complaints caused by stagnant, discolored, and sediment laden water and maintain adequate disinfectant residuals throughout the distribution system. Detailed instructions of this program shall be included in the

system's manual of standard operating procedures. Records of all flushing activities shall be maintained by the system.

(14) The Department shall be notified in writing at least ten (10) days prior to the repainting of the interior or exterior of any storage tank. All interior paint coatings shall be certified as meeting ANSI/NSF Standard 61.

(15) A storage tank that is drained for any reason must be properly disinfected and satisfactory bacteriological samples must be obtained prior to placing it back into service.

(16) The Department shall be notified in writing at least thirty (30) days prior to the entry of an underwater diver into a finished water storage tank for the purpose of inspecting or cleaning of the tank.

F. Cross Connection Control.

(1) General

(a) All public water systems shall initiate and maintain a viable cross connection control program. Such a program shall consist of:

(i) Locating and eliminating unprotected cross connections.

(ii) Maintaining records pertaining to the location of existing backflow prevention assemblies, type and size of each assembly and test results.

(b) 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, sewer or a line from any container of liquids or other substances, unless an approved backflow prevention device or assembly is installed between the public water system and the source of contamination.

(2) Low Hazard Cross Connections

A connection between an approved public water system and another water source not hazardous to health but not meeting the standards of the approved public water system and not cross-connected within its system with a potentially dangerous substance shall be considered a low hazard category cross connection. At a minimum, an approved Double Check Valve Assembly or Pressure Vacuum Breaker must be installed on a low hazard cross connection except as provided for in section 3 below.

(3) Residential Lawn Irrigation Systems

(a) Low hazard residential lawn irrigation systems - Each public water system which has low hazard residential irrigation systems directly or indirectly connected to their public water system must have a written low hazard residential lawn irrigation system cross connection control policy. This policy must be documented in writing and must be approved by the governing body of the public water system. The policy must specify the minimum acceptable device for low hazard residential lawn sprinkler systems. The minimum acceptable device for low hazard residential lawn sprinkler systems is a residential dual check. If a water system specifies another backflow prevention assembly as the minimum acceptable protection for these cross connections, the policy must be approved by the governing body of the public water system with due opportunity being provided for public comment and participation. The written policy must:

(i) Identify the type of backflow prevention device or assembly that is required to be installed on low hazard residential lawn irrigation system connections.

(ii) Establish a schedule for the required testing of double check valve assemblies, or other testable assembly, if testable assemblies are designated by the policy as minimum acceptable protection for low hazard residential lawn irrigation systems. The minimum testing frequency must be specified in the policy and appropriate records must be maintained to verify compliance with the established testing requirements.

(iii) establish a schedule for the required change out of residential dual checks if these are the devices designated by the policy as minimum acceptable protection for low hazard residential lawn irrigation systems. The minimum change out frequency must be specified in the policy and appropriate records must be maintained to verify compliance with the established change out requirements.

(b) High hazard residential lawn irrigation systems - Any residential lawn irrigation system that includes chemical addition, or is also connected to another water source which is not an approved public water system, shall be considered a high hazard cross connection and must meet the requirements of paragraph (4) below.

(4) High Hazard Cross Connections

(a) A connection between an approved public water system and a service or other water system 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. Protection shall be by air gap separation or an approved reduced pressure principle backflow prevention assembly.

(b) Reduced pressure principal backflow prevention assemblies shall not be installed in any location subject to possible flooding. This includes pits or vaults which are not provided with a gravity drain to the ground's surface that is capable of exceeding the discharge rate of the relief valve.

(5) Fire Sprinkler Systems

Fire line sprinkler systems, except those in the high hazard category shall be protected by an approved double check valve assembly. High hazard category fire sprinkler systems shall include, but not be limited to: antifreeze systems, foam systems, systems charged from or tied into ponds, lakes, streams, or any water source other than the approved public water supply. High hazard category fire sprinkler systems shall comply with the requirements of Paragraph (4) above.

(6) Approved Devices and Assemblies

The Department shall prepare and publish a list of backflow prevention assemblies approved by the Department for use in South Carolina, and this list shall be updated at least once annually.

(7) Testing Requirements

When double check valve assemblies, pressure vacuum breakers, and/or reduced pressure principal backflow prevention assemblies are installed to protect a public water system against the possibility of backflow from a customer's water service, routine testing of the assemblies shall be performed by a certified tester.

(a) Each assembly shall be tested by a certified tester after installation and before use by the customer. Except as specified in paragraph 3(a)(ii) above, each assembly shall be tested at least once annually by a certified tester.

(b) The public water system is to receive a written report of the inspection and testing results for all assemblies tested within its distribution system. The report shall be submitted by the certified tester making the inspection and test.

(c) All backflow prevention assemblies shall be tested immediately after repairs of any kind are made to the assembly.

(8) Backflow Prevention Tester Certification

There are four (4) types of certified testers of backflow prevention assemblies: General Tester, Limited Tester, Inspector Tester and Manufacturer's Agent. The definition of each type of certified tester is specified in R.61-58(A).

(a) Each certified tester's license shall expire three (3) years from the date of issue. In order to renew this certification for three (3) more years, the tester shall come before a designated person approved by the Department and shall successfully complete a written examination with a passing score of 70%, and perform the prescribed test on an approved reduced pressure principal backflow prevention assembly, double check valve assembly, and a pressure vacuum breaker using the tester's own differential pressure gauge. The gauge must be accurate within 2% of full scale or plus or minus 0.3 pounds per square inch differential (PSID). Any gauge found to be inaccurate or malfunctioning will be required to be calibrated or repaired as needed to bring it into compliance before certification will be renewed.

(b) Any applicant for certification who fails to properly perform the above prescribed tests will have his certification revoked immediately and will have to successfully complete the state sponsored backflow prevention training and certification course in order to become re-certified as a tester of backflow prevention assemblies in South Carolina.

(c) A certified tester may have his tester's certification revoked due to incompetence or falsification of test results, as determined by the Department.

(d) The Department shall reserve the right to charge or allow for the charge of a nominal fee for the administration of the recertification of testers. This fee shall not exceed fifty dollars ($50.00).

(9) Installation of Pressure Vacuum Breakers

Where used, pressure vacuum breakers shall be installed at a minimum of twelve (12) inches above the highest downstream piping and shall not be subject to backpressure.

G. Operation and Maintenance Requirements for Drinking Water Vending Machines and Dispensing Stations.

(1) All drinking water vending machines and dispensing stations shall be monitored by an operator who holds a valid Bottle Water Class Operator’s Certificate issued by the Department of Labor, Licensing and Regulation, at a frequency to ensure proper operation. Dispensing stations shall be inspected by the operator no less than once a week.

(2) Records shall be kept of each visit by the operator and any other maintenance personnel under the direct supervision of the operator. The records shall show the date and time of the visit, any tests performed, any maintenance performed, and the signature of the operator or maintenance personnel. These reports must be kept by the owner of the vending machine or dispensing station for minimum of two (2) years. These records shall be made available to the Department upon request.

(3) A twenty-four (24) hour telephone number shall be clearly posted on the front of each machine or dispensing station for use in emergencies or for consumer complaints. A record of any consumer complaints shall be kept on file with the owner of the machine for a minimum of three years, and shall be made available to the Department upon request.

(4) Each machine will be considered a transient non-community water system and shall comply with the monitoring requirements of R.61.58.5.

(5) Vending machines shall be operated and maintained in accordance with the manufacturer's recommendations.

H. Operating and Monitoring Requirements for Bottled Water Plants.

(1) All bottled water treatment plants shall be monitored on a daily basis by an operator of the appropriate grade to insure proper operation. This monitoring must be by site visitation. No remote monitoring shall be allowed.

(2) All sources used by bottled water plants in the State shall be approved by Department prior to their use. These sources shall be monitored on an annual basis for all contaminants specified in R.61-58.5, R.61-58.10, and R.61-58.11. The results of this monitoring shall be submitted to the Department by the January 10th following the year for which the monitoring is conducted. If the source is from the distribution system of existing public water system in the State, this monitoring is not required. However, the operator of such a bottled water plant shall hold a valid Bottle Water Class Operator’s Certificate issued by the Department of Labor, Licensing and Regulation.

(3) No surface water sources or groundwater sources under the direct influence of surface water shall be used for bottled water unless the requirements of R.61-58.10 are met.

I. Operation and Maintenance of Aquifer Storage and Recovery (ASR) Wells.

(1) All ASR wells must be operated and maintained in accordance with their construction and operating permits(s) and any approved modifications.

(2) The Department may require routine testing of specific water quality parameters. Results of such testing must be submitted to the Department upon request or at a frequency established by the Department.

(3) Records must be kept of total flow volume into and out of an ASR well. Such records must be submitted to the Department upon request or at a frequency established by the Department.

(4) For the purposes of determining compliance with R.61-58.7.C(12) and R.61-58.7.D(12), the Department may consider up to ninety (90) percent of the water stored in an ASR well(s) as an additional source of water in lieu of requiring the expansion of existing sources or treatment facilities or the development of new sources or treatment facilities on a case-by-case basis.