



Summary of Substantive Changes between the 2016 and the 2017 editions of NSF/ANSI 58, “Reverse Osmosis Drinking Water Treatment Systems”

Presented to the IAPMO Standards Review Committee on March 12, 2018

General: The changes to this standard might have an impact on currently listed products. The substantive changes are:

- Sampling procedures for the evaluations of the minimum performance and elective performance claims were revised to ensure consistency among labs (See Section 6.9.7).
- Evaluation criteria columns from Tables 4.1, 4.2, and 4.3 were removed. The evaluation criteria are now referenced in NSF/ANSI 61 (see NSF/ANSI 61, Annex D, Table D1).

Section 2, Normative references: Referenced standards were added, removed or updated as follows:

2 Normative references

[21 CFR §. Parts 170-199. Food and Drugs³](#)

³ [USFDA –CFR Code of Federal Regulations Title 21](#)

<https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm>

[USFDA Code of Federal Regulations, Title 21, \(Food and drugs\) Direct Food Additive Substances parts 170 through 199, April, 1 1992](#)

Section 6.9.7, Sampling: Sampling procedures for the evaluations of the minimum performance and elective performance claims were revised throughout the standard to ensure consistency among labs (in Sections 6.9.7.1 through 6.9.7.4, Sections 7.1.2.7 through 7.1.2.7.4, Sections 7.1.3.5.1 through 7.1.3.5.4, Sections 7.2.1.6.1 through 7.2.1.6.4, Sections 7.2.2.6.1 through 7.2.2.6.4 and Sections 7.2.3.6.1 through 7.2.3.6.4) as follows:

6.9.7.1 Systems with storage tank and automatic shut-off ~~Influent and p~~Product water samples shall be collected ~~and analyzed for TDS at the following elapsed times from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. Influent and product samples shall be analyzed for all test contaminants.~~ ~~o~~On Day 1 of testing, the storage tank shall be emptied after each collection at 4, 12, and 16 h. The storage tank shall be emptied at each sample point. On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. ~~A TDS sample shall be collected and analyzed from the tank.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a ~~TDS~~ sample shall be collected and analyzed, followed by the emptying of the storage tank. A final TDS sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after the TDS sample collection.~~



6.9.7.2 Counter top systems with storage tanks or reservoirs

~~Influent and p~~Product water samples shall be collected ~~and analyzed for TDS at the following elapsed times from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. Influent and product samples shall be analyzed for all test contaminants. e~~On Day 1 of testing, ~~the storage tank shall be emptied after each collection at~~ 4, 12, ~~and~~ 16 h. ~~The storage tank shall be emptied at each sample point.~~ On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank ~~after each collection~~ at the beginning of the day and after an elapsed time of 6 and 12 h. A TDS sample shall be collected and analyzed from the tank. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a TDS sample shall be collected and analyzed, followed by the emptying of the storage tank. A final TDS sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after the TDS sample collection.~~

6.9.7.3 Systems without storage tanks

~~Influent and p~~Product water samples shall be collected ~~and analyzed for TDS at the following elapsed times from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. Influent and product samples shall be analyzed for all test contaminants. e~~On Day 1 of testing: ~~samples will be collected at~~ 4, 12, and 16 h. On Days 2 to 4 of testing, ~~5% of the first day's production capacity or 500 mL, whichever is greater, the first 250 mL out of the system shall be collected at the beginning of the day and after an elapsed time of 6 and 12 h. A TDS sample shall be collected and analyzed from the tank.~~ Days 5 and 6 represent a 54-h stagnation, under pressure, during which no product water is to be collected. At the start of Day 7, 144 h into the test, a TDS sample shall be collected and analyzed. A final TDS sample shall be collected and analyzed on Day 7 for the first 4-h period. ~~Influent and product water samples shall be collected and analyzed for TDS at the time intervals specified.~~

6.9.7.4 Systems with no shut-off provisions

~~Influent and p~~Product water samples shall be collected ~~and analyzed for TDS at 4-h intervals from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. Influent and product samples shall be analyzed for all test contaminants. e~~On Day 1 of testing, ~~samples will be collected in 4-h intervals~~ including 4, 8, 12, and 16 h. ~~After each collection, the storage tank shall be emptied and the product water volume recorded in liters (gallons) at each 4-h sample point.~~ On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank ~~after each collection~~ at the beginning of the day and after an elapsed time of 6 and 12 h. ~~A TDS sample shall be collected and analyzed from the tank.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a TDS sample shall be collected and analyzed, followed by emptying of the storage tank. Two final samples shall be collected and analyzed on Day 7 for the first two 4-h periods, and the storage tank shall be emptied after each TDS sample collection. ~~After the last sample for TDS is collected, the storage tank shall be emptied.~~

7.1.2.7 Sampling

~~Influent and p~~Product water samples shall be collected ~~from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. and Influent and product samples shall be analyzed for all test contaminants. following 4-h and 12-h e~~On Day 1 of testing, ~~T~~the storage tank shall be emptied ~~at each sample point~~ ~~after each collection at 4 h and 12 h.~~ On Days 2 to 4



of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. A test contaminant sample shall be collected and analyzed from the tank. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.1.2.7.1 Systems with storage tank and automatic shut-off

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 12 h o~~On Day 1 of testing, ~~T~~the storage tank shall be emptied ~~at each sample point after each collection at 4 h and 12 h.~~ On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. ~~A test contaminant sample shall be collected and analyzed from the tank.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.1.2.7.2 Counter top systems with storage tanks or reservoirs

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 8 h o~~On Day 1, the storage tank shall be emptied ~~at each sample point after each collection at 4 h and 8 h.~~ On days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.1.2.7.3 Systems without storage tanks

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 8 h o~~On Day 1 of testing, samples shall be collected at 4 h and 8 h. On Days 2 to 4 of testing, samples shall be collected at the beginning of the day and after an elapsed time of 6 and 12 h ~~and analyzed for TDS.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a test contaminant sample shall be collected and analyzed. A final sample shall be collected and analyzed on Day 7 for the first 4-h period.



7.1.2.7.4 Systems with no shut-off provisions

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for test contaminants. ~~at 4-h intervals~~ On Day 1 of testing, samples will be collected in 4-h intervals including 4, 8, 12, and 16 h. The storage tank shall be emptied after each collection and the product water volume shall be recorded in liters (gallons) at each 4-h sample point. On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection~~. After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.1.3.5.1 Systems with storage tank and automatic shut-off

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 12 h~~ On Day 1 of testing, ~~the~~ storage tank shall be emptied at each sample point after each collection at 4 h and 12 h. On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. ~~A test contaminant sample shall be collected and analyzed from the tank~~. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection~~. After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.1.3.5.2 Counter top systems with storage tanks or reservoirs

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 8 h of testing~~ On Day 1, the storage tank shall be emptied at each sample point after each collection at 4 h and 8 h. On days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h ~~from which a test contaminant sample shall be collected and analyzed~~. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection~~. After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.1.3.5.3 Systems without storage tanks

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 8 h~~ On Day 1 of testing samples



~~will be collected at 4 h and 8 h.~~ On Days 2 to 4 of testing, samples shall be collected at the beginning of the day and after an elapsed time of 6 and 12 h ~~and analyzed for TDS.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a test contaminant sample shall be collected and analyzed. A final sample shall be collected and analyzed on Day 7 for the first 4-h period.

7.1.3.5.4 Systems with no shut-off provisions

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for test contaminants. ~~4-h intervals o~~On Day 1 of testing, sampling will take place in 4-h intervals including 4, 8, 12, and 16 h. The storage tank shall be emptied after each collection and the product water volume shall be recorded in liters (gallons) at each 4-h sample point. On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. ~~A test contaminant sample shall be collected and analyzed from the tank.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.2.1.6.1 Counter top systems with storage tanks or reservoirs

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 8 h of testing o~~On Day 1 of testing, the storage tank shall be emptied ~~at each sample point~~ after each collection at 4 h and 8 h. On days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h from which a test contaminant sample shall be collected and analyzed. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.2.1.6.2 Systems without storage tanks

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 8 h o~~On Day 1 of testing, samples shall be collected at 4 h and 8 h. On Days 2 to 4 of testing, samples shall be collected at the beginning of the day and after an elapsed time of 6 and 12 h and analyzed for TDS. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed. A final sample shall be collected and analyzed on Day 7 for the first 4-h period.

7.2.1.6.3 Systems with storage tank and automatic shut-off



~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 12 h o~~On Day 1 of testing, samples shall be collected at 4 h and 12 h. On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. ~~A test contaminant sample shall be collected and analyzed from the tank.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.2.1.6.4 Systems with no shut-off provisions

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for test contaminants. ~~at 4-h intervals o~~On Day 1 of testing, samples shall be collected at 4 h intervals including 4, 8, 12, and 16 h. The storage tank shall be emptied after each collection and the product water volume shall be recorded in liters (gallons) at each 4-h sample point. On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. ~~A test contaminant sample shall be collected and analyzed from the tank.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period. After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.2.2.6.1 Counter top systems with storage tanks or reservoirs

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 8 h o~~On Day 1 of testing, samples shall be collected at 4 h and 8 h. ~~The storage tank shall be emptied at each sample point.~~ On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h from which a test contaminant sample shall be collected and analyzed. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, ~~followed by emptying of the storage tank.~~ A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.2.2.6.2 Systems without storage tanks

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 8 h o~~On Day 1 of testing, samples shall be collected at 4 h and 8 h. On Days 2 to 4 of testing, samples shall be collected at the beginning of



the day and after an elapsed time of 6 and 12 h and analyzed for TDS. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed. A final sample shall be collected and analyzed on Day 7 for the first 4-h period.

7.2.2.6.3 Systems with storage tank and automatic shut-off

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants ~~following 4 h and 12 h o~~On Day 1 of testing, the storage tank shall be emptied ~~at each sample point~~ after each collection at 4 h and 12 h. On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. ~~A test contaminant sample shall be collected and analyzed from the tank.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.2.2.6.4 Systems with no shut-off provisions

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for test contaminants. ~~at 4-h intervals o~~On Day 1 of testing, samples shall be collected at 4 h intervals including 4, 8, 12, and 16 h. The storage tank shall be emptied after each collection and the product water volume shall be recorded in liters (gallons) at each 4-h sample point. On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. ~~A test contaminant sample shall be collected and analyzed from the tank.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.2.3.6.1 Counter top systems with storage tanks or reservoirs

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants ~~following 4 h and 8 h of testing o~~On Day 1 of testing, the storage tank shall be emptied ~~at each sample point~~ after each collection at 4 h and 8 h. On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h from which a test contaminant sample shall be collected and analyzed. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied~~



~~after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.2.3.6.2 Systems without storage tanks

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. following 4 h and 8 h ~~o~~On Day 1 of testing, samples shall be collected at 4 h and 8 h. On Days 2 to 4 of testing, samples shall be collected at the beginning of the day and after an elapsed time of 6 and 12 h and analyzed for TDS. Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed. A final sample shall be collected and analyzed on Day 7 for the first 4-h period.

7.2.3.6.3 Systems with storage tank and automatic shut-off

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250 mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for all test contaminants. ~~following 4 h and 12 h o~~On Day 1 of testing, the storage tank shall be emptied ~~at each sample point~~ after each collection at 4 h and 12 h. On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. ~~A test contaminant sample shall be collected and analyzed from the tank.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.

7.2.3.6.4 Systems with no shut-off provisions

~~Influent and p~~Product water samples shall be collected from the first water out of the system in the amount of 250mL or total volume needed for analysis, whichever is greater. ~~and Influent and product samples shall be~~ analyzed for test contaminants. ~~at 4-h intervals o~~On Day 1 of testing, samples shall be collected at 4 h intervals including 4, 8, 12, and 16 h. The storage tank shall be emptied after each collection and the product water volume shall be recorded in liters (gallons) at each 4-h sample point. On Days 2 to 4 of testing, 5% of the first day's production rate shall be withdrawn from the storage tank after each collection at the beginning of the day and after an elapsed time of 6 and 12 h. ~~A test contaminant sample shall be collected and analyzed from the tank.~~ Days 5 and 6 represent a 54-h stagnation period, under pressure, during which no product water shall be withdrawn. At the start of Day 7, 144 h into the test, a sample shall be collected and analyzed, followed by emptying of the storage tank. A final sample shall be collected and analyzed on Day 7 for the first 4-h period, ~~and the storage tank shall be emptied after each test contaminant sample collection.~~ After the last sample for test contaminants is collected, the storage tank shall be emptied.



Sampling procedures for the evaluations of the minimum performance and elective performance claims were revised to ensure consistency among labs.