



**Small Business and Local Government Assistance
Surface Water Community Public Water Systems
Compliance Checklist
August 2015**

Company Information		Site Visit Date: _____	
Company Name		Facility Contact	
Mailing Address		Physical Address	
Business Phone		Fax Number	
PWS ID Number(s)		County(ies)	
Plan Approval Date		CCN	
Population		# of Connections	

This checklist applies only to existing **community public water systems** which have approved plans and specifications from TCEQ or its predecessor agency and use **surface water or groundwater under the influence of surface water**.

Chapters of the Texas Administrative Code (TAC) which may affect you and your system:

30 TAC Chapter 288, Subchapter A: Water Conservation Plans

30 TAC Chapter 288, Subchapter B: Drought Contingency Plans

30 TAC Chapter 288, Subchapter C: Required Submittals

30 TAC Chapter 30, Subchapter A: Administration of Occupational Licenses and Registrations

30 TAC Chapter 290, Subchapter D: Rules and Regulations For Public Water Systems

Related to requirements for water treatment plant design, operation and maintenance.

30 TAC Chapter 290, Subchapter E: Fees For Public Water Systems

30 TAC Chapter 290, Subchapter F: Drinking Water Standards Governing Drinking Water Quality and Reporting Requirements

30 TAC Chapter 290, Subchapter H: Consumer Confidence Reports

30 TAC Chapter 291: Utility Regulations

Related to rates, capacity development, and Certificates of Convenience and Necessity for certain utilities.

30 TAC Chapter 293: Water Districts

**30 TAC Chapter 295 and Chapter 297: Water Rights
Texas Water Code Chapter 11**

To view the most current rules, you can log on to www.sos.state.tx.us and look for 30 Texas Administrative Code Chapters 30, 288, 290, 291, 293, 295 & 297.

Compliance with this checklist does not guarantee that you will not get any Notice of Violations (NOVs), but it should substantially increase your chances of a zero-violation investigation. Notice of Violations may also occur through chemical and bacteriological sampling not addressed in this checklist.

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NOTE: All items in the following chapters are likely to be looked at during a TCEQ inspection: 290.39-290.46 and 290.101-290.122. A watermark “A” in the “No” column indicates automatic enforcement if noted by TCEQ staff.

			YES	NO	N/A
SECTION I. ADMINISTRATIVE, PAPERWORK, REPORTS					
		Chapter 288 Subchapter B: DROUGHT CONTINGENCY PLANS			
1	288.30(1) & 288.30(10)(A)	If a water system holds a water right to use at least 1,000 acre-feet a year, has a Water Conservation Plan been submitted to TCEQ upon development and every 5 years upon revision? If serving 3,300 or more connections, has the plan been submitted to both the TCEQ and the Texas Water Development Board?			
2	288.20(a) & 288.30(5)(A)	Has a Drought Contingency Plan (DCP) been created and is it on file? If serving 3,300 or more connections has the DCP been submitted to TCEQ?			
		Chapter 290 Subchapter D: RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS Chapter 291 Subchapter A-K: UTILITY REGULATIONS			
		SYSTEM DESIGN			
3	290.39(e)(1)	If deficiencies in design or capacity are identified, has an engineering report been submitted to the Executive Director?			
4	290.39(j)(1)(D)	Has the Executive Director been notified in writing prior to making any significant change or addition to the system’s production, treatment, storage, pressure maintenance, or distribution facilities (10% or 250 connections, whichever is smaller) or if the changes create an inability to comply with capacity requirements in 290.45?		A	
		DISINFECTION [<i>surface water, or groundwater under the direct influence of surface water</i>]			
5	290.39(j)(1)(B) - (C) 290.42(e)(3)(G)	Have all changes in the process and type of disinfectant used to maintain a disinfectant residual in the distribution system been submitted in writing to the Executive Director?			
6	290.39(j)	If changes were made in the disinfection process, including the disinfectants used, application points, or monitoring points, has notification been given to the Executive Director in writing and was approval received before implementation?			
7	290.39(1)	Are copies of written correspondence from the Executive Director granting exceptions, such as the use of a disinfectant other than chlorine, on file at the utility?			
		EXCEPTIONS, ALTERNATE CAPACITY REQUIREMENTS, AND EMERGENCY OPERATIONS			
8	290.43(d)(9)	If more than 3 pressure tanks are located at one site, has the system received prior written approval from the Executive Director?			
9	290.45(g)	If an alternative minimum capacity requirement is being used, has the alternative capacity requirement been granted in writing by the Executive Director?			
10	290.46(f)(3)(C) - (D)	Does the public water system (system) retain the records concerning exceptions for the system, Concentration Time studies and the results of microbiological analyses, inspection results and recycling practices forms for five years?			

			YES	NO	N/A
11	290.39(c)(4), 290.39(o), & 290.45(b)(3)	If the system is an 'affected utility' [see definition in 290.38(1)], does it have an Emergency Preparedness Plan (EPP) that has been approved by the Executive Director? Does the system meet the requirements for emergency operations contained in 290.45(h) (this includes systems that provide 100 gallons of elevated storage capacity per connection)?			
12	290.45(g)	If the system has more than 50 connections but cannot meet the capacity requirements stated under 290.45(b), have they been granted an alternative minimum capacity requirement by the Executive Director?			
13	290.45(g)(5)	If the system has over 2500 connections and does not provide elevated storage, is a copy of the Executive Director's approved alternative capacity requirement on file?			
14	290.45(a)(7)	If the system is an affected utility and pressure in the distribution system has dropped below 35 psi during emergency operations, has the utility submitted a revised EPP or justification regarding pressure drop for review and approval within 180 days of the date normal power is restored?			
15	290.45(h)(5)	If the system is an 'affected utility' and does not meet the elevated storage capacity requirements, does its approved EPP provide adequate pressure to meet the pressure requirements of §290.46(r) and does the system still comply with the production, treatment, total storage and service pump capacity requirements?			
		OPERATING REPORTS, RECORDS, PLANS, MAPS, PROGRAMS			
16	290.41(d)(2)	If springs or other sources of flowing artesian water are used as a water source, has the completion data been submitted and approved by the Commission prior to using this source?			
17	290.42(l)	Is the plant operations manual detailed and up to date?			
18	290.46(i)	Has the system adopted an adequate plumbing ordinance, plumbing regulation (for example, the Uniform or International Plumbing Code), or customer service agreement with provisions for enforcement to insure that neither cross-connections nor other unacceptable plumbing practices are permitted?			
19	290.44(h)(4)(B)	Are backflow assembly testers, including test gauge serial numbers and the date that their gauge was last tested for accuracy, documented on "Test and Maintenance" report forms?			
20	290.44(h)(4), 290.44(h)(4)(C) & 290.46(f)(3)(B)(vi)	Does the system require testing of all backflow prevention assemblies installed at health hazards, as defined in 290.38(31), by a certified backflow prevention assembly tester? Are the signed and dated original backflow prevention assembly test reports kept on file with the system for at least 3 years [<i>testers follow 290.44(h) requirements for equipment and reporting criteria</i>]?			
21	290.45(b)(2)(H)	Is a log of emergency power use kept on file for at least three years and is it available for review by the Executive Director?			
22	290.45(g)(5)(D) & 290.39(c)(4)(A)	Has the emergency response plan been submitted to Executive Director?			
23	290.45(f)	If the system is operating under a water purchase contract, do the total combined contract specifications and system facilities meet the production, storage, service pump and pressure maintenance capacity?			
24	290.46(e)	Is the water system being operated by a licensed operator that holds an applicable valid license issued by the Executive Director of a type and class appropriate for the system?		A	

			YES	NO	N/A
25	290.46(f)	Does the system maintain a daily operating and maintenance activity record and are operating reports submitted as required?			
26	290.46(f)(1) – (2)	Are the system’s records accessible for review during an inspection, and are they organized and kept on file or stored electronically?			
27	290.46(f)(3)(A)(i) - (ii)	Are the system’s reports for chemical use and volume of water treated each day kept on file for two years?			
28	290.46(f)(3)(A)(iii)	Are the dates, location, and nature of water quality, pressure, or outage complaints received by the system, and are the results of any subsequent investigations kept on file for two years?			
29	290.46(f)(3)(A)(iv) - (vii)	Does the water system keep the following information on file for two years: the dates that dead-end mains were flushed, the dates that the storage tanks and other facilities were cleaned, the amount of chemicals used each day, the volume of water treated each day, the maintenance records for water system equipment and facilities, and employment records for part time operators?			
30	290.46(f)(3)(B)(i) - (ii)	Are the system’s records for notices of violation, corrective actions and public notices kept on file for three years?			
31	290.46(f)(3)(B)(iii)	Are the results from disinfectant residual monitoring in the distribution system kept on file for three years?			
32	290.46(f)(3)(C)(iv)	Are turbidity monitoring results and exception reports for individual filters kept on file for five years after they are no longer in effect?			
33	290.46(f)(3)(B)(iv)	Are the system’s calibration records for laboratory equipment, flow meters, rate-of-flow controllers, on-line turbidimeters, and on-line disinfectant residual analyzers kept on file for three years?			
34	290.46(f)(3)(B)(v)	Are the system’s records of backflow prevention device programs (including backflow prevention assembly test and maintenance forms) kept on file for three years?			
35	290.46(f)(3)(D)	Are the results of microbiological analyses, inspections for all water storage and pressure maintenance facilities, and pressure filters kept on file for five years?			
36	290.46(f)(3)(E)(i) - (iv)	Does the system retain records of Monthly Operating Reports; chemical analyses results; written reports, summaries or communications relating to sanitary surveys conducted by the system, private consultant or the Commission; and customer service inspections for ten years?			
37	290.46(f)(3)(F)	Does the system retain records relating to lead and copper requirements in 290.117 relating to the regulation of lead and copper for no less than 12 years?			
38	290.46(f)(3)(G)	Does the system maintain records, as directed by the Executive Director, relating to special studies and pilot projects, special monitoring, and other system specific matters?			
39	290.46(f)(4)	Does the system submit all required routine reports in a complete and timely manner?		A	
40	290.46(k)	Has the Executive Director approved any interconnection between the distribution system and any other water supply?			

			YES	NO	N/A
41	290.46(m)	Is a maintenance program in place to ensure reliability and general appearance of all facilities (in order to minimize the possibility of the harboring of rodents, insects, and vectors)?			
42	290.46(n)(2)	Is an up-to-date and accurate map of the distribution system readily available?			
43	290.46(n)(1)	Are accurate and up to date “as-built” plans and specifications for the treatment plant, pump station, and storage tanks maintained at the system?			
44	290.46(n)(3)	If the system also has wells, is well-completion data kept on file for every active well?			
45	290.46(p)(1)	Were changes in ownership reported to the Executive Director 120 days prior to the sale, transfer, or merger and in accordance to TAC Chapter 291?			
46	290.46(q)	Are boil water notices for low pressure, water outages, unsafe microbiological samples, low chlorine residuals, high turbidity levels, or other conditions which indicate that the safety of the drinking water has been compromised issued in a timely manner and as specified in 290.47?		A	
47	290.46(s)(1)	Are the required flow measuring devices and rate-of-flow controllers calibrated at least once every 12 months and are well meters calibrated every 3 years?			
48	290.111(e)(4)(B)	Beginning January 1, 2005, systems that serve less than 10,000 people and monitor combined filter effluent turbidity in lieu of individual filter effluent turbidity and fail to meet the turbidity criteria in subsection (e)(1)(A) must conduct additional monitoring. See the rest of 290.111(e) for additional reporting requirements.			
49	290.121(a)	Is the system’s chemical and microbiological monitoring plan up-to-date and maintained at each plant and at a central location?			
50	291.93(3)	If the system has a CCN and has reached 85% of its capacity, has it completed and submitted a Planning Report?			
51	291.71 - 291.76	Does the utility produce and maintain general reports, financial reports, annual reports, management audits, and regulatory assessment records according to this section?			
52	291.90(b)	Does the utility keep records of interruptions, both emergency and scheduled - stating cause, date, time, duration, location, number of customers affected, and the remedy to prevent recurrence?			
		TARIFFS AND CERTIFICATES OF CONVENIENCE AND NECESSITY (CCN) On September 1, 2014, the responsibility for the water utility rates and certificate of convenience and necessity programs were transferred from the TCEQ to the Public Utility Commission of Texas (PUC). This transfer was required by the PUC’s Sunset legislation (HB 1600) enacted in 2013. The PUC will handle applications for the programs they will be regulating, but applicants must still comply with all associated TCEQ rules and requirements. Entities affected by the transfer of program jurisdiction include investor-owned utilities; water supply corporations; city and county-owned water utilities; wastewater utilities; and anyone interested in the policies, rates, and operations of a public or private water utility in Texas. Any application pending at the TCEQ that has not been decided by August 31, 2014 will transfer to the PUC on September 1, 2014.			

			YES	NO	N/A
		Chapter 290 Subchapter F: DRINKING WATER STANDARDS GOVERNING DRINKING WATER QUALITY & REPORTING REQUIREMENTS FOR PUBLIC WATER SYSTEMS			
53	290.104	Are the Maximum Contaminant Levels (MCLs), Maximum Residual Disinfectant Levels (MRDLs), treatment techniques, and action levels in this section met?			
54	290.106(e) & (g)	Does the system monitor and report the monitoring results of inorganic contaminants, and if applicable, does it notify the customers and the TCEQ's Water Supply Division of any violations?			
55	290.107(e) & (g)	Does the system monitor and report the monitoring results of organic contaminants, and if applicable, does it notify the customers and the TCEQ's Water Supply Division of any violations?			
56	290.108(e) & (g)	Does the system monitor and report the monitoring results of Radionuclide's other than Radon, and if applicable, does it notify the customers and the TCEQ's Water Supply Division of any violations?			
57	290.109(e) & (g)	Does the system monitor and report the monitoring results of microbial contaminants, and if applicable, does it notify the public and the TCEQ's Water Supply Division of any violations?			
58	290.110(e) & (g)	Does the system monitor and report the monitoring results of disinfectant residuals, and if applicable, does it notify the people it serves and the TCEQ's Water Supply Division of any violations?			
59	290.111(e), (h), & (j)	Does the <i>surface water or groundwater under the direct influence of surface water</i> system monitor and report the monitoring results of turbidity, and if applicable, does it notify the customers and the Water Supply Division of any violations?			
60	290.111(b)(6)(C)	If the system uses surface water or groundwater under the direct influence of surface water, are the treatment techniques and monitoring requirements for turbidity followed according to this section?			
61	290.111 (e)(2)(A)	For systems that serve fewer than 10,000 people, the turbidity from each individual filter does not exceed 1.0 NTU. (mark "yes" for "true," "no" for "false.")			
62	290.111(e)(3)(A)	For systems that serve fewer than 500 people and continuously monitor the turbidity level of each individual filter, does the system measure and record the turbidity level of the combined filter effluent at least once each day that the plant is in operation?			
63	290.111(e)(3)(B)	For systems that serve at least 500 people and continuously monitor the turbidity level of each individual filter, does the system measure and record the turbidity level of the combined filter effluent at least every four hours that the system serves water to the public?			
64	290.111(e)(3)(C)	Does the system continuously monitor the filtered water turbidity at the effluent of each individual filter and record the turbidity value every 15 minutes? (Except as provided in subparagraph D of this rule)			
65	290.111(e)(3)(D)(i) - (ii)	For systems that serve less than 10,000 people and monitor combined filter effluent turbidity in lieu of individual filter effluent turbidity, does the system continuously monitor the turbidity of the combined filter effluent and record the turbidity value every 15 minutes and measure and record the turbidity level at the effluent of each filter at least once each day the plant is in operation?			

			YES	NO	N/A
66	290.112(e) & (g)	Does the system monitor and report monitoring results of total organic carbon, and if applicable, does it notify the customers and the Water Supply Division of any violations?			
67	290.113(b)	Does the system's running annual average concentration stay below the MCL for TTHM (0.080 mg/L) and HAA5 (0.060 mg/L)?			
68	290.113(e) & (g)	Does the public water system monitor and report the monitoring results of disinfection by-products (DBPs) trihalomethanes (TTHM) and haloacetic acids-five (HAA5), and if applicable, does it notify the customers and the TCEQ's Water Supply Division program of any violations?			
69	290.114(b)(1)	Is the concentration of bromate at the entry point to the distribution system at or below an MCL of 0.010 mg/L?			
70	290.114(a)(4) & (6), 290.114(b)(4) & (6)	Does the public water system report the monitoring results of other DBPs (such as chlorite and bromate), and if applicable, does it notify the customers and the TCEQ's Water Supply Division of any violations?			
71	290.117(a), (i) & (k)	Does the system report, monitor, and provide public education relating to the regulations of lead and/or copper?			
72	290.118(e) & (g)	Does the system report to the Executive Director results of test, measurement, or analysis required of secondary constituent levels, and if applicable, does it notify the public of any violations according to 290.122?			
73	290.119(a)	Does the system use only acceptable laboratories to analyze its samples as required by this section?			
74	290.119(b)	Does the system use the acceptable analytical methods as described in this section?			
75	290.122(a)(1)	<i>If applicable</i> , does the system notify the people served by its system when acute violations occur as required by this section?		A	
		Chapter 290 Subchapter H: CONSUMER CONFIDENCE REPORTS (CCR)			
76	290.271(b)	Has the system provided an annual CCR that contains all the required information to its customers?			
		Content of the CCR			
77	290.272(a)(2)	If a source water assessment has been completed, does the report include sources of contamination in the source water and indicate how its customers may obtain a copy?			
78	290.272(g)(2)	Does the report include the telephone number of the owner, operator, or designee of the water system as another source of information regarding the report?			
79	290.272(g)(3)	If the report is written in English, does it include the Spanish statement and appropriate telephone number as required in this section?			
80	290.274(a)	Are the reports mailed or delivered to each bill paying customer by July 1 each year?			
81	290.274(a) & (e)	Does the system provide a copy of the report to each new customer and the public upon request?			
82	290.274(b)	Has a good faith effort been made to deliver a copy of the report to non-bill paying customers, such as renters or workers as described in this section?			

			YES	NO	N/A
83	290.274(c)	Has the system certified that the reports were distributed and that information in the report is correct and consistent with the compliance monitoring data previously submitted to the Executive Director, and was this certification along with a copy of the report mailed to the Executive Director by July 1 each year?			
84	290.274(d)	Has the system sent the report to any other agency or clearinghouse identified by the Executive Director by July 1 each year?			
85	290.274(f)	If the system serves 100,000 or more customers, is the current year's report posted on a publicly accessible website?			
86	290.274(g)	If the system provides water to a community water system (for example if a city sells water to another city), is the report delivered to the receiving system by April 1 and is the certification that the required information has been delivered (mailed) to the Executive Director by May 1 of each year?			
87	290.274(h)	Does the system retain copies of its CCR for a minimum of 5 years?			

			YES	NO	N/A
SECTION II TECHNICAL					
Chapter 290 Subchapter D: RULES AND REGULATIONS FOR PUBLIC WATER SYSTEMS					
WATER SOURCE - SURFACE WATER					
1	290.41(b)	Does the system have a water source capable of supplying maximum daily demands of the distribution system during extended periods of peak usage and critical hydrologic conditions?			
2	290.41(e)(1)(A) & (F)	If the surface water source is subject to continuous or intermittent contamination by municipal, agricultural, or industrial wastes and/or treated effluent, were site evaluations and laboratory procedures conducted to determine the adverse effects of the contamination on the quality of water prior to receiving written approval from the Executive Director to develop and use the source?			
3	290.41(e)(1)(B)	Is the disposal of all liquids or solid wastes from any source on the watershed in conformity with applicable regulations and state statutes?			
4	290.41(e)(1)(C)	Are shore installations, marinas, boats, and all dwellings on the watershed provided with satisfactory sewage disposal facilities and are the facilities at least 75 feet from the lake surface water?			
5	290.41(e)(1)(D)	Is the disposal of wastes from boats or any other water craft in accordance with the Texas Water Code §321.1-321.11?			
6	290.41(e)(1)(E)	Are pesticides or herbicides used within the watershed applied in strict accordance with the product label restrictions?			
7	290.41(e)(1)(F)	If a new surface water source is proposed, was the Executive Director provided information regarding specific water quality parameters according to this section prior to receiving written approval from the Executive Director to develop and use the source?			

			YES	NO	N/A
8	297.43(c) & 297.58(a)	Does the surface water rely on a water right? Is the facility staying within their permitted allocation?			
9	TWC 11.032	If the surface water source relies on a water right, are use records maintained?			
10	295.202(a) & TWC 11.031	Is the facility reporting water use records by March 1 st of each year?			
11	290.41(e)(2)	Are the water intakes located and constructed to secure raw water of the best quality from the source?			
12	290.41(e)(2)(A)	Are the water intakes located away from areas subject to excessive siltation and areas that receive immediate runoff from wooded sloughs or swamps?			
13	290.41(e)(2)(B)	Is the raw water intake 1,000 feet or farther away from boat launching ramps, marinas, docks, or floating fishing piers which are accessible to the public?			
14	290.41(e)(2)(C)	Is there is a 200 foot radius restricted zone from the raw water intake prohibiting trespassing and recreational activities, which is posted by signs and/or buoys in plain site?			
15	290.41(e)(2)(D)	Has the TCEQ made an on-site evaluation of any proposed raw water intake locations (must be requested prior to design and supported by preliminary design drawings)?			
16	290.41(e)(2)(E)	Are the raw water intakes located and constructed to receive raw water from a variety of depths? (If not, is supporting data available proving that raw water quality effects would be minimal and has the system received written approval from the Executive Director)			
17	290.41(e)(2)(F)	Does the water intake have screens or gates to minimize the amount of debris entering the plant?			
18	290.41(e)(2)(G)	Is the water treatment plant at least 500 feet from a sewage treatment plant or land irrigated with sewage effluent?			
19	290.41(e)(3)	Is the raw water pump station located in a well drained area which is designed to remain in operation during flood events?			
		WATER SOURCE – SPRINGS			
20	290.41(d)(1)	If springs or other similar sources of flowing artesian water are used, are they protected from potential contaminant sources?			
21	290.41(d)(3)	Is the spring or similar source constructed so that surface water and debris cannot enter the source?			
22	290.41(d)(3)(A)	Is the spring or similar source site level and graded so surface water drains away from the source?			
23	290.41(d)(3)(B)	Is the spring or similar source encased with an open bottomed, watertight basin which intercepts the flowing water below the surface of the ground?			
24	290.41(d)(3)(B)	Does the spring or similar source basin extend at least 18 inches above ground level, and is the top of the basin two feet above the highest known water mark or 100 year flood elevation, or protected from possible flood damage by levees?			

			YES	NO	N/A
25	290.41(d)(3)(C)	Does the spring or similar source have a concrete sealing block extending 3 feet in each direction of the encasement?			
26	290.41(d)(3)(C)	Is the sealing block at least 6" thick and does it slope to drain away from the encasement at least 0.25 inches per foot?			
27	290.41(d)(3)(D)	Does the spring or similar source enclosure have a sloped, watertight roof which prevents ponding of water and does it prevent entrance of animals, insects, and other sources of contamination?			
28	290.41(d)(3)(E)	Does the spring or similar source enclosure roof have a hatch not less than 30 inches in diameter?			
29	290.41(d)(3)(E)	Is the hatch locked except during inspections and maintenance?			
30	290.41(d)(3)(E)	Is the hatch at least 4 inches high and does it have a cover that overlaps the curbing at least 2 inches in a downward direction?			
31	290.41(d)(3)(E)	If necessary, is a gasket placed on the hatch to ensure a positive seal?			
32	290.41(d)(3)(F)	Does the encasement have a gooseneck vent or roof ventilator that has approved 16-mesh or finer, corrosion resistant material that prevents animals, insects, and heavy air contaminants from entering, and is it securely clamped with stainless or galvanized bands or wires?			
33	290.41(d)(3)(G)	Does the encasement have an overflow which is designed to prevent animals, birds, insects and debris from entering?			
34	290.41(d)(3)(G)	Does the encasement have an overflow that is above ground level, and not subject to submergence?			
		WATER TREATMENT			
35	290.42(a)(1)	Is the total capacity of the public water system's production and treatment facilities greater than its anticipated maximum daily demand?			
		Surface Water Treatment			
36	290.42(d)(1)	Is all the surface water obtained treated at a plant suitable for pretreatment disinfection, taste and odor control, continuous coagulation, sedimentation, filtration, covered clearwell storage and terminal disinfection of the water with chlorine or suitable chlorine compounds?		A	
37	290.42(d)(1)	Is the treatment process designed to achieve at least 3 log removal or inactivation of Giardia cysts, 2 log removal of Cryptosporidium oocysts, and a 4 log removal or inactivation of viruses before the water is supplied to consumers?			
38	290.42(d)(2)	Is all plant piping constructed to be thoroughly tight against leaks?			
39	290.42(d)(2)	Are there no cross connections or interconnections in the filtration plant between a conduit carrying filtered or post chlorinated water and another conduit carrying raw water or water in any prior stage of treatment?			
40	290.42(d)(2)(A)	Are vacuum breakers located on all hose bibbs in the plant facility?			

			YES	NO	N/A
41	290.42(d)(2)(B)	Is the conduit or basin containing raw water (or any water in a prior stage of treatment) not located directly above or partitioned by a single common wall with another conduit or basin containing finished water?			
42	290.42(d)(2)(C)	Is an air gap or other backflow prevention assembly provided in make-up water supply lines to chemical feeder solution mixing chambers?			
43	290.42(d)(2)(D)	Are the filters located so that common walls will not exist between filters and aerators, mixing and sedimentation basins, and clearwells?			
44	290.42(d)(2)(E)	If a filter-to-waste connection exists, is there an air gap connection to the waste?			
45	290.42(d)(2)(F)	Are all air release devices on treated waterlines free from submergence or possible entrance of contaminants? Are all openings to the atmosphere covered with 16 mesh or finer corrosion resistant screening material?			
46	290.42(d)(3)	Is decanted water or sludge returned to the raw water supply controlled so minimal interference with the treatment process exists? If not in compliance, a treatment technique violation has occurred and notice to customers must be made.			
47	290.42(d)(3)(A)	Unless an alternative is approved by the Executive Director, are spent backwash water, and the liquids from sludge settling lagoons, spent backwash water tanks, sludge thickeners, and similar dewatering facilities returned to the raw waterline upstream of the raw water sampling tap and coagulant feed point?			
48	290.42(d)(4)	If complete treatment facilities fail to operate satisfactorily, are reservoirs for pretreatment or selective quality control provided?			
49	290.42(d)(5)	Are flow measuring devices provided to measure the raw water supplied to the plant, the recycled decant water, the treated water used to backwash the filters, and the treated water discharged from the plant?			
50	290.42(d)(11)(F)(ii)	Is the rate of filter back washing regulated by a rate-of-flow controller or flow control valve?			
51	290.42(d)(11)(F)(iii)	Is the rate of flow of backwash water not less than 20 inches in vertical rise per minute (12.5 gpm per square foot) and usually not more than 35 inches vertical rise per minute (21.8 gpm per square foot)?			
52	290.42(d)(11)(F)(v)	Does the filter freeboard (in inches) exceed the wash rate (in inches) of vertical rise per minute?			
53	290.42(f)(1)(A)	Is the bulk storage facility at the plant large enough to store at least a 15 day supply of chemicals at design capacity?			
54	290.42(f)(1)(B)	Are day tanks provided to prevent chemical overfeed incidents (not required if adequate process control instrumentation and procedures are employed to prevent chemical overfeed incidents)?			
55	290.42(f)(1)(C)	Are all chemical bulk storage facilities and day tanks clearly labeled identifying their contents and do they have a device that indicates amount of chemicals remaining?			
56	290.42(f)(1)(D)	Are dry chemicals stored off the floor in a dry room that is located above ground and protected from flooding or from wet floors, walls and ceilings?			
57	290.42(f)(1)(E)	Are the bulk storage facilities and day tanks designed to minimize the possibility of leaks and spills?			

			YES	NO	N/A
58	290.42(f)(1)(E)(i)	Are the bulk storage and day tanks constructed of materials compatible with the chemicals being stored and resistant to corrosion?			
59	290.42(f)(1)(E)(ii)(I)	Are the containment facilities large enough to hold the maximum amount of chemicals that can be stored in the tanks with a minimum freeboard of six vertical inches, or hold 110% of the total volume of the container, whichever is less?			
60	290.42(f)(1)(E)(ii)(IV)	Are incompatible chemicals stored in different containment structures?			
61	290.42(f)(1)(F)	Are chemical transfer pumps and control systems designed to minimize the possibility of leaks and spills?			
62	290.42(f)(1)(G)	Are the piping, pumps, and valves used for chemical storage and transfer compatible with the chemicals being fed?			
63	290.42(f)(2)(A)	Do all chemical feeders required to comply with the treatment technique requirements and to achieve compliance with chemical MCLs have a standby or reserve unit?			
64	290.42(f)(2)(B)(i)	Are all chemical feeders equipped with chemical feed devices designed to determine the chemical feed rate?			
65	290.42(f)(2)(B)(ii)	Is the capacity of the chemical feeder's sufficient to control the dosage at the full range of feed rates expected to occur at the facility?			
66	290.42(f)(2)(B)(iii)	Do the chemical feeders have tanks for chemical dissolution when needed?			
67	290.42(f)(2)(C) & (D)	Are the chemical feed systems designed to minimize the possibilities of leaks and spills and provide protection against back pressure and siphoning, and are chemical feeders, valves, and piping compatible with the chemical being fed?			
68	290.42(f)(2)(E)	If enclosed feed lines are used, are they designed and installed to prevent clogging and be easily maintained?			
69	290.42(f)(2)(F)	Are the dry chemical feeders located in a separate room that provides dust control?			
70	290.42(f)(2)(G)	Are the coagulant feed systems designed so coagulants are applied to the water prior to or within the mixing basins or chambers to permit their complete mixing with the water?			
71	290.42(f)(2)(G)(i)	Are the coagulant feed points located downstream of the raw water sampling tap?			
72	290.42(f)(2)(G)(ii)	Are the coagulants applied continuously during the treatment plant operation?			
73	290.42(f)(2)(H)	Are chlorine feed units, ammonia feed units, and storage facilities separated by solid, sealed walls?			
74	290.42(f)(2)(I)	Are the chemical application points located to achieve acceptable finished water quality, adequate taste and odor control, corrosion control and disinfection?			
75	290.42(d)(8)	Is flash mixing equipment available?			
76	290.42(d)(8)(A)	If the plant has a design capacity greater than 3.0 million gallons per day, does it have at least one hydraulic mixing unit or at least two sets of mechanical flash mixing equipment which are designed to operate in parallel, or another plant, interconnection or wells that meet the average daily demand?			

			YES	NO	N/A
77	290.42(d)(9)(A)	If the plant has a design capacity greater than 3.0 million gallons per day, does it have at least two sets of flocculation equipment which are designed to operate in parallel, or does it have another plant, interconnection or wells that help it meet the average daily demand?			
78	290.42(d)(9)(B)	Is the flocculation equipment designed to provide adequate time and mixing intensity to produce a settleable floc under varying raw water characteristics and raw water flow rates?			
79	290.42(d)(9)(B)(i)	Do flocculation facilities for straight-flow and up-flow sedimentation basins have a minimum theoretical detention time of at least 20 minutes when operated at design capacity (If built before 10/01/2000, exempt if settled turbidity is less than 10.0 nephelometric turbidity units (NTU) and meets the filtered water turbidity requirements in 290.111)?			
80	290.42(d)(9)(B)(ii)	Does the mixing intensity in the multiple stage flocculators decrease as the coagulated water passes from one stage to the next?			
81	290.42(d)(9)(C)	Does the coagulated water or water from flocculators flow to sedimentation basins at a velocity that prevents destruction of floc?			
82	290.42(d)(9)(C)	Are the piping, flumes and troughs designed to provide a flow velocity of 0.5 to 1.5 feet per second?			
83	290.42(d)(9)(C)	Are the gates, ports and valves designed at a maximum flow velocity of 4.0 feet per second in the transfer of water between units?			
84	290.42(d)(10)(A)	If the plant has a designed capacity greater than 3.0 million gallons per day, are there at least two sedimentation basins or clarification units which are designed to operate in parallel, or another plant, interconnection or wells that meet the average daily demand? [Some exceptions in 290.42 (d)(10)]			
85	290.42(d)(10)(B)	Are the inlets and outlets of clarification facilities designed to prevent short-circuiting of flow or the destruction of floc?			
86	290.42(d)(10)(C)(i)	Do the basins for straight-flow or up-flow sedimentation of <i>coagulated waters</i> provide either a theoretical detention time of at least 6 hours in the flocculation and sedimentation chambers, or a maximum surface overflow rate of 0.6 gpm per square foot of surface area in the sedimentation chamber?			
87	290.42(d)(10)(C)(ii)	Do the basins for straight-flow or up-flow sedimentation of <i>softened waters</i> provide either a theoretical detention time of at least 4.5 hours in the flocculation and sedimentation chambers, or a maximum surface overflow rate of 1.0 gpm per square foot of surface area in the sedimentation chamber?			
88	290.42(d)(10)(C)(iii)	Do clarifiers for sludge-blanket and solids-recirculation provide a theoretical detention time of at least 2 hours in the flocculation and sedimentation chambers or a maximum surface overflow rate of 1.0 gpm per square foot in the settling chamber?			
89	290.42(d)(10)(C)(iv)	Is the side wall water depth at least 12 feet in clarification basins that are not equipped with mechanical sludge removal facilities?			
90	290.42(d)(10)(C)(v)	Is the effective length of the straight-flow sedimentation basin at least twice its effective width?			
91	290.42(d)(10)(D)(i)	If the system has a single clarification basin, are there facilities to drain the basin within 6 hours?			

			YES	NO	N/A
92	290.42(d)(10)(D)(ii)	Are the sludge removal facilities provided, by mechanical means or by hopper-bottomed basins with valves, capable of completely draining the units?			
93	290.42(d)(11)(A)	If pressure filters are used, is the system's treatment capacity less than 0.50 million gallons per day (mgd)?			
94	290.42(d)(11)(B)	Are the filtration facilities designed to operate at filtration rates which assure effective filtration at all times (see 290.42(d)(11)(B)(i) – (vi))?			
95	290.42(d)(11)(C)	Are the depth and condition of the support material sufficient to provide effective filtration (see 290.42(d)(11)(c)(i) – (iv))?			
96	290.42(d)(11)(D)	Do filters have the capability to regulate the filtration rate?			
97	290.42(d)(11)(E)(i)	Does each filter have a sampling tap to monitor effluent turbidity?			
98	290.42(d)(11)(E)(ii)–(iv)	Does each filter have an on-line turbidimeter and recorder to determine turbidity every 15 minutes?			
99	290.42(d)(11)(E)(iv)	If a filter was installed after October 1, 2000, is it equipped with an on-line turbidimeter and recorder which allows the operator to determine turbidity at 15 minute intervals?			
100	290.42(d)(11)(E)(v)	If filter units do not have on-line turbidimeters, are filters equipped with loss of head indicators? (if it is a declining rate filter, a rate of flow indicator is acceptable)			
101	290.42(d)(11)(F)	Are filters designed to provide adequate cleaning during the backwash cycle?			
102	290.42(d)(11)(F)(i)	Is only filtered water used to backwash the filters?			
103	290.42(d)(11)(F)(iii)	Does each filter have a rate-of-flow controller to regulate the rate of filter backwashing [the rate of backwashing shall not be less than 20 inches vertical rise per minute (12.5 gpm/ft ²) and usually not more than 35 inches vertical rise per minute (21.8 gpm/ft ²)]?			
104	290.42(d)(11)(F)(iv)	Are the backwash facilities capable of expanding the filtering bed during the backwash cycle?			
105	290.42(d)(11)(F)(vi)	Are atmospheric vacuum breakers properly installed on surface filter wash systems?			
106	290.42(d)(11)(F)(vii)	If gravity filters were installed after January 1, 1996, are they equipped with air scour backwash or surface wash facilities?			
107	290.42(d)(11)(G)	If the filter was installed after October 1, 2000, is it equipped to allow the filter to be completely drained without removing other filters from service?			
108	290.42(d)(12)	Do the pipe galleries have ample working room, good lighting, and good drainage provided by sloping floors, gutters, and sumps, and good ventilation to prevent condensation and to provide humidity control?			
109	290.42(d)(13)	Are influent, effluent, waste backwash, and chemical feed lines labeled or colored according to 290.42(d)(13)?			
110	290.42(d)(14)	Are there sampling taps for raw, settled, individual filter effluent, and clearwell discharges?			

			YES	NO	N/A
111	290.42(d)(15)(A)	If the plant serves 25,000 persons or more, is the local laboratory used to conduct the required daily microbiological analysis certified by the Executive Director to conduct coliform analysis?			
112	290.42(d)(15)(C)	Does the plant have equipment capable of measuring all the items listed in this rule, such as pH, temperature, disinfectant residual, etc.?			
113	290.42(d)(15)(E)	Is each surface water treatment plant that uses sludge-blanket clarifiers equipped with facilities to monitor the depth of the sludge blanket?			
114	290.42(d)(15)(F)	Is each surface water treatment plant that uses solids-recirculation clarifiers equipped with facilities to monitor the solids concentration in the slurry?			
115	290.42(d)(16)	Does the plant have a computer and software on site for recording performance data, maintaining records, and submitting reports to the Executive Director? (If not has the alternate site been approved by the Executive Director?)			
		SPRINGS AND OTHER SOURCES TREATMENT			
116	290.42(c)(1)	Does the treatment process achieve minimum level standards?			
117	290.42(c)(1)(A)	Do the filters provided for turbidity and microbiological quality control conform to the requirements in 290.42(d)(11)?			
118	290.42(c)(1)(B)	If any process involves exposure of the water to atmospheric contamination, is there subsequent disinfection of the water ahead of the ground storage tanks?			
119	290.42(c)(1)(B)	If any process involves exposure of the water to atmospheric contamination, are insects, birds, and other foreign matter excluded from the water and are aerators, and other openings screened with 16-mesh or finer corrosion resistant screen?			
120	290.42(c)(3)	Does the system have appropriate laboratory facilities to provide for controls as well as for checking disinfection or other treatment process?			
121	290.42(c)(4)	Is all the plant piping constructed for minimal leakage so that cross connections or interconnections do not exist between conduit carrying potable water and another conduit carrying raw water or water in a prior stage of treatment?			
122	290.42(c)(5)	Are sampling taps provided for raw water, treated water, and also at every point water enters the distribution system?			
123	290.42(c)(6)	Is decant water or sludge controlled so there is minimum interference with the treatment process? If a treatment technique violation occurs, are customers notified?			
124	290.42(c)(7)	Are air release devices on treated waterlines installed in such a manner as to preclude the possibility of submergence or possible entrance of contaminants?			

			YES	NO	N/A
		DISINFECTION			
125	290.42(e)(1)	Is all water disinfected in accordance with 290.110?			
126	290.42(e)(3)	Is disinfection equipment installed and does it provide continuous and effective disinfection at all times?		A	
127	290.42(e)(3)(A)	Does the disinfection equipment have a capacity 50% greater than the highest expected dosage to be applied at any given time?			
128	290.42(e)(3)(B)	Is automatic proportioning equipment for disinfectant equipment provided?			
129	290.42(e)(3)(C)	Does the surface water treatment plant have at least one functional disinfectant standby unit of each capacity available to ensure uninterrupted operation?			
130	290.42(e)(3)(E)	Are calcium hypochlorite solutions prepared in separate mixing tanks and allowed to settle?			
131	290.42(e)(3)(D)	Does the system have facilities available to determine the amount of disinfectant used daily and the remaining amount for use (scales or gauges)?			
132	290.42(e)(3)(F)	Have provisions been made for both pretreatment disinfection and post-treatment disinfection?			
133	290.42(e)(4)(A)	If chlorine gas is used, is a full face contained breathing apparatus or supplied air respirator readily available outside the chlorine room?			
134	290.42(e)(4)(A)	Is a small bottle of fresh ammonia (or the approved equal) for testing chlorine leaks available outside the chlorine room and available in the event of an emergency?			
135	290.42(e)(4)(B)	Is the gas chlorination equipment stored in a separate building or separate rooms with impervious walls separating it from all other mechanical and electrical equipment and is it housed above ground level?			
136	290.42(e)(4)(C)	Is adequate ventilation provided for areas where chlorine is stored or fed?			
137	290.42(e)(5)	Are hypochlorination solution containers and pumps stored in a secure and enclosed area for protection from adverse weather conditions and vandalism? Are the solution tops completely covered to prevent the entrance of dust, insects, etc.?			
138	290.42(e)(6)	Is anhydrous ammonia fed equipment stored in a secure, enclosed, and appropriately ventilated area?			
139	290.42(f)(1)	Is the chemical storage facility designed to ensure a reliable supply of chemicals to the feeders and to minimize spills?			
		FACILITIES			
140	290.41(e)(5)	Are all facilities protected by intruder resistant fences, with gates that have locks, or if applicable are enclosed in locked, ventilated structures to prevent intruder passage or damage to the facilities by trespassers, and is the gate or well house locked \ when the plant is unattended?			
141	290.41(e)(4)	Does each plant and well site have an all weather access road leading to it?			

			YES	NO	N/A
142	290.42(h)	Are appropriate toilets and hand washing facilities provided in areas where employees frequent?			
		PERMITS			
143	290.42(i)	Have wastewater permits been obtained as necessary for processed water treatment waste?			
		CHEMICALS			
144	290.42(j)	Do all the chemicals and any additional or replacement process media used in treatment of water conform to American National Standards Institute/National Sanitation Foundation Standard 60 for direct additives and ANSI/NSF Standard 61 for indirect additives?			
		SAFETY			
145	290.42(k)(1)	Does all safety equipment meet OSHA standards or the Texas Hazard Communication Act, Texas Health and Safety Code, Title 6, Chapter 502?			
146	290.42(k)(2)	Does the system comply with the EPA requirements for Risk Management Plans?			
		WATER STORAGE			
147	290.43(b)(1)	Are the elevated and/or ground storage tanks located 500 feet or more away from any municipal or industrial sewage treatment plant or any land that is spray irrigated with treated sewage effluent or sludge disposal?			
148	290.43(b)(2)	Are the clearwells or treated water tanks appropriately located so that they are not under any part of any building, and if possible wholly or partially above ground?			
149	290.43(b)(3)	If the clearwell or storage tank is located below ground level, is it more than 50 feet from a sanitary sewer or septic tank (unless the sanitary sewer is constructed of 150 psi pressure-rated pipe with pressure tested, watertight joints, then the distance is no closer than 10 feet) ?			
150	290.43(b)(4)	If the storage tank or clearwell is constructed below ground level, is it at least 150 feet from a septic tank soil absorption system?			
151	290.43(c)	Are all facilities for potable water storage covered and designed, fabricated, erected, tested and disinfected in strict accordance with current American Water Works Association (AWWA) standards and do they provide the minimum number, size, and type of roof vents, man ways, drains, sample connections, access ladders, overflows, liquid level indicators, and other appurtenances required? Is the roof of all tanks erected such that no water ponds on the roof, and the roof slope is not less than 0.75 inches per foot?			
152	290.43(c)(1)	Are the roof vents 'gooseneck' or 'roof ventilator' type, designed by an engineer for the maximum outflow from the tank, and properly installed according to AWWA standards?			
153	290.43(c)(1)	Do the roof vents have approved 16-mesh screens securely fastened with stainless or galvanized bands or wires to prevent animals, birds, insects or heavy air contaminants from entering?			
154	290.43(c)(2)	Is the primary roof opening 30 inches in diameter and do all access openings have a raised 4 inch curb with a lockable cover that overlaps the curbing at least two inches in a downward direction?			

			YES	NO	N/A
155	290.43(c)(3)	Are all overflow pipes equipped with a gravity hinged and weighted cover and does the cover have a gap no more than 1/16"?			
156	290.43(c)(3)	Do overflow discharge openings terminate at ground level? Are they located so that they are not subject to submergence or is the overflow located close enough and at a position accessible from a ladder or the balcony for inspection purposes?			
157	290.43(c)(3)	Is the overflow sized to handle the maximum possible fill rate without exceeding capacity overflow?			
158	290.43(c)(4)	Do all ground storage tanks have water level indicators at the tank site?			
159	290.43(c)(5)	Are all inlet and outlet connections located to prevent short circuiting or stagnation of water?			
160	290.43(c)(5)	Are any clearwells used for disinfectant contact time appropriately baffled to prevent short-circuiting?			
161	290.43(c)(6)	Are all clearwells and potable water storage tanks tight to prevent leakage, and are they located above ground level without common walls with any other part of the plant containing water in the process of being treated?			
162	290.43(c)(6)	Are all associated appurtenances including valves, pipes, and fittings tight against leakage?			
163	290.43(c)(7)	Do all storage tanks have a means to remove accumulated silt and deposits at all low points in the bottom of the tank, and are the drains not connected to a waste or sewage disposal system and therefore cannot contaminate the stored water?			
164	290.43(c)(8)	Are all clearwells, ground storage tanks, standpipes, and elevated tanks painted (using lead-free paint), disinfected, and maintained in strict accordance to AWWA standards? Do newly installed internal paints and coatings conform to ANSI/NSF Standard 61 and have they been certified by an organization accredited by ANSI?			
165	290.43(c)(9)	Have all used tanks put into operation only been used for potable water storage and is a letter from the previous owner confirming this on file with the Commission?			
166	290.43(c)(10)	Are all access man ways in the riser pipe, shell area, access tube, bowl area or any other location opening directly into the water compartment located according to AWWA standards?			
167	290.43(c)(10)	Are all the man ways or other openings at least 24 inches in diameter? (Some exceptions in 290.43(c)(10))			
168	290.43(c)(10)	Are all openings directly to water compartments sealed with gaskets to make positive seals?			
		PRESSURE TANKS			
169	290.43(d)	Are all pressure (hydropneumatic) tanks located above grade and made from steel with welded seams? [Some exceptions in 290.43(d)(8)]			
170	290.43(d)(1)	Is the thickness of the metal in all pressure tanks sufficient to withstand the highest expected working pressure with a four to one safety factor?			
171	290.43(d)(1)	Do all pressure tanks 1,000 gallons or larger meet ASME standards and have an access port for inspection (those installed before 7/1/1988 are exempt from the ASME coding requirement)?			

			YES	NO	N/A
172	290.43(d)(1)	Do all pressure tanks 1,000 gallons or larger have a permanently affixed ASME name plate?			
173	290.43(d)(2)	Do all pressure tanks have a pressure release device?			
174	290.43(d)(2)	Do all pressure tanks have an easy to read pressure gauge?			
175	290.43(d)(3)	Do all pressure tanks provide facilities to maintain air-water volume at its design water level and working pressure?			
176	290.43(d)(3)	Do the pressure tanks larger than 1,000 gallons have a device readily available to determine the air-water volume? (Galvanized tanks installed before 7/1/1988 are exempt)			
177	290.43(d)(3)	Do air injection lines have filters or other devices to prevent compressor lubricants and other contaminants from entering the pressure tank?			
178	290.43(d)(4)	Do the required protective paints or coatings applied to the inside portion of all pressure tanks conform to ANSI/NSF Standard 61 and have they been certified by an organization accredited with ANSI?			
179	290.43(d)(5)	Have all pressure tanks been used to store only potable water, and if previously owned, is a letter on file from the previous owner certifying this?			
180	290.43(d)(6)	Are all pressure tanks equipped with a slow closing valve and time delay pump controls?			
181	290.43(d)(7)	Are all associated pipe, valves, and fittings to the pressure tanks tight against leaks?			
182	290.43(d)(8)	Are all seamless fiberglass tanks used smaller than 300 gallons?			
183	290.42(d)(9)	If more than 3 pressure tanks are located at one site, did you obtain prior commission approval?			
184	290.43(e)	Are the water storage tanks and pressure maintenance facilities installed in a lockable building that is intruder resistant or enclosed by an intruder resistant fence with lockable gates and gates and doors are locked when unattended?			
185	290.43(f)	Are any service pumps taking suction from storage tanks provided with an automatic low water cutoff device and will the service pump circuitry also resume pumping automatically once the minimum water level is reached in the tank?			
		WATER DISTRIBUTION			
186	290.44(a)(1)	Do all newly installed pipes and related products used in the system conform to ANSI/NSF standard 61 and are they certified by an organization accredited by ANSI?			
187	290.44(a)(2)	Do all of the plastic pipes used in the system have an ASTM design pressure rating of 150 psi or a standard dimension ratio of 26 or less and bear the NSF seal of approval for potable water (NSF-pw)?			
188	290.44(a)(3)	Have all pipes used in the water system only been used for conveying drinking water?			
189	290.44(a)(4)	Are all water transmission/distribution lines buried below the frost line and at least 24" below ground surface?			

			YES	NO	N/A
190	290.44(a)(5)	Does the hydrostatic leakage rate not exceed the amount allowed or recommended by AWWA formulas?			
191	290.44(b)(1)	Do the pipe and pipe fittings not exceed 0.25% lead, and 0.2% lead in solders and flux (waived for repairs to cast iron pipe)?			
192	290.44(c)	Are all new pipes used in the system at least 2 inches in diameter (does not apply to individual customer service lines)?			
193	290.44(d)	Does the water distribution system provide a minimum pressure of 35 psi at all points in the distribution network at flow rates of 1.5 gpm/ connection and maintain 20 psi during fire fighting events?			
194	290.44(d)(1)	Are all air release devices installed in the distribution system where topography or other factors may create air locks? Are the release devices installed above submergence level, and are the openings covered with 16 mesh or finer corrosion resistant screening material or acceptable equivalent?			
195	290.44(d)(2)	If booster pumps are installed to take suction directly from the distribution system, is a minimum residual pressure of 20 psi maintained on the suction at all times?			
196	290.44(d)(2)	Has an exception been granted by the Executive Director in a plan approval letter or by separate correspondence for all booster pumps taking suction from any area other than a storage tank in the system lines?			
197	290.44(d)(3)	Are the booster pumps equipped with an automatic pressure cut off device so that pumping units become inoperative at 20 psi?			
198	290.44(d)(4)	Do all service connections provide accurate metering devices?			
199	290.44(d)(5)	Are sufficient valves and blowoffs available for repairs and flushing to avoid large areas of interrupted service?			
200	290.44(d)(6)	Do all dead end mains have acceptable flush valves and discharge piping?			
201	290.44(d)(6)	Are dead end mains located and arranged for ultimately connecting them to provide circulation?			
202	290.44(e)	Are the requirements regarding the installation of water distribution lines, wastewater collection lines, wastewater force mains, or other potential sources of contamination followed?			
203	290.44(f)	Are sanitary precautions including flushing, disinfection and bacteriological sampling followed according to AWWA standards when disinfecting water mains and when laying water lines?			
204	290.44(h)(1)(A) & (B)	At any establishment or residence where an actual or potential contamination hazard exists, has an air gap or backflow prevention assembly been installed at the meter in accordance with Appendix 290.47(i) or is an adequate internal cross control program in effect?			
205	290.44(h)(2)	Are all connections from condensing, cooling, or industrial processes, or any other system of non-potable usage over which the public water supply system officials do not have sanitary control prohibited from being connected to the public drinking water system and is water from such systems prevented from returning to the potable water supply?			

			YES	NO	N/A
206	290.44(h)(3)	Does the overhead bulk water station provide for an air gap between the filling outlet hose and the receiving tank?			
207	290.44(h)(4)	Are all backflow prevention assemblies that are required by 290.44(h) tested upon installation by a recognized backflow prevention assembly tester?			
208	290.44(h)(4)	Are all the backflow prevention assemblies that are installed to provide protection against health hazards tested and certified to be operating within specifications at least annually by a recognized backflow prevention assembly tester [see 290.47(i) for a non all-inclusive list of facilities and water using equipment that are required to have some type of backflow assembly]?			
209	290.44(h)(4)(A)	Are all backflow prevention assembly testers licensed by the Executive Director?			
210	290.44(h)(4)(B)	Are gauges used in testing backflow prevention assemblies tested annually for accuracy?			
211	290.44(i)(1) - (2)	If water is hauled, is it obtained from an approved source, and has the equipment used for transportation been approved by the Executive Director and constructed according to 290.44 (i)(A)-(L)?			
212	290.44(g)(1)	Does the system have written approval from the Executive Director for all interconnections with other public water systems?			
213	290.44(g)(2)	If there is a direct connection between two public water systems, is the system utilized as the secondary source capable of supplying a minimum of 0.35 gpm per connection for the total number of connections in the combined distribution system?			
		MINIMUM CAPACITY REQUIREMENTS			
		Capacity for all systems using surface water sources			
214	290.45(b)(2)(A)	Is the raw water pump capacity at least 0.6 gpm per connection when the largest pump is out of service?			
215	290.45(b)(2)(B)	Is there 0.6 gpm per connection treatment plant capacity under normal rated design flow?			
216	290.45(b)(2)(C)	If there are transfer pumps, do they have a capacity of 0.6 gpm per connection with the largest pump out of service?			
217	290.45(b)(2)(D)	If the system serves 250 connections or less, is the covered clearwell storage capacity at the treatment plant 50 gallons per connection?			
218	290.45(b)(2)(D)	If the system serves more than 250 connections, is the covered clearwell storage capacity at the treatment plant 5.0% of the daily plant capacity?			
219	290.45(b)(2)(E)	Is the total storage capacity 200 gallons per connection?			
220	290.45(b)(2)(F)	Does the service pump capacity provide each pump station or pressure plane with two or more pumps that have a total capacity of 2.0 gpm per connection, or do they have a total capacity of at least 1,000 gpm and the ability to meet peak hourly demands with the largest pump out of service, whichever is less?			

			YES	NO	N/A
221	290.45(b)(2)(F)	If the system provides an elevated storage capacity of 200 gallons per connection for a pressure plane, are two service pumps with a minimum combined capacity of 0.6 gpm per connection provided for each pump station and its pressure plane?			
222	290.45(b)(2)(G)	For systems with 2,500 connections or less, does the system provide an elevated storage capacity of 100 gallons per connection or a pressure tank capacity of 20 gallons per connection? [Some exceptions in 290.45(b)(2)(G)] If pressure tanks are used, a maximum capacity of 30,000 gallons is sufficient.			
223	290.45(b)(2)(G)	For systems with 2,500 connections or more, does the system provide an elevated storage capacity of 100 gallons per connection?			
224	290.45(b)(2)(H)	If the system has 250 connections or more and doesn't meet the elevated storage tank requirements, is emergency power provided which will deliver water at 0.35 gpm per connection to the distribution system in the event of the loss of normal power supply?			
225	290.45(e)(1) - (2)	If wholesale water is provided, is there enough production, treatment and service pumping capacity to meet or exceed all contractual obligations?			
226	290.45(e)(3)	If the water wholesaler supplies more than 250 connections under direct pressure but does not provide elevated storage capacity of at least 100 gallons per connection, is emergency power available to deliver 20% of the minimum required service pump capacity?			
		Groundwater under the Direct Influence of Surface Water			
227	290.46(e)(5)(A)	If the system serves no more than 1,000 connections and uses a cartridge or membrane filter, do they employ at least one Class "C" or higher groundwater licensed operators who have completed a 4 hour training course on monitoring and reporting, or operators with a Class "C" or higher surface water license who have completed the Groundwater Production course, and who each work at least 24 hours per month at the systems production, treatment or distribution facility?			
228	290.46(e)(5)(B)	If the system serves more than 1,000 connections and uses a cartridge or membrane filter, does it have two operators with a Class "C" or higher groundwater license who have completed a 4 hour training course on monitoring and reporting, or an operator with a Class "C" or higher surface water license who has completed the Groundwater Production course and works at least 24 hours per month at the systems production, treatment or distribution facility?			
229	290.46(e)(5)(C)	If the system serves no more than 1,000 connections and uses coagulant addition and direct filtration, do they employ a Class "C" or higher surface water licensed operator that has completed the Groundwater Production course or do they employ a Class "C" or higher ground water licensed operator that has completed a Surface Water production course? Beginning 01-01-07 one operator must have completed the Surface Water Unit I course and the Surface Water Unit II course.			

			YES	NO	N/A
230	290.46(e)(5)(D)	If the system serves more than 1,000 connections and uses coagulant addition and direct filtration, do they employ at least two Class "C" or higher surface water licensed operators that have completed the Groundwater Production course or do they employ a Class "C" or higher ground water licensed operator who has completed a Surface Water production course and who each work at least 24 hours per month at the system's production, treatment, or distribution facilities? Beginning 01-01-07 two operators must have completed the Surface Water Unit I course and the Surface Water Unit II course.			
231	290.46(e)(5)(F)	Does the system have at least one Class "C" operator or higher on duty at the plant when it is in operation or does the plant have continuous turbidity & disinfectant residual monitors with automatic plant shut down and alarms to notify operators?			
		MINIMUM OPERATING PRACTICES			
232	290.46(d)	Is the system's disinfection continuously maintained during treatment process and throughout the system?			
233	290.46(e)(6)(A)	If the system serves no more than 1,000 connections, does it employ at least one Class "B" or higher surface water licensed operator? Effective 01-01-07 the system must employ at least 1 operator who has completed Surface Water Unit I and the Surface Water Unit II course.			
234	290.46(e)(6)(B)	If the system serves more than 1,000 connections, does it employ at least two operators: 1 Class "C" or higher and 1 Class "B" or higher surface water licensed operators, and does each operator work at least 32 hours per month at the production, treatment or distribution system? Effective 01-01-07 the public water system must employ at least 2 operators who have completed Surface Water Unit I and the Surface Water Unit II course.			
235	290.46(e)(6)(C)	Does the system have at least one Class "C" or higher surface water operator on duty at all times the plant is in operation? (See exceptions in this section)			
		All Systems			
236	290.46(e)(2)(C)	If the system uses chlorine dioxide, are the chlorine dioxide facilities under the direct supervision of at least a Class "C" licensed operator?			
237	290.46(g)	If the system installs or repairs lines, is all disinfection work performed under the supervision of the water systems personnel?			
238	290.46(h)	Does the system have Calcium Hypochlorite on hand for making repairs, setting meters, and disinfecting new lines?			
239	290.46(i)	Do the plumbing ordinances and service agreements prohibit potential cross connections?			
240	290.46(j)	Is a customer service inspection certificate completed when the water purveyor has reason to believe that a cross connection or other unacceptable plumbing practice exists, prior to providing continuous water service to new construction, or after any material improvements, corrections, or additions to the private plumbing facility? Is the appropriate form (found in 290.47(d)) used?			
241	290.46(j)(1)	Are customer service inspections performed by TCEQ licensed Customer Service Inspectors, Plumbing Inspectors, or Water Supply Protection Specialists?			

			YES	NO	N/A
242	290.46(j)(2)	As potential contamination hazards are discovered, are they eliminated or is service terminated?			
243	290.46(l)	Are all dead end mains flushed monthly or more frequently to maintain water quality?			
244	290.46(m)(1)	Are the system's ground, elevated and pressure tanks inspected annually and do they meet the requirements in 290.46(m)(1)?			
245	290.46(m)(2)	If pressure filters are used, are visual inspections of the filter media and internal surfaces conducted annually to ensure the filter media is in good condition and the internal coating materials continue to provide adequate protection to the internal surfaces?			
246	290.46(m)(3)	If cartridge filters are used, are they changed according to manufacturers' specifications or more frequently?			
247	290.46(m)(4)	Are water storage facilities, treatment units, pressure maintenance facilities and distribution system lines and related appurtenances in watertight condition and free of excess solids?			
248	290.46(m)(5)	Are the basins used for clarification maintained free of excess solids?			
249	290.46(m)(6)	Are pumps, motors, valves, and other mechanical devices maintained in good working condition?			
250	290.46(o)	Are the filters backwashed when a loss of head differential of six to ten feet is experienced between the influent and effluent loss of head gauges, or when the turbidity level at the effluent of the filter reaches 1.0 NTU?			
251	290.46(s)	Is accurate testing equipment or other means to monitor effectiveness of all chemical treatment processes provided?			
252	290.46(s)(1)	Are flow-measuring devices and rate of flow controllers calibrated at least every 12 months?			
253	290.46(s)(2)	Is all laboratory equipment used for compliance testing calibrated in accordance with 290.46(s)(2)?			
254	290.46(s)(2)(C)	Are all disinfectant residual analyzers properly calibrated according to 290.46(s)(2)(c)?			
255	290.46(t)	Are legible signs which include the utility name and emergency contact number located at each of the production, treatment, and storage facilities?			
256	290.46(u)	Are all abandoned wells owned by the system plugged with cement or if not deteriorated, are they tested every 5 years?			
257	290.46(v)	Is all electrical wiring in a securely mounted conduit in compliance with local or national electrical code?			
258	290.47(a)	If the water system is recognized as an approved or superior water system, and signs are displayed, are they maintained?			

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