

**401 KAR 8:030. Water treatment plant and water distribution system classification and staffing.**

RELATES TO: KRS 223.180, 223.190, 223.200, 223.210, 223.220, 224.10-110, 42 U.S.C. 300g-7, Section 1419

STATUTORY AUTHORITY: KRS 223.180 - 223.220, 224.10-100, 224.10-110

NECESSITY, FUNCTION, AND CONFORMITY: KRS 223.180-223.220 authorizes the cabinet to classify water treatment plants and distribution systems based on size, type, and physical condition and according to the skill, knowledge, and experience needed by the plant operator. KRS 224.10-110 requires the cabinet to enforce administrative regulations for the regulation and control of the purification of water for public and semipublic use and for the certification of water plant operators. This administrative regulation establishes standards for the staffing and classification of water treatment plants and water distribution systems.

**Section 1. General Provisions.**

(1)

- (a) A public water system shall be operated according to the provisions of KRS Chapters 223 and 224 and 401 KAR Chapter 8.
- (b) A certified operator shall not be required for a semipublic water system.
- (c) Except as established in subsection (3)(c)1b, 2b, and 4b of this section, a public water system shall be operated by a certified operator, other than an operator-in-training, in direct responsible charge who holds a valid certificate in a class equal to or higher than that required for the system under supervision.

(2)

- (a) A Class I Operator In Training shall not be in direct responsible charge of a water treatment, distribution, or bottled water system.
- (b) A certified operator with an Operator In Training designation shall work under the direct supervision of a certified operator who:
  - 1. Works at the same facility; and
  - 2. Has obtained a certification level that is equal to or greater than the certification level required to serve in direct responsible charge of the facility.
- (c) An Operator In Training may have direct responsible charge for a water treatment or water distribution system for which the operator holds a valid certification in a class equal to or higher than that as required by 401 KAR 11:040.

(3) Staffing requirements.

- (a) Water distribution systems. A water distribution system shall be operated by or under the supervision of a distribution system operator certified in a class equal to or higher than the class of the distribution system.
- (b) Combination water treatment plants and water distribution systems.
  - 1. A combination water treatment plant or water distribution system shall be classified as Class IA-D, Class IB-D, or Class IIB-D.
  - 2. A system classified as a combination system in subparagraph 1. of this paragraph shall be operated by or under the supervision of an operator who:
    - a. Holds an active combination or separate water treatment and distribution system operator certificate of the appropriate class or higher; and
    - b. Who shall be in direct responsible charge of the system.
  - 3. A certified operator of a Class IA-D combination system shall be at the water treatment plant if water is being treated, unless the operator is performing other system-related duties.
- (c) Water treatment plants.
  - 1. Class IIA.

- a. Except as established in subparagraph b. of this paragraph, if water is being treated, a Class IIA water treatment plant shall be operated by a certified water treatment plant operator who:
  - (i) Holds an active certificate in a class equal to or higher than Class IIA who shall be in direct responsible charge of the plant; and
  - (ii) Shall be present at the water treatment plant or performing system-related duties.
- b. A Class IIA water treatment plant that treats water during more than one (1) shift per day may employ a Class IA-D certified operator for one (1) shift per day, other than the shift worked by the Class IIA operator in direct responsible charge, if the Class IIA operator in direct responsible charge shall be able to respond on site within thirty (30) minutes.
2. Class IIIA.
  - a. Except as established in subparagraph b. of this paragraph, if water is being treated, a Class IIIA water treatment plant shall be operated by a certified water treatment plant operator who:
    - (i) Holds an active certificate in a class equal to or higher than Class IIIA who shall be in direct responsible charge of the plant; and
    - (ii) Shall be present at the water treatment plant or performing system-related duties.
  - b. A Class IIIA water treatment plant that treats water during more than one (1) shift per day may employ a Class IIA operator for one (1) shift per day, other than the shift worked by the Class IIIA operator in direct responsible charge, if the Class IIIA operator in direct responsible charge shall be able to respond on site within thirty (30) minutes.
3. Class IIIB. A Class IIIB water treatment plant shall be operated by or under the supervision of a certified water treatment plant operator who:
  - a. Holds an active certificate in a class equal to or higher than Class IIIB; and
  - b. Who shall be in direct responsible charge of the system.
4. Class IVA.
  - a. Except as established in subparagraph b. of this paragraph, if water is being treated, a Class IVA water treatment plant shall be operated by a certified water treatment plant operator who:
    - (i) Holds an active Class IVA certificate who shall be in direct responsible charge of the plant; and
    - (ii) Who shall be present at the water treatment plant or performing system-related duties.
  - b. A Class IVA water treatment plant that treats water during more than one (1) shift per day may employ a Class IIIA operator for one (1) shift per day, other than the shift worked by the Class IVA operator in direct responsible charge, if the Class IVA operator in direct responsible charge shall be able to respond on site within thirty (30) minutes.
5. Class IVB. A Class IVB water treatment plant shall be operated by or under the supervision of a certified water treatment plant operator who holds an active certificate in a class equal to or higher than Class IVB who is in direct responsible charge of the system.
6. A public water system may propose an alternate staffing plan to the staffing requirement established in this paragraph.
  - a. The proposal shall be submitted to the cabinet and shall thoroughly explain the alternate proposal.
  - b. The proposal shall demonstrate:

- (i) A necessity for the water system to vary from the requirements in this paragraph; and
  - (ii) An equal level of protection of human health and the environment.
- c. The cabinet shall not approve an alternate proposal that does not propose that a duly certified operator in direct responsible charge operate a water treatment plant, in accordance with KRS 223.210.
- (d) Bottled Water Systems. A bottled water treatment plant shall be operated by or under the supervision of a certified water treatment plant operator who:
  - 1. Holds an active bottled water certification; and
  - 2. Who shall be in direct responsible charge of the system.
- (e) System-related duties shall be for:
  - 1. Class IIA, Class IIIA, and Class IVA water systems, duties related to the operation and maintenance of the water treatment plant; or
  - 2. Class IA-D water systems, duties related to the operation and maintenance of the water treatment plant and distribution system.
- (4)
  - (a) A public water system may comply with the staffing requirements of this section by securing a contract operator or an operations firm.
  - (b) If a public water system secures a contract operator or operations firm to operate a treatment plant or distribution system, the public water system shall provide to the cabinet:
    - 1. Name, mailing address, and telephone number of the:
      - a. Certified operator or contract operations firm; and
      - b. Principal contact within the firm for certification activities, if different;
    - 2. Name, certificate type, and certificate number for each certified operator;
    - 3. Facility name, public water supply identification number, and county location of each system for which the contract or operations firm operator is assuming responsibility;
    - 4. Effective date and expiration date of the contract; and
    - 5. Duties and responsibilities of each party to the contract.
- (5) Certificate display. If a public water system office is available at the water treatment plant or within the distribution system, each operator's certificate shall be prominently displayed.
- (6) Reporting requirements.
  - (a) A public water system shall notify the cabinet in writing within thirty (30) calendar days of a certified operator employment change.
  - (b)
    - 1. A certified operator shall notify the cabinet within thirty (30) calendar days of a change in employment or mailing address.
    - 2. Employment change information shall include:
      - a. The name and identification number of the public water system;
      - b. The effective date of the change; and
      - c. Whether the operator is assuming or relinquishing responsibility for the plant or system.

Section 2. Classification of Water Treatment Plants and Water Distribution Systems. There shall be four (4) classes of water treatment plants, Class I, II, III, or IV; two (2) subclasses of treatment types, A or B; four (4) classes of water distribution systems, Class I, II, III, or IV; and one (1) bottled water class.

- (1)
  - (a) Class IV is the highest class and subclass A is the highest subclass.

- (b) Combined treatment and distribution classifications for Class I and II systems shall be Class IA-D, Class IB-D, and Class IIB-D.
- (2) The water treatment plant and water distribution system classifications shall correspond to the operator classifications established in 401 KAR 11:040.
- (3) A public water system shall be classified according to the criteria in subsection (4) of this section.
- (a)
1. The cabinet may change a public water system classification if necessary because of:
    - a. Complexity of the system due to engineering design;
    - b. Source water quality; or
    - c. Operation conditions.
  2. Notice of a change shall be given to the owner of the public water system.
- (b) The cabinet shall reclassify a nontransient noncommunity water system that treats water primarily for its industrial process with limited employee use if the calculated portion of the water produced by the water treatment plant not used for the industrial process averages less than ten (10) percent of the average daily production averaged over the most recent twelve (12) months.
- (4)
- (a)
1. A water treatment plant or system based on the cabinet-assigned design capacity for finished water production the treatment plant is able to produce in twenty-four (24) continuous hours of production, taking into consideration all limiting factors and the treatment process employed.
  2. A water treatment plant classification shall be as established in Table 1 of this subsection.
- (b)
1. A water distribution system shall be classified according to population served, determined as established in 401 KAR 8:200, Section 3.
  2. A water distribution system classification shall be as established in Table 1 of this subsection.

Table 1

|           | Water Treatment Plant (Assigned Design Capacity)                        | Water Distribution System (Population Served)        |
|-----------|-------------------------------------------------------------------------|------------------------------------------------------|
| Class I   | Less than 50,000 gallons per day                                        | Less than 1,500                                      |
| Class II  | 50,000 gallons or more per day but less than 500,000 gallons per day    | Equal to or greater than 1,500 but less than 15,000  |
| Class III | 500,000 gallons or more per day but less than 3,000,000 gallons per day | Equal to or greater than 15,000 but less than 50,000 |
| Class IV  | 3,000,000 gallons or more per day                                       | Equal to or greater than 50,000                      |

- (c) Each class of water treatment plan shall be subdivided according to the type of treatment used by the plant. The subclasses shall be:
1. Subclass A: a water treatment plant that treats:
    - a. Surface water or groundwater under the direct influence of surface water; or

- b. Groundwater not under the direct influence of surface water that uses gravity filtration; and
  - 2. Subclass B: a water treatment plant that treats groundwater:
    - a. Not under the direct influence of surface water and uses a filtration process other than gravity filtration; or
    - b. Not under the direct influence of surface water that does not use filtration processes.
  - (d) A combination treatment and distribution system shall be classified as Class IA-D, Class IB-D, or Class IIB-D.
  - (e) Each treatment plant comprising a single public water system shall be classified in accordance with this section, and each plant shall be operated in accordance with Section 1 of this administrative regulation.
  - (5) A bottled water treatment plant classification shall only apply to a bottled water system that bottles water for sale.
  - (6) Limited. A limited classification is available to a water treatment facility serving a school or a semipublic water system.
- (17 Ky.R. 592; 1428; eff. 11-15-1990; 19 Ky.R. 419; eff. 8-27-1992; 23 Ky.R. 3079; 3808; 24 Ky.R. 70; 332; eff. 8-12-1997; TAm eff. 8-9-2007; 36 Ky.R. 442; 1041; 1450; eff. 2-5-2010; TAm eff. 10-19-2011; TAm eff. 12-11-2017; Crt eff. 10-3-2018; 45 Ky.R. 3516; 46 Ky.R. 947; eff. 11-1-2019.)