



## Ohio Administrative Code

### Rule 3745-7-03 Public water system classification and staffing requirements.

Effective: August 15, 2018

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Each public water system or water treatment plant and distribution system within a public water system shall be classified in accordance with this rule, with the exception of transient noncommunity public water systems using groundwater, without treatment for nitrate, arsenic or 4-log removal of viruses and having the potential to serve populations of two hundred fifty or fewer. In lieu of making a potential to serve population determination of two hundred fifty or fewer, a transient noncommunity public water system may demonstrate an average daily flow of less than one thousand two hundred fifty gallons per day.

All systems classified under this rule shall provide the minimum staffing required in accordance with this rule.

#### (A) Applicability.

(1) Public water systems or water treatment plants and distribution systems within a public water system shall be classified in accordance with this rule and shall be staffed in accordance with paragraph (C) of this rule by either a professional operator of record pursuant to paragraph (A)(1) of rule 3745-7-02 of the Administrative Code or a backup professional operator pursuant to paragraphs (C)(3)(c), (C)(3)(d) and (C)(3)(e) of this rule.

(2) The owner of a public water system may request that the director reclassify the facility in accordance with the provisions of this rule at any time.

#### (B) Classification.

(1) A public water system or water treatment plant and distribution system within a public water system shall be classified in accordance with paragraphs (B)(2) to (B)(3) of this rule based on the approved design flow, degree of risk to public health or the environment, and the complexity of the treatment plant operation.



(a) The classification of a particular public water system or water treatment plant and distribution system within a public water system may change when there are system changes that affect the quality of the source, the complexity of treatment or the distribution system, the population the system has the potential to serve, or potential public health hazards.

(b) The director shall issue a certificate to each public water system indicating the classification of each water treatment plant and distribution system within the system. The owner shall display each certificate for public examination at the water treatment plant or principal office of the public water system.

(2) Distribution system.

(a) The director shall classify as a class I water distribution system:

(i) The distribution system of each public water system if the system has the potential to serve a population of less than twenty-five thousand per day and is not part of a class A public water system as defined in table 1 of this rule.

(ii) Each public water system that consists solely of a distribution system if the system has the potential to serve a population of less than twenty-five thousand per day and is not part of a class A public water system as defined in table 1 of this rule.

(b) For distribution systems that are not classified as a class I water distribution system under paragraph (B)(2)(a) of this rule and are not part of a class A public water system as defined in table 1 of this rule, the director shall classify the distribution system of each public water system and each public water system that consists solely of a distribution system as a class II water distribution system.

(c) Each public water system that purchases water from another public water system and provides additional treatment shall have the treatment system classified in accordance with table 1 of this rule.

(3) Unless classified as a class A system in accordance with number 10 of table 1 of this rule, public



water systems shall be classified according to the criteria in numbers 1-9 of table 1 of this rule.

	System characteristics	Design flow*	Classification
1.	Surface water treatment, excluding slow sand filtration	More than 5.0 MGD	Class IV
		5.0 MGD or less	Class III
2.	Slow sand filtration surface water treatment	All	Class II
3.	Ground water treatment to remove any chemical contaminant with a maximum contaminant level (arsenic, nitrate, etc.) -or- precipitative softening ground water treatment	More than 5.0 MGD	Class III
		0.5 to 5.0 MGD	Class II
		Less than 0.5 MGD	Class I
4.	Ground water treatment for any contaminant with a secondary maximum contaminant level# or that only involves adding a disinfectant, but in either case excluding precipitative softening ground water treatment	More than 5.0 MGD	Class III
		2.5 to 5.0 MGD	Class II
		Less than 2.5 MGD	Class I



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5.	Nontransient noncommunity groundwater treatment systems that have the potential to serve a population > 250 or a daily average flow >1250 gallons per day and serve a population < 1,000 not meeting the criteria of paragraph (1) and paragraph (4) of this table	Not applicable	Class I
6.	A transient noncommunity groundwater system that has the potential to serve a population < 250 or an average daily flow of 1250 gallons per day or less which treats for nitrate, arsenic or 4-log virus inactivation and removal	Not applicable	Class I
7.	A purchased water system that provides additional treatment and has the potential to serve a population of twenty-five thousand per day or greater	Not applicable	Class II
8.	A purchased water system that provides additional treatment, does not meet the criteria in paragraph (10) of this table and has the potential to serve a population of less than twenty-five thousand per day	Not applicable	Class I
9.	Public water systems meeting the criteria of paragraphs (10)(a) to (10)(c) but not paragraph (10)(d) of this table	Not applicable	Class I
10.	Public water systems meeting all of the following criteria:	Not applicable	Class A



	(a) Is a community or nontransient noncommunity public water system that has the potential to serve a population of no more than 250 or produces an average daily flow of less than 1250 gallons per day, or a transient noncommunity public water system that has the potential to serve a population greater than 250 or produces an average daily flow of greater than 1250 gallons per day.		
	(b) Uses only purchased water or a ground water source		
	(c) Does not provide precipitative softening or treat for a chemical contaminant with a maximum contaminant level or action ll as defined in rule 3745-81-01 of the Administrative Code		
	(d) Has no serious public health or environmental hazard associated with the operation of the public water system		

\* MGD = Million gallons per day

# "Secondary maximum contaminant level" is as defined in rule 3745-82-01 of the Administrative Code.

(C) Staffing.

(1) A professional operator of record shall, at a minimum, be physically present at the public water system and fulfill the time requirements, as detailed in table 2, and perform technical operation as assigned by the owner of a public water system or their designee. Time spent working on equipment



within the service area of a public water system, as part of a professional operator of record's normal job responsibilities, shall count toward the minimum staffing time requirements.

System classification	Staffing requirement
Class A without treatment or only treating with a cartridge filter	At least 30 minutes per week.
Class A with treatment	2 days per week for a minimum of 1 hour per week.
Class I	3 days per week for a minimum of 1.5 hours per week.
Class II	5 days per week for a minimum of 20 hours per week.
Class III and IV	5 days per week for a minimum of 40 hours per week.

(2) Distribution system staffing.

(a) The owner of a class I distribution system shall ensure that a professional operator of record or a professional operator that is certified in the field of water distribution or water supply, class A operators excluded, performs visits to any portion of the distribution system at least three days per week. The owner of the distribution system shall maintain documentation regarding their authorization of individuals other than the professional operator of record to perform these visits. The individual performing the visit shall document the visit in the log book and report any problems to the professional operator of record.

(b) The owner of a class II distribution system shall ensure that a professional operator of record or a professional operator that is certified in the field of water distribution or water supply, class A operators excluded, performs visits to any portion of the distribution system at least five days per week. The owner of the distribution system shall maintain documentation regarding the authorization of individuals other than the professional operator of record to perform these visits. The individual performing the visit shall document the visit in the log book and report any problems to the professional operator of record.

(3) Exceptions.



(a) During periods when the public water system is not producing or treating water it shall not be necessary to meet the staffing requirements in paragraph (C)(1) of this rule.

(b) Upon application by the owner of the system using a form acceptable to the director, and the director's approval of the system operating plan described in paragraph (C)(3)(b)(i) of this rule, the director shall reduce the minimum staffing requirement for the professional operator of record of a class II, III, or IV public water system to no less than five days a week for a minimum of ten hours per week. The director shall not grant a reduction to a public water system where a professional operator of record cannot respond to operational problems within one hour, a public water system that has a history of noncompliance with maximum contaminant levels, treatment techniques, sampling, reporting, or any other violations related to the public water system, or a public water system under formal enforcement.

(i) Public water systems shall submit an operating plan for the system as part of the application for a staffing reduction. The operating plan shall include a description of the level of automation and continuous monitoring at the facility, a standard operating procedure for any such automation or continuous monitoring equipment, and a detailed operations schedule showing the number of professional operators, the certification level, and the number of hours spent per week at the public water system. The description of the continuous monitoring shall include a description of the calibration frequency, verification of calibration and records maintenance. Reductions in minimum staffing for the professional operator of record may be granted in accordance with the criteria in Table 3 and Table 4 of this rule, either singly or in combination, based on the information provided in the system's operating plan. In no case shall a reduction of greater than thirty hours per week be granted for a class III or IV facility, or ten hours per week for a class II facility.

	Professional operator of record staffing may be reduced by 5 hours per week if:	Professional operator of record staffing may be reduced by 10 hours per week if:	Professional operator of record staffing may be reduced by 15 hours per week if:	Professional operator of record staffing may be reduced by 20 hours per week if:
Plant staffing at class III or IV water treatment plants	There is another professional operator certified at a level no more than 2 classes below that of the public water system onsite at the water treatment plant 2 hours per day 5 days per week	There is another professional operator certified at a level no more than 2 classes below that of the public water system onsite at the water treatment plant 4 hours per day 5 days per week	There is another professional operator certified at a level no more than 2 classes below that of the public water system onsite at the water treatment plant 6 hours per day 5 days per week	There is another professional operator certified at a level no more than 2 classes below that of the public water system onsite at the water treatment plant 8 hours per day 5 days per week



Plant staffing at class II water treatment plants	There is a class I professional operator onsite at the water treatment plant 3 hours per day 5 days per week	There is a class I professional operator onsite at the water treatment plant 4 hours per day 5 days per week	Not applicable	Not applicable
Plant staffing at class II water treatment plants	There is a Class 1 professional operator in training onsite at the water treatment plant for 6 hours a day 5 days per week	There is a Class 1 professional operator in training onsite at the water treatment plant for 8 hours a day 5 days per week	Not applicable	Not applicable

	Professional operator of record staffing may be reduced by 5 hours per week if:	Professional operator of record staffing may be reduced by 10 hours per week if:	Professional operator of record staffing may be reduced by 15 hours per week if:	Professional operator of record staffing may be reduced by 20 hours per week if:
Automation or continuous monitoring at class II, III or IV plants	The water treatment plant has supervisory control and data acquisition ("SCADA") and continuous monitoring for MCL and treatment technique monitoring (turbidity, fluoride, pH, flow, temperature and chlorine residual, if applicable)	The water treatment plant is automated with continuous monitoring for the parameters required in the 5 hour reduction	The water treatment plant is automated with continuous monitoring for the parameters required in the 5 hour reduction and the water treatment plant must also have personnel onsite at the water treatment plant or an electronic notification system that notifies the professional operator of record when there are problems with the water treatment plant	The water treatment plant is automated with continuous monitoring for the parameters required in the 5 hour reduction and an electronic notification system or certified professional operators on each shift that will notify the professional operator of record when there are problems with the water treatment plant. The water treatment plant must also have the ability to be operated remotely or have a certified professional operator respond within 30 minutes

(ii) Any change in the circumstances under which the reduction was approved (e.g., retirement of a professional operator listed in the approved staffing plan, loss of the professional operator of record, reduction in the workforce, removal or failure of automation or continuous monitoring, etc.) will require that the system immediately return to compliance with the minimum staffing requirements in paragraph (C)(1) of this rule. This provision shall not preclude a public water system from submitting a modified operating plan.

(iii) For a system operating plan to receive director's approval under table 4 of this rule, continuous





monitors shall be calibrated in accordance with manufacturer standards or applicable regulations, whichever is more stringent. Calibration verification shall be conducted at least once per week or in accordance with applicable regulations, whichever is more stringent. Records of the calibrations and verifications shall be maintained for three years.

(c) The professional operator of record of a class II, III, or IV public water system or class II water distribution system may be replaced by a backup professional operator with a certificate one classification lower than the public water system's classification for a period of up to thirty consecutive days. The use of this provision does not require notification to the agency. The operational records shall clearly indicate every time the backup professional operator is being used to meet the minimum staffing requirement. This provision may not be used to routinely circumvent minimum staffing requirements. In the case of systems which utilize an established flex work schedule of four ten-hour days, the use of a professional operator with a certificate one classification less than the facility to staff the facility on the fifth day of the week shall not be considered an attempt to circumvent the minimum staffing requirements.

(d) Upon proper justification, such as military leave or long term illness, the director may authorize the replacement of the professional operator of record for a class II, III, or IV public water system or class II water distribution system by a backup professional operator with a certificate one classification lower than the facility for a period of greater than thirty consecutive days. Such requests shall be made in writing to the district office in which the system is located.

(e) If the designated professional operator of record is unable to meet the minimum staffing requirements at a class A or class I public water system, then a professional operator with a certificate equal to or higher than the public water system may serve as the professional operator of record until such time as the designated professional operator of record is available. The operational records shall clearly indicate every time the backup professional operator is being used to meet the minimum staffing requirement. The use of this provision does not require notification to the agency unless the use of the backup professional operator exceeds thirty consecutive days. In the event the use of a backup professional operator under this provision exceeds thirty consecutive days, the owner or professional operator shall provide notice in accordance with paragraph (A)(1) of rule 3745-7-02 of the Administrative Code.



(f) Any professional operator fulfilling the role of a backup professional operator shall be held responsible for any violations that occur during the period when they are acting as the backup professional operator.

(g) In the event a public water system has more than one water treatment plant within one hundred feet of another water treatment plant, the public water system may submit a request on a form acceptable to the director, for a fifty per cent reduction of the hourly minimum staffing requirements for each water treatment plant. The request shall include documentation of the distance between the two facilities and documentation that the facilities are not under enforcement and have been in compliance with maximum contaminant levels, treatment techniques, sampling, reporting and professional operator certification requirements for the three years prior to the request. Upon receiving a complete application, the director may approve the minimum staffing reduction. Any change in the circumstances under which the reduction was approved (e.g., enforcement action entered, violation of the professional operator certification requirements, monitoring violations, etc.) will require that the system immediately return to compliance with the minimum staffing requirements in paragraph (C)(1) of this rule. This provision shall not preclude the public water system from submitting a modified operating plan. A reduction granted under this provision in combination with any other reductions available in this rule shall not reduce the minimum staffing requirements at a class II, III or IV facility to less than five days per week for a minimum of ten hours per week.

(D) Additional staffing requirements.

(1) The professional operator of record of the public water system or backup professional operator authorized under paragraphs (C)(3)(c), (C)(3)(d) and (C)(3)(e) of this rule shall be available during all periods of public water system operation.

(2) Visits to all public water systems classified in accordance with this rule shall be performed by the owner, supplier, or a representative or agent of the owner or supplier seven days per week and noted in the operational and maintenance records required by rule 3745-7-09 of the Administrative Code. Visits shall not be necessary when the public water system is not in operation.

(3) In the event a public water system can document the existence of automation and continuous



monitoring which provides a greater level of reasonable assurance that a facility is maintaining compliance, the system may request a waiver of the visit requirement contained in paragraph (D)(2) of this rule. In order to request a waiver, the public water system shall submit a request on a form acceptable to the director. The public water system shall demonstrate the system continuously monitors flow, pH, turbidity, disinfection and fluoridation, if applicable, at the entry point to the distribution system. The public water system shall also demonstrate the system continuously monitors chlorination, if applicable, at representative points in the distribution system. The public water system shall document alarm set points for each parameter that are protective of human health. Set points shall be set in such a manner that an appropriately certified professional operator can respond to correct a problem prior to the violation of regulatory limits. The public water system shall document that the monitoring system has the ability to notify public water system personnel when a value outside a set point has been detected. The public water system shall demonstrate the ability for a professional operator, certified at a level equal to or higher than that of the public water system, to respond to the system within an hour of a value outside a set point being detected.

The meters shall be calibrated in accordance with Ohio EPA regulations or manufacturer standards, whichever is more stringent. At a minimum, the calibration of all continuous monitors shall be verified on a weekly basis. Flow meter readings shall be within a plus or minus ten per cent of the reading determined by the method for calibration verification. Readings for chemical monitors shall be within the acceptable limits established in the "Ohio EPA, Laboratory Manual for Chemical Analyses of Public Drinking Water 2014."

In the event the calibration verification determines the monitor is outside of acceptable limits, the public water system shall immediately notify the district office of the problem and return to having an owner's representative visit the facility seven days per week. Once the meter has been repaired or recalibrated, the facility may discontinue having an owner's representative visit seven days per week and return to the monitoring approved by the director.

All of the information required in paragraph (D)(3) of this rule, shall be documented in the facility's operation and maintenance records. In the event any of the following occur, the public water system shall return to having an owner's representative visit the facility on a daily basis:

(a) Failure of the continuous monitoring equipment.



(b) Failure to follow the procedures identified in paragraph (D)(3) of this rule.

(c) Failure to maintain the appropriate records.

(d) Enforcement is initiated against the public water system.

(E) The classification of a professional operator of record, and the numbers of days per week and hours per week for staffing requirements specified in paragraph (C) of this rule are minimum requirements. In order to protect public health and welfare and based on specific circumstances or treatment complexity at a public water system, the director may require a public water system to be operated by a professional operator of record with a higher classification than the minimum requirement, or may require one or more professional operator of record to visit a public water system or water treatment plant and distribution system within a public water system more frequently and for more hours per week than the minimums required by this rule.

[Comment: This rule incorporates the "Ohio EPA Laboratory Manual for the Chemical Analyses of Drinking Water 2014" by reference. Copies are available at [http://epa.ohio.gov/portals/28/documents/labcert/CHEMMAN%202014\\_final.pdf](http://epa.ohio.gov/portals/28/documents/labcert/CHEMMAN%202014_final.pdf) and at the "Ohio EPA, Lazarus Government Center, 50 West Town Street, Suite 700, Columbus, OH, 43215." Copies can also be obtained by contacting the laboratory certification office at 614-644-4245.]