

**567—42.4(455B) Reporting.****42.4(1) Reporting requirements other than for lead and copper.**

*a.* When required by the department, the supplier of water shall report to the department within ten days following a test, measurement or analysis required to be made by 567—Chapter 40, 41, 42, or 43 the results of that test, measurement or analysis in the form and manner prescribed by the department. This shall include reporting of all positive detects within the same specific analytical method.

*b.* Except where a different reporting period is specified in this rule or 567—Chapters 41 and 43, the supplier of water shall report to the department within 48 hours after any failure to comply with the monitoring requirements set forth in 567—Chapters 41 and 43. The supplier of water shall also notify the department within 48 hours of failure to comply with any primary drinking water regulations.

*c.* The public water supply system, within ten days of completion of each public notification required pursuant to 567—42.1(455B) for the initial public notice and any repeat notices, shall submit to the department a certification that it has fully complied with the public notification rules. The public water system must include with this certification a representative copy of each type of notice distributed, published, posted, or made available to the persons served by the system or to the media.

*d.* Groundwater rule. Additional reporting requirements for the groundwater rule are listed in 567—paragraph 41.7(6)“*a.*”

*e.* Coliform rule. Additional reporting requirements for the coliform rule are listed in 567—paragraph 41.2(1)“*n.*”

**42.4(2) Lead and copper reporting requirements.** All water systems shall report all of the following information to the department in accordance with this subrule.

*a. Reporting requirements for tap water monitoring for lead and copper and for water quality parameter monitoring.*

(1) Except as provided in 42.4(2)“*a*”(1)“8,” a water system shall report the information specified below for all tap water samples specified in 567—paragraph 41.4(1)“*c*” and for all water quality parameter samples specified in 567—paragraph 41.4(1)“*d*” within the first ten days following the end of each applicable monitoring period specified in 567—41.4(455B) (i.e., every six months, annually, or every three years). For monitoring periods with a duration of less than six months, the end of the monitoring period is the last date samples can be collected during that period as specified in 567—paragraphs 41.4(1)“*c*” and 41.4(1)“*d*.”

1. The results of all tap samples for lead and copper including the location of each site and the criteria under which the site was selected for the system’s sampling pool;

2. Documentation for each tap water lead or copper sample for which the water system requests invalidation pursuant to 567—paragraph 41.4(1)“*c*”(6)“2”;

3. Rescinded IAB 1/7/04, effective 2/11/04;

4. The 90th percentile lead and copper concentrations measured from among all lead and copper tap water samples collected during each monitoring period (calculated in accordance with 567—subparagraph 41.4(1)“*b*”(3));

5. With the exception of initial tap sampling conducted pursuant to 567—paragraph 41.4(1)“*c*”(4)“1,” the system shall designate any site which was not sampled during previous monitoring periods, and include an explanation of why sampling sites have changed;

6. The results of all tap samples for pH and, where applicable, alkalinity, calcium, conductivity, temperature, and orthophosphate or silica collected under 567—subparagraphs 41.4(1)“*d*”(2) through (5);

7. The results of all samples collected at the entry point(s) to the distribution system for applicable water quality parameters under 567—subparagraphs 41.4(1)“*d*”(2) and (5); and

8. A water system shall report the results of all water quality parameter samples collected under 567—subparagraphs 41.4(1)“*d*”(3) through (6) during each six-month monitoring period specified in 567—subparagraph 41.4(1)“*d*”(4) within the first ten days following the end of the monitoring period, unless the department has specified a more frequent reporting requirement.

(2) Certain systems that do not have enough taps that can provide first-draw samples that have met the six-hour stand time criteria, such as an NTNC that has 24-hour operation or a CWS that meets the criteria of 42.2(2)“b”(7), must either:

1. In the case where the department has not approved the non-first-draw sample sites, provide written documentation to the department identifying stand times and locations for enough non-first-draw samples to make up its sampling pool under 567—paragraph 41.4(1)“c”(2)“5” by July 1, 2003; or

2. If the department has already approved the non-first-draw sample sites selected by the system, identify each site that did not meet the six-hour minimum stand time and the length of stand time for that particular substitute sample collected pursuant to 567—paragraph 41.4(1)“c”(2)“5.” Certain systems include this information in writing with the lead and copper tap sample results required to be submitted pursuant to 567—paragraph 41.4(1)“d”(1)“1.”

(3) At a time specified by the department or, if no specific time is designated by the department, then as early as possible prior to the addition of a new source or any long-term change in water treatment, a water system that has optimized corrosion control under 567—subparagraph 43.7(1)“b”(3), a water system subject to reduced monitoring pursuant to 567—paragraph 41.4(1)“c”(4)“4,” or a water system subject to a monitoring waiver pursuant to 567—subparagraph 41.4(1)“c”(7) shall send written documentation to the department describing the change or addition. The department must review and approve the addition of a new source or long-term change in treatment before it is implemented by the water system. Examples of long-term treatment changes include the addition of a new treatment process or modification of an existing treatment process. Examples of modifications include the switching of secondary disinfectants, switching of coagulants (e.g., alum to ferric chloride), and switching of corrosion inhibitor products (e.g., orthophosphate to blended phosphate). Long-term changes can include dose changes to existing chemicals if the system is planning long-term changes to its finished water pH or residual inhibitor concentration. Long-term treatment changes would not include chemical dose fluctuations associated with daily water quality changes. In those instances where prior department approval of the treatment change or new source is not required, water systems are encouraged to provide the notification to the department beforehand to minimize the risk that the treatment change or new source will adversely affect optimal corrosion control.

(4) Any small system applying for a monitoring waiver under 567—subparagraph 41.4(1)“c”(7), or subject to a waiver granted pursuant to 567—paragraph 41.4(1)“c”(7)“3,” shall provide the following information to the department in writing by the specified deadline:

1. By the start of the first applicable monitoring period in 567—subparagraph 41.4(1)“c”(4), any small water system applying for a monitoring waiver shall provide the documentation required to demonstrate that it meets the waiver criteria of 567—paragraphs 41.4(1)“c”(7)“1” and “2.”

2. No later than nine years after the monitoring previously conducted pursuant to 567—paragraph 41.4(1)“c”(7)“2” or 567—paragraph 41.4(1)“c”(7)“4,” first bulleted paragraph, each small system desiring to maintain its monitoring waiver shall provide the information required by 567—paragraph 41.4(1)“c”(7)“4,” first and second bulleted paragraphs.

3. No later than 60 days after the system becomes aware that it is no longer free of lead-containing or copper-containing materials, as appropriate, each small system with a monitoring waiver shall provide written notification to the department, setting forth the circumstances resulting in the lead-containing or copper-containing materials being introduced into the system and what corrective action, if any, the system plans to remove these materials.

(5) Each groundwater system that limits water quality parameter monitoring to a subset of entry points under 567—paragraph 41.4(1)“d”(3)“3” shall provide, by the commencement of such monitoring, written correspondence to the department that identifies the selected entry points and includes information sufficient to demonstrate that the sites are representative of water quality and treatment conditions throughout the system.

*b. Source water monitoring reporting requirements.*

(1) A water system shall report the sampling results for all source water samples collected in accordance with 567—paragraph 41.4(1)“e” within the first ten days following the end of each source

water monitoring period (i.e., annually, per compliance period or per compliance cycle) specified in 567—paragraph 41.4(1)“e.”

(2) With the exception of the first round of source water sampling conducted pursuant to 567—subparagraph 41.4(1)“e”(2), the system shall specify any site which was not sampled during previous monitoring periods, and include an explanation of why the sampling point has changed.

*c. Corrosion control treatment reporting requirements.* By the applicable dates under 567—subrule 43.7(1), systems shall report the following information:

(1) For systems demonstrating that they have already optimized corrosion control, information required in 567—subparagraph 43.7(1)“b”(2) or (3).

(2) For systems required to optimize corrosion control, their recommendation regarding optimal corrosion control treatment under 567—paragraph 43.7(2)“a.”

(3) For systems required to evaluate the effectiveness of corrosion control treatments under 567—paragraph 43.7(2)“c,” the information required by that paragraph.

(4) For systems required to install optimal corrosion control designated by the department under 567—paragraph 43.7(2)“d,” a letter certifying that the system has completed installing that treatment.

*d. Source water treatment reporting requirements.* By the applicable dates in 567—subparagraph 43.7(3)“b”(1), systems shall provide the following information to the department:

(1) If required under 567—subparagraph 43.7(3)“b”(1), their recommendation regarding source water treatment;

(2) For systems required to install source water treatment under 567—subparagraph 43.7(3)“b”(1), a letter certifying that the system has completed installing the treatment designated by this department within 24 months after the department designated the treatment.

*e. Lead service line replacement reporting requirements.* Systems shall report the following information to demonstrate compliance with the requirements of 567—subrule 43.7(4):

(1) No later than 12 months after the end of a monitoring period in which a system exceeds the lead action level in sampling referred to in 567—paragraph 43.7(4)“a,” the system must submit to the department written documentation of the material evaluation pursuant to 567—subparagraph 41.4(1)“c”(1), identify the initial number of lead service lines in its distribution system at the time the system exceeds the lead action level, and provide the department with the system’s schedule for replacing annually at least 7 percent of the initial number of lead service lines in its distribution system.

(2) No later than 12 months after the end of a monitoring period in which a system exceeds the lead action level in sampling referred to in 567—paragraph 43.7(4)“a” and every 12 months thereafter, the system shall demonstrate in writing that the system has either:

1. Replaced in the previous 12 months at least 7 percent of the initial lead service lines (or a greater number of lines specified by the department under 567—paragraph 43.7(4)“e” in its distribution system), or

2. Conducted sampling which demonstrates that the lead concentration in all service line samples from individual line(s), taken pursuant to 567—paragraph 41.4(1)“c”(2)“3,” is less than or equal to 0.015 mg/L. In such cases, the total number of lines replaced and those lines which meet the criteria in 567—paragraph 43.7(4)“c” shall equal at least 7 percent of the initial number of lead lines identified under 42.4(2)“e”(1) or the percentage specified by the department under 567—paragraph 43.7(4)“e.” A lead service line meeting the criteria of 567—paragraph 43.7(4)“c” may only be used to comply with the 7 percent criteria for a specific year, and may not be used again to calculate compliance with the 7 percent criteria in future years.

(3) The annual letter submitted to the department under 42.4(2)“e”(2) shall contain the following information:

1. The number of lead service lines scheduled to be replaced during the previous year of the system’s replacement schedule;

2. The number and location of each lead service line replaced during the previous year of the system’s replacement schedule;

3. If measured, the water lead concentration and location of each lead service line sampled, the sampling method, and the date of sampling.

(4) Any system which collects lead service line samples following partial lead service line replacement required by 567—subrule 43.7(4) shall report the results to the department within the first ten days of the month following the month in which the system receives the laboratory results, or as specified by the department. Systems shall also report any additional information as specified by the department, and in a time and manner prescribed by the department, to verify that all partial lead service line replacement activities have taken place.

*f. Public education program reporting requirements.*

(1) Any water system that is subject to the public education requirements in 42.2(2) shall, within ten days after the end of each period in which the system is required to perform public education in accordance with 42.2(2)“b,” send written documentation to the department that contains:

1. A demonstration that the system has delivered the public education materials that meet the content requirements in 42.2(2)“a” and the delivery requirements in 42.2(2)“b”; and

2. A list of all the newspapers, radio stations, television stations, facilities and organizations to which the system delivered public education materials during the period in which the system was required to perform public education tasks.

(2) Unless required by the department, a system that previously has submitted the information required by 42.4(2)“f”(1)“2” need not resubmit the same information, provided there have been no changes in the distribution list and the system certifies that the public education materials were distributed to the same list previously submitted. The certification is due within ten days after the end of each period in which the system is required to perform public education.

(3) No later than three months following the end of the monitoring period, each system must mail a sample copy of the consumer notification of tap results to the department along with a certification that the notification has been distributed in a manner consistent with the requirements of 42.2(1).

*g. Reporting of additional monitoring data.* A system which collects sampling data in addition to that required by 567—Chapters 41 and 43 shall report the results to the department within the first ten days following the end of the applicable monitoring period under 567—paragraphs 41.4(1)“c,” “d,” and “e” during which the samples are collected.

**42.4(3) Operation and maintenance for PWS.**

*a. Required records of operation.*

(1) Applicability. Monthly records of operation shall be completed by all public water supplies, on forms provided by the department or on similar forms, unless a public water supply meets all of the following conditions:

1. Supplies an annual average of not more than 25,000 gpd or serves no more than an average of 250 individuals daily;

2. Is a community public water supply and does not provide any type of treatment, or is a noncommunity system (NTNC and TNC) which has only a cation-exchange softening or iron/manganese removal treatment unit, and meets the requirements of 42.4(3)“a”(2)“7”;

3. Does not utilize either a surface water or a groundwater under the direct influence of surface water either in whole or in part as a water source;

4. Does not use a treatment technique such as blending to achieve compliance with a maximum contaminant level, treatment technique, action level, or health advisory.

The reports shall be completed as described in 42.4(3)“a”(2) and maintained at the facility for inspection by the department for a period of five years. For CWS and NTNC PWSs, the monthly operation report must be signed by the certified operator in charge. For TNC PWSs, the monthly operation report, if required by the department, must be signed by the owner or the owner’s designee.

All public water supplies using a surface water or influenced groundwater source must also comply with the applicable record-keeping requirements in 567—43.5(455B), 567—43.9(455B), 567—43.10(455B), and 567—43.11(455B).

(2) Contents. Monthly operation reports shall be completed as follows:

1. Pumpage or flow. Noncommunity supplies shall measure and record the total water used each week. It is recommended that a daily measurement and recording be made. Community supplies shall

measure and record daily water used. Reporting of pumpage or flow may be required in an operation permit where needed to verify MCL compliance.

2. Treatment effectiveness. Where treatment is practiced, the intended effect of the treatment shall be measured at locations and by methods which best indicate effectiveness of the treatment process. These measurements shall be made pursuant to Appendix B of this chapter. Daily monitoring is seven days a week unless otherwise specified by the department.

3. Treatment effectiveness for a primary standard. Where the raw water quality does not meet the requirements of 567—Chapters 41 and 43 and treatment is practiced for the purpose of complying with a maximum contaminant level, action level, health advisory, or treatment technique criteria, daily measurement of the primary standard constituent or an appropriate indicator constituent designated by the department shall be recorded. The department will require reporting of these results in the operation permit to verify MCL compliance.

4. Treatment effectiveness for a secondary standard. Where treatment is practiced for the purpose of achieving the recommended level of any constituent designated in the federal secondary standards, measurements shall be measured and recorded at a frequency specified in Appendix B. Daily monitoring is seven days a week unless otherwise specified by the department.

5. Chemical application. Chemicals such as fluoride, iodine, bromine and chlorine, which are potentially toxic in excessive concentration, shall be measured and recorded daily. Recording shall include the amount of chemical applied each day. Where the supplier of water is attempting to maintain a residual of the chemical throughout the system, such as chlorine, the residual in the system shall be recorded daily. The quantity of all other chemicals applied shall be measured and recorded at least once each week.

6. Static water levels and pumping water levels must be measured and recorded once per month for all groundwater sources. More or less frequent measurements may be approved by the department where historical data justifies it.

7. Noncommunity systems (NTNC and TNC) are exempt from the self-monitoring requirements for cation-exchange softening and iron/manganese removal if the treatment unit:

- Is a commercially available “off-the-shelf” unit designed for home use;
- Is self-contained, requiring only a piping connection for installation;
- Operates throughout a range of 35 to 80 psi; and
- Has not been installed for the purpose of removing a contaminant which has a maximum contaminant level, treatment technique, action level, or health advisory.

*b. Chemical quality and application.* Any drinking water system chemical which is added to raw, partially treated, or finished water must be suitable for the intended use in a potable water system. Effective on October 1, 2000, the chemical must be certified by an American National Standards Institute (ANSI) accredited third party for conformance with American National Standards Institute/National Sanitation Foundation (ANSI/NSF) Standard 60, if such certification exists for the particular product, unless certified chemicals are not reasonably available for use, in accordance with guidelines provided by the department. If the chemical is not certified to meet the ANSI/NSF Standard 60 or no certification is available, the person seeking to supply or use the chemical must prove to the satisfaction of the department that the chemical is not toxic or otherwise a potential hazard in a potable public water supply system.

The supplier of water shall keep a record of all chemicals used. This record should include a clear identification of the chemical by brand or generic name and the dosage rate. When chemical treatment is applied with the intent of obtaining an in-system residual, the residuals will be monitored regularly. When chemical treatment is applied and in-system residuals are not expected, the effectiveness of the treatment will be monitored through an appropriate indicative parameter.

(1) Continuous disinfection.

1. When required. Continuous disinfection must be provided at all public water supply systems, except for the following: groundwater supplies that have no treatment facilities or have only fluoride, sodium hydroxide or soda ash addition and that meet the bacterial standards as provided in 567—subrule 41.2(1) and do not show other actual or potential hazardous contamination by microorganisms. For

a noncommunity system that only uses a cation-exchange softening unit that meets the requirements of 42.3(4)“a”(7), the requirement for continuous disinfection is based upon the system’s history of both coliform bacteria detection and compliance with the coliform bacteria monitoring requirements as provided in 567—subrule 41.2(1).

2. Method. Chlorine is the preferred disinfecting agent. Chlorination may be accomplished with liquid chlorine, calcium or sodium hypochlorites or chlorine dioxide. Other disinfecting agents will be considered, provided a residual can be maintained in the distribution system, reliable application equipment is available and testing procedures for a residual are recognized in Standard Methods for the Analysis of Water and Wastewater.

3. Chlorine residual. A minimum free available chlorine residual of 0.3 mg/L or a minimum total available chlorine residual of 1.5 mg/L must be continuously maintained throughout the water distribution system, except for those points in the distribution system that terminate as dead ends or areas that represent very low use when compared to usage throughout the rest of the distribution system as determined by the department. All systems using water to which chlorine has been added must monitor daily in the distribution system to ensure the minimum disinfectant residual concentration is met, including both wholesale systems and consecutive systems.

4. Test kit. A test kit capable of measuring free and combined chlorine residuals in increments no greater than 0.1 mg/L in the range below 0.5 mg/L, and in increments no greater than 0.2 mg/L in the range from 0.5 mg/L to 1.0 mg/L, and in increments no greater than 0.3 mg/L in the range from 1.0 mg/L to 2.0 mg/L must be provided at all chlorination facilities. The test kit must use a method of analysis that is recognized in Standard Methods for the Examination of Water and Wastewater.

5. Leak detection, control and operator protection. A bottle of at least 56 percent ammonium hydroxide must be provided at all gas chlorination installations for leak detection. Leak repair kits must be available where ton chlorine cylinders are used.

6. Other disinfectant residuals. If an alternative disinfecting agent is approved by this department, the residual levels and type of test kit used will be assigned by the department in accordance with and based upon analytical methods contained in Standard Methods for the Examination of Water and Wastewater.

(2) Phosphate compounds.

1. When phosphate compounds are to be added to any public water supply system which includes iron or manganese removal or ion-exchange softening, such compounds must be applied after the iron or manganese removal or ion-exchange softening treatment units, unless the director has received and approved an engineering report demonstrating the suitability for addition prior to these units in accordance with the provisions of 567—subrule 43.3(2). The department may require the discontinuance of phosphate addition where it interferes with other treatment processes, the operation of the water system or if there is a significant increase in microorganism populations associated with phosphate application.

2. The total phosphate concentration in the finished water must not exceed 10 mg/L as PO<sub>4</sub>.

3. Chlorine shall be applied to the phosphate solution in sufficient quantity to give an initial concentration of 10 mg/L in the phosphate solution. A chlorine residual must be maintained in the phosphate solution at all times.

4. Test kits capable of measuring polyphosphate and orthophosphate in a range from 0.0 to 10.0 mg/L in increments no greater than 0.1 mg/L must be provided.

5. Continuous application or injection of phosphate compounds directly into a well is prohibited.

(3) Fluorosilicic acid. Where fluorosilicic acid (H<sub>2</sub>SiF<sub>6</sub>, also called hydrofluosilicic acid) is added to a public water supply, the operator shall be equipped with a fluoride test kit with a minimum range of from 0.0 to 2.0 mg/L in increments no greater than 0.1 mg/L. Distilled water and standard fluoride solutions of 0.2 mg/L and 1.0 mg/L must be provided.

c. *Reporting and record-keeping requirements for systems using surface water and groundwater under the direct influence of surface water.* In addition to the monitoring requirements required by 42.4(3)“a” and “b,” a public water system that uses a surface water source or a groundwater source

under the direct influence of surface water must report monthly to the department the information specified in this subrule beginning June 29, 1993, or when filtration is installed, whichever is later.

(1) Turbidity measurements as required by 567—subrule 43.5(3) must be reported within ten days after the end of each month the system serves water to the public. Information that must be reported includes:

1. The total number of filtered water turbidity measurements taken during the month.
2. The number and percentage of filtered water turbidity measurements taken during the month which are less than or equal to the turbidity limits specified in 567—paragraphs 43.5(3) “b” through “e” for the filtration technology being used.
3. The date and value of any turbidity measurements taken during the month which exceed 5 NTU. If at any time the turbidity exceeds 5 NTU, the system must inform the department as soon as possible, but no later than 24 hours after the exceedance is known, in accordance with the public notification requirements in 42.1(2). This requirement is in addition to the monthly reporting requirement, pursuant to 567—43.5(455B).

(2) Disinfection information specified in 567—subrule 43.5(2) and paragraph 42.4(3) “b” must be reported to the department within ten days after the end of each month the system serves water to the public. Information that must be reported includes:

1. For each day, the lowest measurement of residual disinfectant concentration in mg/L in water entering the distribution system.
2. The date and duration of each period when the residual disinfectant concentration in water entering the distribution system fell below 0.3 mg/L free residual chlorine or 1.5 mg/L total residual chlorine and when the department was notified of the occurrence.

If at any time the residual falls below 0.3 mg/L free residual chlorine or 1.5 mg/L total residual chlorine in the water entering the distribution system, the system must notify the department as soon as possible, but no later than by the end of the next business day. The system also must notify the department by the end of the next business day whether or not the residual was restored to at least 0.3 mg/L free residual chlorine or 1.5 mg/L total residual chlorine within four hours. This requirement is in addition to the monthly reporting requirement, pursuant to 567—43.5(455B).

3. The information on the samples taken in the distribution system in conjunction with total coliform monitoring listed in 567—paragraph 43.5(2) “d” and pursuant to 567—subparagraph 41.2(1) “c”(7).

(3) Total inactivation ratio. The total inactivation ratio must be calculated each day the treatment plant is in operation, pursuant to 567—paragraph 43.5(2) “a,” and reported on the monthly operation report. If the total inactivation ratio is below 1.0, the system must notify the department within 24 hours.

*d. Reporting and record-keeping requirements for disinfection byproducts, disinfectants, and disinfection byproduct precursors.*

(1) General requirements.

1. In addition to the monitoring requirements required by 42.4(3) “a” and “b,” a CWS or NTNC public water system that adds a chemical disinfectant to the water in any part of the drinking water treatment process or which provides water that contains a chemical disinfectant must report monthly to the department the information specified in this paragraph by the dates listed in 567—subparagraphs 41.6(1) “a”(3) and 43.6(1) “a”(3). A TNC public water system which adds chlorine dioxide as a disinfectant or oxidant must report monthly to the department the information specified in this paragraph by the dates listed in 567—paragraph 43.6(1) “a”(3) “3.”

2. Systems required to sample quarterly or more frequently must report to the department within ten days after the end of each quarter in which samples were collected, notwithstanding the public notification provisions of 567—42.1(455B). Systems required to sample less frequently than quarterly must report to the department within ten days after the end of each monitoring period in which samples were collected.

(2) Disinfection byproducts. Systems must report the information specified in the following table:

Disinfection Byproducts Reporting Table

If you are a ...	You must report ...
System monitoring for TTHMs and HAA5 under the requirements of 567—subparagraph 41.6(1)“c”(4) on a quarterly or more frequent basis	<ol style="list-style-type: none"> <li>1. The number of samples taken during the last quarter.</li> <li>2. The location, date, and result of each sample taken during the last quarter.</li> <li>3. The arithmetic average of all samples taken in the last quarter.</li> <li>4. The annual arithmetic average of the quarterly arithmetic averages for the last four quarters.*</li> <li>5. Whether the MCL was exceeded.</li> <li>6. Under Stage 2, any operational evaluation levels that were exceeded during the quarter, including the location and date and the calculated TTHM and HAA5 levels.</li> </ol>
System monitoring for TTHMs and HAA5 under the requirements of 567—subparagraph 41.6(1)“c”(4) less frequently than quarterly, but at least annually	<ol style="list-style-type: none"> <li>1. The number of samples taken during the last year.</li> <li>2. The location, date, and result of each sample taken during the last monitoring period.</li> <li>3. The arithmetic average of all samples taken over the last year.*</li> <li>4. Whether the MCL was exceeded.</li> </ol>
System monitoring for TTHMs and HAA5 under the requirements of 567—subparagraph 41.6(1)“c”(4) less frequently than annually	<ol style="list-style-type: none"> <li>1. The location, date, and result of the last sample taken.</li> <li>2. Whether the MCL was exceeded.</li> </ol>
System monitoring for chlorite under the requirements of 567—subparagraph 41.6(1)“c”(3)	<ol style="list-style-type: none"> <li>1. The number of samples taken each month for the last 3 months.</li> <li>2. The location, date, and result of each sample taken during the last quarter.</li> <li>3. For each month in the reporting period, the arithmetic average of all samples taken in each three sample set taken in the month.</li> <li>4. Whether the MCL was exceeded, and in which month it was exceeded.</li> </ol>
System monitoring for bromate under the requirements of 567—subparagraph 41.6(1)“c”(2)	<ol style="list-style-type: none"> <li>1. The number of samples taken during the last quarter.</li> <li>2. The location, date, and result of each sample taken during the last quarter.</li> <li>3. The arithmetic average of the monthly arithmetic averages of all samples taken in the last year.</li> <li>4. Whether the MCL was exceeded.</li> </ol>

\*The calculation of the running annual average will transition from a system-wide RAA calculation under Stage 1 to a locational running annual average (LRAA) under Stage 2. The transition will commence according to the system schedule listed in 567—paragraph 41.6(1)“b.” Beginning at the end of the fourth calendar quarter that follows the compliance date, and at the end of each subsequent quarter, the system must report the arithmetic average of quarterly results for the last four quarters of each monitoring location. If the calculated LRAA based on fewer than four quarters of data would cause the MCL to be exceeded regardless of the monitoring results of subsequent quarters, the system must report this information to the department no later than the due date of the next compliance report.

(3) Disinfectants. In addition to the requirements in 567—subparagraph 41.2(1)“c”(7), systems must report the information specified in the following table:



Disinfectants Reporting Table

If you are a ...	You must report ...
System monitoring for chlorine or chloramines under the requirements of 567—paragraph 43.6(1) “c”(1)“2”	<ol style="list-style-type: none"> <li>1. The number of samples taken during each month of the last quarter.</li> <li>2. The monthly arithmetic average of all samples taken in each month for the last 12 months.</li> <li>3. The arithmetic average of all monthly averages for the last 12 months.</li> <li>4. Whether the MRDL was exceeded.</li> </ol>
System monitoring for chlorine dioxide under the requirements of 567—paragraph 43.6(1) “c”(1)“3”	<ol style="list-style-type: none"> <li>1. The dates, results, and locations of samples taken during the last quarter.</li> <li>2. Whether the MRDL was exceeded.</li> <li>3. Whether the MRDL was exceeded in any two consecutive daily samples and whether the resulting violation was acute or nonacute.</li> </ol>

(4) Disinfection byproduct precursors and enhanced coagulation or enhanced softening. Systems must report the information specified in the following table:

Disinfection Byproduct Precursors and Enhanced Coagulation or  
Enhanced Softening Reporting Table

If you are a ...	You must report ...
System monitoring monthly or quarterly for TOC under the requirements of 567—subparagraph 43.6(1)“c”(2) and required to meet the enhanced coagulation or enhanced softening requirements in 567—subparagraph 43.6(3)“b”(2) or (3)	<ol style="list-style-type: none"> <li>1. The number of paired (source water and treated water, prior to continuous disinfection) samples taken during the last quarter.</li> <li>2. The location, date, and result of each paired sample and associated alkalinity taken during the last quarter.</li> <li>3. For each month in the reporting period that paired samples were taken, the arithmetic average of the percent reduction of TOC for each paired sample and the required TOC percent removal.</li> <li>4. Calculations for determining compliance with the TOC percent removal requirements, as provided in 567—subparagraph 43.6(3)“c”(1).</li> <li>5. Whether the system is in compliance with the enhanced coagulation or enhanced softening percent removal requirements in 567—paragraph 43.6(3)“b” for the last four quarters.</li> </ol>
System monitoring monthly or quarterly for TOC under the requirements of 567—subparagraph 43.6(1)“c”(2) and meeting one or more of the alternative compliance criteria in 567—subparagraph 43.6(3)“a”(2) or (3)	<ol style="list-style-type: none"> <li>1. The alternative compliance criterion that the system is using.</li> <li>2. The number of paired samples taken during the last quarter.</li> <li>3. The location, date, and result of each paired sample and associated alkalinity taken during the last quarter.</li> <li>4. The running annual arithmetic average based on monthly averages (or quarterly samples) of source water TOC for systems meeting a criterion in 567—paragraph 43.6(3)“a”(2)“1” or “3” or of treated water TOC for systems meeting the criterion in 567—paragraph 43.6(3)“a”(2)“2.”</li> <li>5. The running annual arithmetic average based on monthly averages (or quarterly samples) of source water SUVA for systems meeting the criterion in 567—paragraph 43.6(3)“a”(2)“5” or of treated water SUVA for systems meeting the criterion in 567—paragraph 43.6(3)“a”(2)“6.”</li> <li>6. The running annual average of source water alkalinity for systems meeting the criterion in 567—paragraph 43.6(3)“a”(2)“3” and of treated water alkalinity for systems meeting the criterion in 567—paragraph 43.6(3)“a”(3)“1.”</li> <li>7. The running annual average for both TTHM and HAA5 for systems meeting the criterion in 567—paragraph 43.6(3)“a”(2)“3” or “4.”</li> <li>8. The running annual average for the amount of magnesium hardness removal (as CaCO<sub>3</sub>, in mg/L) for systems meeting the criterion in 567—paragraph 43.6(3)“a”(3)“2.”</li> </ol> <p>Whether the system is in compliance with the particular alternative compliance criterion in 567—subparagraph 43.6(3)“a”(2) or (3).</p>
SW/IGW system on reduced monitoring for TTHM/HAA5 under the requirements of 567—paragraph 41.6(3)“d”	<p>For each treatment plant that treats surface or IGW source water, report the following:</p> <ol style="list-style-type: none"> <li>1. The number of source water TOC samples taken each month during the last quarter.</li> <li>2. The date and result of each sample taken during the last quarter.</li> <li>3. The quarterly average of monthly samples taken during the last quarter or the result of the quarterly sample.</li> <li>4. The running annual average (RAA) of quarterly averages from the past four quarters.</li> <li>5. Whether the TOC RAA exceeded 4.0 mg/L.</li> </ol>

[ARC 9915B, IAB 12/14/11, effective 1/18/12; ARC 3735C, IAB 4/11/18, effective 5/16/18]