

## CHAPTER 631. PUBLIC WATER SUPPLY OPERATION

[Authority:27A O.S., §§ 1-3-101, 2-2-101, 2-2-201, and 2-6-301 et seq.]

[Source:Codified 6-12-00]

### SUBCHAPTER 1. INTRODUCTION

#### **252:631-1-1. Purpose**

(a) This chapter sets the operation standards for Public Water Supply systems so they may provide safe drinking water. This Chapter is analogous to the federal PWS program. Other rules may govern Public Water Supply system operations, such as the Discharge Regulations (OAC 252:606), Laboratory Accreditation (OAC 252:301), TNI Laboratory Accreditation (OAC 252:307), Minor Public Water Supply Systems (OAC 252:624), Public Water Supply Construction Standards (OAC 252:626) and Operator Certification (OAC 252:710). This Chapter implements the "Oklahoma Water Supply Systems Act" at Title 27A, § 2-6-301 and following.

(b) This chapter applies to any person or entity, including any federal facility, that operates a Public Water Supply system in Oklahoma, except for minor public water supply systems, which are regulated in OAC 252:624.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 18 Ok Reg 1999, eff 6-11-01; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 25 Ok Reg 2305, eff 7-11-08; Amended at 33 Ok Reg 1490, eff 9-15-16]

#### **252:631-1-2. Definitions**

In addition to terms defined in Title 27A of the Oklahoma Statutes, the following words or terms, when used in this Chapter, shall have the following meaning unless the context clearly indicates otherwise:

**"Accredited laboratory"** means a laboratory accredited through the DEQ laboratory accreditation program.

**"AWWA"** means the American Water Works Association.

**"Direct Integrity Test"** means a physical test applied to a membrane unit in order to identify and isolate integrity breaches.

**"DEQ"** means the Oklahoma Department of Environmental Quality.

**"Disinfection"** means a process that inactivates pathogenic organisms in water by chemical oxidants or equivalent agents.

**"EPA"** means the Environmental Protection Agency.

**"Groundwater under the direct influence of surface water"** means any water beneath the surface of the ground with significant occurrence of insects or other macroorganisms, algae, or large-diameter pathogens such as *Giardia Lamblia* or *Cryptosporidium*, or significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH that closely correlate to climatological or surface water conditions.

**"Indirect Integrity Monitoring"** means monitoring some aspect of membrane filtrate water quality that is indicative of the removal of particulate matter.

**"Laboratory checks"** means chemical, radiochemical, physical, bacteriological, and microbiological tests made in a laboratory approved by the DEQ, on water samples submitted to confirm the quality of the water.

**"Maximum contaminant level (MCL)"** means the maximum permissible level of a contaminant in a Public Water Supply system that has been determined to be necessary to safeguard the public health as specified in these regulations.

**"Maximum residual disinfectant level (MRDL)"** means the level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap without an unacceptable possibility of adverse health effects.

**"Minor public water supply system"** means a water system not included in the public water supply system definition. Minor public water supply systems are regulated by OAC 252:624.

**"OAC"** means Oklahoma Administrative Code.

**"Operating records and reports"** means the daily record of data connected with the operation of the system compiled in a monthly report.

**"OWRB"** means the Oklahoma Water Resources Board.

**"Point of connection (POC)"** means the point at which a consecutive system receives water from the wholesale system. This is not the same as a "point of entry."

**"Point of entry (POE)"** means the point at which a source or combination of sources enters the distribution system.

**"Primary Drinking Water Standards"** means the maximum levels of contaminants as listed in 40 CFR Part 141 which are limited in drinking water in order to protect public health.

**"Protected groundwater free of sanitary defects"** means a ground water source that is properly designed and permitted, practices full-time chlorination, and is properly operated and maintained as evidenced by no critical deficiencies on inspections.

**"Public Water Supply (PWS) system"** means any system providing water for human consumption through pipes or other constructed conveyances, if such system has at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days per year, whether receiving payment for same or not. Multi-family dwellings, manufactured home communities, mobile home parks, recreational vehicle (RV) parks, and correctional facilities, which are constructed, inspected and maintained under a State or locally approved plumbing code, purchase water from a permitted water system, do not provide treatment, and do not resell water, are not classified as a Public Water Supply system. The following are the categories of Public Water Supply systems:

(A) **"Community water system"** means any PWS system that serves at least fifteen (15) service connections used by year-round residents or regularly serves at least twenty-five (25) year-round residents.

(B) **"Non-community water system"** means any PWS system that serves an average of at least twenty-five (25) individuals at least sixty (60) days per year but is neither a community water system nor a non-transient non-community water system.

(C) **"Non-transient non-community (NTNC) water system"** means any PWS system that is not a community water system and that regularly serves at least twenty-five (25) of the same persons over six (6) months per year.

**"Residual disinfectant concentration"** means the concentration of disinfectant measured in milligrams per liter (mg/l) in a representative sample of water.

**"Secondary standard"** means a non-mandatory guideline that has been determined to be desirable to provide acceptable drinking water.

**"Slow sand filtration"** means a process involving passage of raw water through a bed of sand at low velocity (generally less than 50 gallons/sq.ft./day) resulting in substantial particulate removal by physical and biological mechanisms.

**"Source"** means any lake, stream, spring or groundwater supply that is used as treated or untreated water for a PWS system.

**"Total coliform positive sample"** means a sample in which one or more coliform organisms are found.

**"Treatment technique"** means the practice of a PWS system to properly remove pathogens and total organic carbon.

**"Turbidity"** means the amount of suspended material in water as measured by Nephelometric Turbidity Units (NTU).

**"Water Treatment"** means the act of removing contaminants from source water or adjusting water quality by the addition of chemicals, filtration, and other processes, thereby making the water safe for human consumption.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 25 Ok Reg 2305, eff 7-11-08; Amended at 32 Ok Reg 986, eff 9-15-15; Amended at 33 Ok Reg 1490, eff 9-15-16; Amended at 35 Ok Reg 1330, eff 9-15-18]

### **252:631-1-3. Adoption of U.S. EPA regulations by reference**

The provisions of Parts 141, "National Primary Drinking Water Regulations," and 143, "National Secondary Drinking Water Regulations," of Title 40 of the Code of Federal Regulations (CFR) as published on August 17, 2022, and the requirements contained therein are, unless otherwise specified, adopted and incorporated by reference.

[Source: Amended at 40 Ok Reg 2039, eff 9-15-23; Amended at 39 Ok Reg 1096, eff 9-15-22; Amended at 38 Ok Reg 1838, eff 9-15-21; Amended at 35 Ok Reg 1330, eff 9-15-18; Amended at 33 Ok Reg 1490, eff 9-15-16; Amended at 32 Ok Reg 986, eff 9-15-15; Amended at 31 Ok Reg 1311, eff 9-12-14; Amended at 30 Ok Reg 1095, eff 7-1-13; Added at 29 Ok Reg 1051, eff 7-1-12; Added at 28 Ok Reg 1277, eff 7-1-11; Amended at 27 Ok Reg 1171, eff 7-1-10; Amended at 26 Ok Reg 1944, eff 7-1-09; Amended at 25 Ok Reg 2305, eff 7-11-08; Amended at 24 Ok Reg 1541, eff 6-15-07; Amended at 23 Ok Reg 1769, eff 6-15-06; Amended at 22 Ok Reg 1476, eff 6-15-05; Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 18 Ok Reg 1999, eff 6-11-01; Added at 17 Ok Reg 1987, eff 6-12-00]

#### **252:631-1-4. Use of incorporated federal regulations**

- (a) As used in the incorporated federal regulations, unless the context clearly indicates otherwise, the term "State" is synonymous with DEQ.
- (b) This Chapter implements the federal PWS program.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03]

### **SUBCHAPTER 3. OPERATIONS**

#### **252:631-3-1. PWS Criteria**

- (a) All systems must properly operate, in accordance with a Operations and Maintenance manual as required by OAC 252:626-3-7. All systems must maintain each unit to provide treatment of the water in accordance with the DEQ approved plans and specifications, in accordance with the purpose for which the units were designed and according to the terms of their permits. Permits may contain more stringent provisions than contained in the rules to meet the requirements of the provisions of 40 CFR adopted by reference in this chapter. Employees must be trained in the proper operation and maintenance of the system.
- (b) Public water supply systems must comply with all applicable Primary Drinking Water Standards in 40 CFR Part 141, which includes, but is not limited to, the following:
  - (1) Microbiological standards in 40 CFR Section 141.63 and Subparts S and Y;
  - (2) Inorganic chemicals standards in 40 CFR Section 141.62;
  - (3) Organic chemical standards in 40 CFR Section 141.61;
  - (4) Disinfectant byproduct standards in 40 CFR Section 141.64;
  - (5) Radiochemical standards in 40 CFR Section 141.66;
  - (6) Filtration, disinfection and enhanced treatment standards in 40 CFR Sections 141.73, 141.173, and Subparts T and W;
  - (7) Residual disinfectant level standards in 40 CFR Section 141.65; and
  - (8) Lead, copper and corrosivity standards in 40 CFR Part 141, Subpart I.
- (c) Public water supply systems must comply with all applicable monitoring, reporting, and analytical requirements in 40 CFR Part 141, which includes, but is not limited to, the following:
  - (1) Microbiological requirements in 40 CFR Section 141, Subparts S and Y;
  - (2) Turbidity requirements in 40 CFR Section 141.22;
  - (3) Inorganic chemicals requirements in 40 CFR Section 141.23;
  - (4) Organic chemical requirements in 40 CFR Section 141.24;
  - (5) Radiochemical requirements in 40 CFR Section 141.25 and Section 141.26;
  - (6) Lead and copper requirements in 40 CFR Section 141, Subpart I;
  - (7) Sodium requirements in 40 CFR Section 141.41;
  - (8) Corrosivity requirements in 40 CFR Section 141.42;
  - (9) Filtration, disinfection and enhanced treatment requirements in 40 CFR Sections 141.74, 141.174, and Subparts T & W; and
  - (10) Disinfectant residuals and disinfectant by-product requirements in 40 CFR, Part 141, Subparts C, H, L, U and V.

(d) Systems, which operate on an intermittent or seasonal basis, shall submit bacteriological samples on two consecutive days prior to placing the system into operation. The system can be placed into operation only after the samples are shown to be safe.

[Source: Amended at 35 Ok Reg 1330, eff 9-15-18; Amended at 33 Ok Reg 1490, eff 9-15-16; Amended at 25 Ok Reg 2305, eff 7-11-08; Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 18 Ok Reg 1999, eff 6-11-01; Added at 17 Ok Reg 1987, eff 6-12-00]

### **252:631-3-2. Laboratory accreditation**

(a) **Analytical testing.** Compliance samples for microbiological, inorganic, organic and radioactive contaminants as well as corrosivity must be analyzed by a laboratory accredited by the DEQ. Testing required for compliance with alkalinity, calcium, conductivity, disinfectant residual, orthophosphate, pH, silica, temperature and turbidity may be performed by a laboratory operator certified by the DEQ.

(b) **Laboratory reporting requirements.** In addition to distributing final reports to the PWS as required in OAC 252:301 and 307, the laboratory must transmit data to the DEQ as follows:

(1) **Electronic reporting.** Analytical results must be transmitted to DEQ in an electronic format acceptable to DEQ no later than 10 days after the month or required monitoring period in which the sample was collected.

(2) **Emergency notification.** All *E. coli* positive sample results, and all follow up samples for *E. coli* positive sample results, must be reported to designated Water Quality Division personnel immediately by phone and email.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 25 Ok Reg 2305, eff 7-11-08; Amended at 32 Ok Reg 986, eff 9-15-15; Amended at 33 Ok Reg 1490, eff 9-15-16]

### **252:631-3-3. Disinfection requirements**

(a) **Mandatory disinfection.** Full-time disinfection is mandatory for:

(1) surface water, groundwater under the direct influence of surface water, and spring water supplies unless an alternative has been approved by the DEQ. Each of these systems shall provide disinfection in accordance with 40 CFR Section 141.72(b) and meet the monitoring requirements contained in 40 CFR Section 141.74(c).

(2) groundwater supplies or purchase water systems whenever their record of bacteriological tests show:

(A) a persistent presence of Total Coliform; or

(B) a verified Fecal Coliform, or *E. Coli* MCL exceedance;

(3) PWS systems that purchase water from a public water supply under mandatory disinfection, unless the purchase water system verifies chlorine residuals that are in compliance with (c) or, if chloramines are used, (d) of this Section; and

(4) any new well in a system where the initial bacteriological tests of the well do not show a safe record with the DEQ for 2 consecutive days after completion and testing of the well.

(b) **Modification of disinfection methods.** When any change in the disinfection process is contemplated, contact the DEQ. Submittal of an application, including plans, specifications, engineering reports, disinfection profile and disinfection benchmark justifying such a change may be required in order to obtain approval from the DEQ.

(c) **Chlorine.** The minimum free chlorine residuals shall be as follows:

(1) **Most distant points.** The minimum free chlorine residual at the most distant points in a water distribution system must be 0.2 mg/l.

(2) **Point of entry.** The minimum free chlorine residual at the POE shall be at 1.0 mg/l. For supplies that document they meet or exceed the inactivation requirements in 252:631-3-3(a)(1), the minimum free chlorine residual at the POE shall be 0.2 mg/l.

(d) **Chloramines.**

(1) **Prior public notice.** Systems must notify all users of kidney dialysis machines at least one month before introducing chloramines into the distribution system or starting chloramination.

(2) **Chloramines engineering study.** Before changing to chloramines as the residual disinfectant in the distribution system, the system must conduct and submit to the DEQ for approval an engineering study and weekly analyses for at least 6 weeks prior to and quarterly for one year following such a change of disinfectant. The engineering study and analysis must address the following:

- (A) Select at least 4 sample points for each treatment plant used by the system. At least 25% of the sample points must be at locations within the distribution system reflecting the maximum residence time of water in the system; and
- (B) Collect samples from the selected points weekly for 6 weeks and perform the following analyses using the methods approved in 40 CFR 141.74(a)(1) before modification of treatment is initiated:
  - (i) Total coliform;
  - (ii) Fecal coliform; and
  - (iii) Heterotrophic Plate Count.

(3) **Continuing testing.** After modification of the treatment process, perform the bacteriological tests for samples collected at each of the selected points at quarterly intervals for one year, and then annually, when samples are collected for total trihalomethane determination. Submit the results to the DEQ.

(4) **Primary Disinfection.** A disinfectant must be added to provide the required log inactivation of *Giardia Lamblia* cysts before ammonia is added.

(5) **Total chlorine.** The minimum total chlorine residual at the most distant points in a water distribution system must be 1.0 mg/l and at least 2.0 mg/l at the POE. Higher residuals may be required depending on pH, temperature and other characteristics of the water.

(e) **Other disinfectants.** Iodine or bromine compounds shall not be used as a disinfectant. Ozone, chlorine dioxide, or ultraviolet light may be used for in-plant treatment or disinfection provided chlorine or chloramine residual is maintained according to this Section.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 18 Ok Reg 1999, eff 6-11-01; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 25 Ok Reg 2305, eff 7-11-08; Added at 29 Ok Reg 1051, eff 7-1-12; Amended at 30 Ok Reg 1095, eff 7-1-13; Amended at 31 Ok Reg 1311, eff 9-12-14]

#### **252:631-3-4. Validation of data**

Notwithstanding other provisions of this Chapter, samples that are not properly collected or submitted, not collected by trained and authorized personnel, not analyzed in an accredited laboratory, or samples that do not represent the distribution system must not be used to determine compliance with these regulations. DEQ must document the determination of circumstances or conditions that require samples to be invalidated.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 32 Ok Reg 986, eff 9-15-15; Amended at 33 Ok Reg 1490, eff 9-15-16]

#### **252:631-3-5. Disinfection byproducts [REVOKED]**

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Revoked at 20 Ok Reg 61, eff 10-31-02 (emergency); Revoked at 20 Ok Reg 1153, eff 6-1-03]

#### **252:631-3-6. Disinfection profiling and benchmarking**

PWS Systems must develop disinfection profiles and benchmarks in accordance with 40 CFR Sections 141.172 and 141.530 - 141.544.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 18 Ok Reg 1999, eff 6-11-01; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 25 Ok Reg 2305, eff 7-11-08]

#### **252:631-3-7. Disinfection benchmarking [REVOKED]**

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Revoked at 20 Ok Reg 61, eff 10-31-02 (emergency); Revoked at 20 Ok Reg 1153, eff 6-1-03]

### **252:631-3-8. Public notice requirements**

PWS systems must provide public notice in accordance with 40 CFR Part 141, Subparts D and Q.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 18 Ok Reg 1999, eff 6-11-01; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03]

### **252:631-3-9. Annual consumer confidence reports**

PWS systems must prepare and deliver an annual Consumer Confidence Report in accordance with 40 CFR Part 141, Subpart O.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 18 Ok Reg 1999, eff 6-11-01; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03]

### **252:631-3-10. Process control tests**

Control tests must be performed in accordance with procedures approved by the DEQ.

- (1) Surface water, groundwater under the direct influence of surface water, and springs.
  - (A) Systems that use coagulation, settling, softening or filtration must do the following chemical control tests on the filtered water twice a day, record the results on a report form provided or approved by the DEQ, and submit the form to the DEQ Water Quality Division each month, with a copy to the local DEQ representative:
    - (i) Alkalinity - Phenolphthalein (P);
    - (ii) Alkalinity - Total;
    - (iii) Hardness (where softening is used);
    - (iv) pH value; and
    - (v) Stability to calcium carbonate (once per day);
  - (B) Perform jar tests as needed to determine the optimum coagulant dosages for plant control and operation to meet turbidity requirements.
  - (C) Turbidity and residual disinfection samples must be collected and analyzed in accordance with 40 CFR Part 141, Subparts H, P, T and W.
  - (D) Systems that use membrane filtration shall perform direct integrity testing and indirect integrity monitoring in accordance with 40 CFR Part 141.719(b)(3) and (4).
- (2) **Groundwater supplies.** The following tests are required for public water supply systems utilizing groundwater as a source. Test results must be listed as indicated on the appropriate forms and submitted to DEQ:
  - (A) For all public water supply systems that practice chlorination, the chlorine residual shall be tested and recorded once daily at the POE;
  - (B) For community and NTNC public water supply systems:
    - (i) Static level and pumping level of each well must be determined quarterly;
    - (ii) Alkalinity, pH, and stability must be determined at least monthly for community systems and at least quarterly for non-transient non-community water systems;
    - (iii) Where ion-exchange softening is provided, determine the hardness of the finished water once a day; and
    - (iv) Where nanofiltration, reverse osmosis or electrodialysis is provided, perform the following chemical control tests on the treated water once a day:
      - (I) Alkalinity - Phenolphthalein (P),
      - (II) Alkalinity - Total,
      - (III) Hardness,
      - (IV) pH value, and
      - (V) Stability to calcium carbonate.
- (3) **Purchase water systems.** Purchase water systems that are required to maintain a disinfection residual shall monitor the disinfectant residual in the distribution system as follows:
  - (A) Those serving a population of 1,500 or less shall monitor the disinfectant residual at representative locations in the distribution system at least once every seven days;

(B) Those serving a population of 1,501 to 20,000 shall monitor the disinfectant residual at representative locations in the distribution system at least three times a week on non-consecutive days; or

(C) Those serving a population of greater than 20,000 shall monitor the disinfectant residual at representative locations in the distribution system at least five times a week.

**(4) Special tests.**

(A) Systems that remove iron or manganese must test the raw and finished water weekly for those metals.

(B) Systems that treat or blend for the reduction in concentration of regulated contaminants must monitor the raw and finished water for those contaminants daily in addition to collecting compliance samples.

(C) Threshold odor and other tests may be required by the DEQ based on local conditions.

(D) Systems that treat or blend for the reduction in concentration of nitrates must test the raw and finished water at least once a day for nitrates.

(E) Systems that apply phosphate chemicals in the treatment process must test the finished water at least once a day for phosphates.

**(5) Fluoridation.** Where fluoridation is practiced, the system must:

(A) analyze the water twice a day for fluoride content, both before and after fluoridation;

(B) forward a copy of the analytical report (ODH form No. 561/DEQ form No. 631-001) to the DEQ monthly and keep a copy at the plant (ODH also requires a copy); and

(C) submit a sample of treated water to the DEQ State Environmental Laboratory, or to a DEQ-accredited laboratory, for analysis of fluoride content every month.

**(6) Sampling disinfectants in distribution system.** The following control tests shall be performed in the distribution system for all systems that disinfect. Sampling points shall be changed regularly so the system is sampled completely at least once each week or in accordance with a sampling plan approved by DEQ.

(A) **Chlorine.** Systems that use chlorine shall test for free chlorine and total chlorine residual twice a day in the distribution system.

(B) **Chloramines.** Systems that use chloramines shall test for total chlorine residual twice a day in the distribution system. See 252:631-3-3(d) for the requirements for Heterotrophic Plate Counts.

(C) **Other disinfectants.** Systems that use ozone or chlorine dioxide shall perform process control tests in accordance with 40 CFR Section 141.132.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 25 Ok Reg 2305, eff 7-11-08; Amended at 31 Ok Reg 1311, eff 9-12-14; Amended at 32 Ok Reg 986, eff 9-15-15; Amended at 33 Ok Reg 1490, eff 9-15-16; Amended at 35 Ok Reg 1330, eff 9-15-18]

## **252:631-3-11. Operating records & reports**

(a) **Immediate notification to DEQ.** Each system must report to the DEQ by the end of the next business day if any of the following occur:

(1) Waterborne disease outbreak;

(2) Finished water turbidity exceeds 1 NTU;

(3) Chlorine residual falls below 0.2 mg/l at the POE and whether the residual was restored to at least 0.2 mg/l within 4 hours;

(4) Nitrate level exceeds 10 mg/l;

(5) Verification of a positive Fecal Coliform or E. Coli sample; and

(6) Exceedance of the Chlorine Dioxide MRDL.

(b) **Records.** All systems must keep a daily record of the results of required process control tests and list the results of microbiological checks on the dates sampled. The records of all laboratory checks and control tests must indicate when, where, and by whom the tests were made. The PWS system must complete and submit the original of the DEQ-approved monthly operational report form to the DEQ with a copy to the appropriate local DEQ representative no later than the tenth (10th) day of the following month. Purchase

water systems that are required to maintain a disinfection residual must maintain a monthly operational report for DEQ inspection.

**(c) Water treatment systems.**

(1) Systems that provide water treatment must keep:

- (A) a daily record of the operations performed in the treatment process;
- (B) observations, cost and occurrences related to the operation of the plant; and
- (C) the control tests and laboratory checks previously described in 252:631-3-10.

(2) In addition, water treatment plants designed for turbidity and microbial removal must keep:

- (A) the number of filtered water turbidity samples taken during the month;
- (B) the number and percentage of turbidity samples that are less than or equal to the standards;
- (C) the date and value of any turbidity measurements that exceed 1 and 5 NTU. Where continuous monitoring is used, measurements must be recorded every 4 hours during plant operation; and
- (D) the results of direct integrity testing and indirect integrity monitoring for membrane filtration as required in 252:631-3-10(1)(D).

**(d) Groundwater systems.** Operators of groundwater systems must keep a daily record of all well operations, in addition to the process control tests and laboratory checks required for ground water supplies.

**(e) Record keeping.** All records must be available for inspection by the DEQ and maintained for at least 10 years unless otherwise specified.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 18 Ok Reg 1999, eff 6-11-01; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 25 Ok Reg 2305, eff 7-11-08; Added at 29 Ok Reg 1051, eff 7-1-12; Amended at 31 Ok Reg 1311, eff 9-12-14; Amended at 32 Ok Reg 986, eff 9-15-15]

**252:631-3-12. Control of lead and copper [REVOKED]**

[Source: Revoked at 25 Ok Reg 2305, eff 7-11-08; Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Added at 17 Ok Reg 1987, eff 6-12-00]

**252:631-3-13. Disinfectant residuals, disinfection byproducts, and disinfection byproduct precursors [REVOKED]**

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03; Revoked at 25 Ok Reg 2305, eff 7-11-08]

**252:631-3-14. Conventional filtration systems, reporting and recordkeeping requirements [REVOKED]**

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 18 Ok Reg 1999, eff 6-11-01; Revoked at 20 Ok Reg 61, eff 10-31-02 (emergency); Revoked at 20 Ok Reg 1153, eff 6-1-03]

**252:631-3-15. Plugging abandoned wells**

PWS systems must plug all unused or dry water wells, water test wells, or water test holes promptly according to the OWRB well-plugging rules (OAC 785:35) to protect the water-bearing formation.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 20 Ok Reg 1153, eff 6-1-03]

**252:631-3-16. Flushing of dead-ends**

PWS systems must avoid dead-ends in the distribution system. Where a dead-end main exists, it must be equipped with a valve or other arrangement for flushing. Flush until the water is clear or a chlorine residual is found. Flush every ninety (90) days or more often where conditions require.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 20 Ok Reg 1153, eff 6-1-03]



### **252:631-3-17. Water system connections**

(a) PWS systems must not allow the connection of a new customer without an approved sewage disposal system, as defined in OAC 252:641 (Individual and Small Public On-Site Sewage Disposal Systems) or OAC 252:656 (Water Pollution Control Construction).

(b) PWS systems shall:

- (1) not allow a physical connection between a line carrying a public drinking water supply and a line carrying water of unknown or questionable quality.
- (2) not allow connections from any PWS system to any device or system that poses a health threat unless it is equipped with an air gap of at least 6 inches or two pipe diameters, whichever is larger, above the overflow or drain pipe. The installation of a reduced pressure zone backflow prevention device will be considered in lieu of an air gap. To allow maintenance on the backflow prevention device, the design shall include a diversion line with equal backflow prevention. Do not locate backflow prevention devices in a pit or vault where they can become submerged. A fire suppression system is not considered a hazardous water supply.
- (3) not allow a cross-connection between a public water system and any private water system.
- (4) provide an air gap at all points where finished water is connected to a drain.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 25 Ok Reg 2305, eff 7-11-08]

### **252:631-3-18. Operator certification**

All community and non-transient non-community PWS systems are required to have certified operators in accordance with OAC 252:710 "Waterworks and Wastewater Works Operator Certification" of the DEQ.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 18 Ok Reg 1999, eff 6-11-01]

### **252:631-3-19. Wastewater**

(a) **Sanitary waste.** All sanitary and laboratory chemical wastewater must be discharged to a sanitary sewer collection system or to an approved on-site wastewater disposal system.

(b) **Treatment plant wastewater and sludge.** Disposal of wastewater and residuals from treatment units (filter backwash water, clarifier blow-off, etc.) must be according to OAC 252:606 (Discharge Standards), OAC 252:621 (Non-Industrial Flow-through and Public Water Supply Impoundments, Including Land Application) and OAC 252:626 (PWS Construction). Each lagoon shall be cleaned when the depth of the residuals is within two feet (2') of the maximum operating depth. For information about permits and requirements, contact the DEQ Water Quality Division.

[Source: Amended at 25 Ok Reg 2305, eff 7-11-08; Amended at 20 Ok Reg 1153, eff 6-1-03; Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 18 Ok Reg 1999, eff 6-11-01]

### **252:631-3-20. Water pressure**

All PWS systems must maintain a water pressure of at least twenty-five (25) psi throughout the distribution system.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 25 Ok Reg 2305, eff 7-11-08]

### **252:631-3-21. Public water supply annual service fees**

(a) Each PWS system shall be charged an annual fee (see 27A O.S. § 2-6-306).

(b) The PWS annual fee shall be calculated using the actual costs of services as follows:

- (1) Laboratory analysis fees, for parameters analyzed by the State Environmental Laboratory, shall be charged as specified in OAC 252:305, "Laboratory Services";
  - (2) Inspection service costs equal \$50.00 for purchase systems, \$100.00 for ground systems or \$200.00 for surface systems and groundwater under the direct influence of surface water systems;
- and

(3) Federal program requirement costs for tracking, reporting, and enforcement and technical assistance costs (applicable to community systems and non-transient non-community systems) equal \$370.00 for purchase systems, \$1,600.00 for ground systems or \$6,800.00 for surface systems and groundwater under the direct influence of surface water systems.

(c) Each system shall be charged the actual cost for regulatory services as calculated according to OAC 252:631-3-21(b), except that:

(1) no system shall pay less than a minimum annual fee of \$50 for purchase water systems, \$75 for ground water systems and \$150 for surface water system or less than four cents (\$0.04) per service connection per month, whichever is greater, and

(2) no system shall pay an annual fee increase of more than thirty cents (\$0.30) per service connection per month.

(d) The minimum annual fees listed in OAC 252:631-3-21(c) do not apply to state, federal, tribal, and non-transient non-community systems. These systems shall pay the actual costs of services.

(e) Each system will be notified by mail of the fee due from that system by August 1 of each year. The DEQ shall mail such notice to the most recent name and address provided to the DEQ by the PWS system, however, failure to receive such notice by the system shall not operate to waive any fees due to the DEQ.

(f) To assist in meeting rising costs to the Department of the public water supply program associated with implementation and enforcement of the federal primary drinking water standards, the fees set out in paragraph (b) above shall be automatically adjusted on July 1<sup>st</sup> every year to correspond to the percentage, if any, by which the Consumer Price Index (CPI) for the most recent calendar year exceeds the CPI for the previous calendar year. The Department may round the adjusted fees up to the nearest dollar. The Department may waive collection of an automatic increase in a given year if it determines other revenues, including appropriated state general revenue funds, have increased sufficiently to make the funds generated by the automatic adjustment unnecessary in that year. A waiver does not affect future automatic adjustments.

(1) Any automatic fee adjustment under this subsection may be averted or eliminated, or the adjustment percentage may be modified, by rule promulgated pursuant to the Oklahoma Administrative Procedures Act. The rulemaking process may be initiated in any manner provided by law, including a petition for rulemaking pursuant to 75 O.S. § 305 and OAC 252:4-5-3 by any person affected by the automatic fee adjustment.

(2) If the United States Department of Labor ceases to publish the CPI or revises the methodology or base years, no further automatic fee adjustments shall occur until a new automatic fee adjustment rule is promulgated pursuant to the Oklahoma Administrative Procedures Act.

(3) For purposes of this subsection, "Consumer Price Index" or "CPI" means the Consumer Price Index - All Urban Consumers (U.S. All Items, Current Series, 1982-1984=100, CUUR0000SA0) published by the United States Department of Labor. The CPI for a calendar year is the figure denoted by the Department of Labor as the "Annual" index figure for that calendar year.

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Amended at 18 Ok Reg 1999, eff 6-11-01; Amended at 20 Ok Reg 61, eff 10-31-02 (emergency); Amended at 20 Ok Reg 1153, eff 6-1-03; Amended at 25 Ok Reg 2305, eff 7-11-08; Amended at 30 Ok Reg 1095, eff 7-1-13]

### **252:631-3-22. Security**

A PWS system shall provide:

(1) fencing with locking gates;

(2) locks on access manholes;

(3) locks on wellheads and well houses; and

(4) other necessary precautions to prevent vandalism, pilfering, trespass, and sabotage.

[Source: Added at 20 Ok Reg 61, eff 10-31-02 (emergency); Added at 20 Ok Reg 1153, eff 6-1-03]

### **252:631-3-23. Source water development**

(a) **Continued protection for all sources.** A PWS system shall provide protection for all sources of water from potential sources of contamination through ownership, zoning, easements, leasing or other legal means.

(b) **Reservoir and lake protection.** PWS systems shall provide protection for a reservoir or lake used as a source of water. Control the marginal shoreline land by purchase or ordinance. If control is through the use of an ordinance, the ordinance must describe the water district boundaries and enforcement rules which shall include:

- (1) regulating the public health aspects of the water supply, waste and sewage disposal and recreation activities;
- (2) regulating the building of structures within the control area;
- (3) regulating aquatic activities involving human body contact with the water, including restricting body contact with the water during recreational or other activities when the water quality or public health may be adversely affected; and
- (4) regulating the removal of brush and trees to the high water elevation, regulating the protection from floods during construction within the control district, and regulating the plugging of wells which are inundated, in accordance with OWRB requirements.

(c) **Groundwater source protection.** To protect all groundwater wells from microbiological contamination:

- (1) disinfect every new, modified or reconditioned groundwater well in accordance with AWWA standard specifications after completion of work on the well and the placement of the permanent pumping equipment;
- (2) upon completion of the well, the PWS system shall submit a copy of the well driller's log to the DEQ;
- (3) upon completion of the well, collect at least 2 bacteriologically safe samples on consecutive days. Collect samples after chlorine used to disinfect the well has been completely dissipated and submit the sampling records to the DEQ;
- (4) if any samples show the presence of coliform bacteria, additional samples shall be taken to determine the degree of contamination and the treatment required; and
- (5) if any of the samples show the presence of fecal coliform, a study shall be conducted and a determination made whether the groundwater source is under the direct influence of surface water.

[Source: Added at 25 Ok Reg 2305, eff 7-11-08; Amended at 31 Ok Reg 1311, eff 9-12-14]

## **SUBCHAPTER 5. MINOR WATER SYSTEMS [REVOKED]**

### **252:631-5-1. General [REVOKED]**

[Source: Added at 20 Ok Reg 61, eff 10-31-02 (emergency); Added at 20 Ok Reg 1153, eff 6-1-03; Revoked at 25 Ok Reg 2305, eff 7-11-08]

### **252:631-5-2. Surface water, ground water under the direct influence of surface water, and springs [REVOKED]**

[Source: Added at 20 Ok Reg 61, eff 10-31-02 (emergency); Added at 20 Ok Reg 1153, eff 6-1-03; Revoked at 25 Ok Reg 2305, eff 7-11-08]

### **252:631-5-3. Groundwater supplies [REVOKED]**

[Source: Revoked at 25 Ok Reg 2305, eff 7-11-08; Added at 20 Ok Reg 1153, eff 6-1-03; Added at 20 Ok Reg 61, eff 10-31-02 (emergency)]

### **252:631-5-4. Special tests [REVOKED]**

[Source: Added at 20 Ok Reg 61, eff 10-31-02 (emergency); Added at 20 Ok Reg 1153, eff 6-1-03; Revoked at 25 Ok Reg 2305, eff 7-11-08]

### **252:631-5-5. Security [REVOKED]**

[Source: Added at 20 Ok Reg 61, eff 10-31-02 (emergency); Added at 20 Ok Reg 1153, eff 6-1-03; Revoked at 25 Ok Reg 2305, eff 7-11-08]

## **APPENDIX A. Primary Drinking Water Standards [REVOKED]**

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Revoked and reenacted at 18 Ok Reg 1999, eff 6-11-01; Revoked at 20 Ok Reg 61, eff 10-31-02 (emergency); Revoked at 20 Ok Reg 1153, eff 6-1-03]

## **APPENDIX B. Monitoring Requirements [REVOKED]**

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Revoked and reenacted at 18 Ok Reg 1999, eff 6-11-01; Revoked at 20 Ok Reg 61, eff 10-31-02 (emergency); Revoked at 20 Ok Reg 1153, eff 6-1-03]

## **APPENDIX C. Public Notice Requirements [REVOKED]**

[Source: Added at 17 Ok Reg 1987, eff 6-12-00; Revoked at 20 Ok Reg 61, eff 10-31-02 (emergency); Revoked at 20 Ok Reg 1153, eff 6-1-03]