NR 809.765 Filtration sampling requirements.

(1) Monitoring requirements for systems using filtration treatment. In addition to monitoring required by s. NR 809.76, a public water system serving at least 10,000 people and using conventional or direct filtration shall conduct continuous monitoring of turbidity for each individual filter using a method approved in s. NR 809.725(1) and shall calibrate turbidimeters using the procedure specified by the manufacturer. Systems shall record the results of individual filter monitoring every 15 minutes.

(2) If there is a failure in the continuous monitoring equipment, the system shall conduct grab sampling every four hours in lieu of continuous monitoring, until the turbidimeter is repaired and back on-line. A system has a maximum of 5 working days after failure to repair the equipment or is in violation.

SECTION 25. NR 809.77 is amended to read:

NR 809.77 Disinfection requirements. A system which uses ground water under the direct influence of surface water and does not provide filtration treatment shall provide disinfection treatment specified in sub. (1) ~~on or after December 30, 1991, or~~ within 18 months after the Department determines that the ground water source is under the influence of surface water. ~~whichever is later.~~ A system which filters and uses surface water or ground water under the direct influence of surface water as a source, shall provide the disinfection treatment specified in sub. (2), ~~on or after June 29, 1993~~ or when filtration is installed, ~~whichever is later~~ Failure to meet any requirement of this section ~~after June 29, 1993~~ is a treatment technique violation.

SECTION 26. NR 809.775 is created to read:

NR 809.775 Disinfection profiling and benchmarking.

(1) Determination of systems required to profile. A public water system serving at least 10,000 people shall determine its TTHM annual average using the procedure in par. (a) of this section and its HAA5 annual average using the procedure in par. (b) of this section. The annual average is the arithmetic average of the quarterly averages of four consecutive quarters of monitoring.

(a) The TTHM annual average shall be the annual average during the same period as is used for the HAA5 annual average.

1. Those systems that collected disinfection byproduct data under the provisions of the Information Collection Rule shall use the results of the samples collected during the last four quarters of required monitoring under the Information Collection Rule.

2. Those systems that use ``grandfathered" HAA5 occurrence data that meet the provisions of subd. (1)(b)2. of this section shall use TTHM data collected at the same time under the provisions of ss. NR 809.22 and NR 809.23.

3. Those systems that use HAA5 occurrence data that meet the provisions of subd. par. (1)(b)3.a. of this section shall use TTHM data collected at the same time under the provisions of ss. NR 809.22 and NR 809.23.

(b) The HAA5 annual average shall be the annual average during the same period as is used for the TTHM annual average.

1. Those systems that collected data under the provisions of the Information Collection Rule shall use the results of the samples collected during the last four quarters of required monitoring under the Information Collection Rule.

2. Those systems that have collected four quarters of HAA5 occurrence data that meets the routine monitoring sample number and location requirements for TTHM in ss. NR 809.22 and NR 809.23 and handling and analytical method requirements of the Information Collection Rule may use those data to determine whether the requirements of this section apply.

3. Those systems that have not collected four quarters of HAA5 occurrence data that meets the provisions of either subd. (1)(b)1 or 2 of this section by March 16, 1999 shall either:

a. Conduct monitoring for HAA5 that meets the routine monitoring sample number and location requirements for TTHM in ss. NR 809.22 and NR 809.23 and handling and analytical method requirements of the Information Collection Rule to determine the HAA5 annual average and whether the requirements of sub. (2) of this section apply. This monitoring must be completed so that the applicability determination can be made no later than March 31, 2000, or

b. Comply with all other provisions of this section as if the HAA5 monitoring had been conducted and the results required compliance with sub. (2) of this section.

(c) The system may request that the Department approve a more representative annual data set than the data set determined under par. (1)(a) or (b) of this section for the purpose of determining applicability of the requirements of this section.

(d) The Department may require that a system use a more representative annual data set than the data set determined under par. (1)(a) or (b) of this section for the purpose of determining applicability of the requirements of this section.

(e) The system shall submit data to the Department on the schedule in subds. (1)(e)1 through 5 of this section.

1. Those systems that collected TTHM and HAA5 data under the provisions of the Information Collection Rule, as required by subds. (1)(a)1. and (1)(b)1. of this section, shall submit the results of the samples collected during the last 12 months of required monitoring under the Information Collection Rule not later than December 31, 1999.

2. Those systems that have collected four consecutive quarters of HAA5 occurrence data that meets the routine monitoring sample number and location for TTHM in ss. NR 809.22 and NR 809.23 and handling and analytical method requirements of the Information Collection Rule, as allowed by subds.

(1)(a)2 and (1)(b)2) of this section, shall submit those data to the Department not later than April 16, 1999. Until the Department has approved the data, the system shall conduct monitoring for HAA5 using the monitoring requirements specified under subd. (1)(b)3 of this section.

3. Those systems that conduct monitoring for HAA5 using the monitoring requirements specified by subds. (1)(a)3 and (1)(b)3a of this section, shall submit TTHM and HAA5 data not later than March 31, 2000.

4. Those systems that elect to comply with all other provisions of this section as if the HAA5 monitoring had been conducted and the results required compliance with this section, as allowed under subd. par. (1)(b)3b of this section, shall notify the Department in writing of their election not later than December 31, 1999.

5. If the system elects to request that the Department approve a more representative annual data set than the data set determined under subd. (1)(b)1 of this section, the system shall submit this request in writing not later than December 31, 1999.

(f) Any system having either a TTHM annual average ≥0.064 mg/L or an HAA5 annual average ≥0.048 mg/L during the period identified in pars. (1)(a) and (b) of this section shall comply with sub. (2) of this section.

Note: The Information Collection Rule refers to 40 CFR Ch. 1, part 141, Subpart M, ss. 141.140 through 141.144.

(2) Disinfection profiling. (a) Any system that meets the criteria in par. (1)(f) of this section shall develop a disinfection profile of its disinfection practice for a period of up to three years.

(b) The system shall monitor daily for a period of 12 consecutive calendar months to determine the total logs of inactivation for each day of operation, based on the CT99.9 values in Tables 1-8 s. NR 809.78(1)(c)6, as appropriate, through the entire treatment plant. This system shall begin this monitoring not later than April 1, 2000. As a minimum, the system with a single point of disinfectant application prior to entrance to the distribution system shall conduct the monitoring in subds. (2)(b)1 through 4 of this section. A system with more than one point of disinfectant application shall conduct the monitoring in subds. (2)(b)1 through 4 of this section for each disinfection segment. The system shall monitor the parameters necessary to determine the total inactivation ratio, using analytical methods in s. NR 809.725, as follows:

1. The temperature of the disinfected water shall be measured once per day at each residual disinfectant concentration sampling point during peak hourly flow.

2. If the system uses chlorine, the pH of the disinfected water shall be measured once per day at each chlorine residual disinfectant concentration sampling point during peak hourly flow.

3. The disinfectant contact time(s) (``T") shall be determined for each day during peak hourly flow.

4. The residual disinfectant concentration(s) (``C") of the water before or at the first customer and prior to each additional point of disinfection shall be measured each day during peak hourly flow.

(c) In lieu of the monitoring conducted under the provisions of par. (2)(b) of this section to develop the disinfection profile, the system may elect to meet the requirements of subd. (2)(c)1 of this section. In addition to the monitoring conducted under the provisions of par. (2)(b) of this section to develop the disinfection profile, the system may elect to meet the requirements of subd. (2)(c)2 of this section.

1. A PWS that has three years of existing operational data may submit those data, a profile generated using those data, and a request that the Department approve use of those data in lieu of monitoring under the provisions of par. (2)(b) of this section not later than March 31, 2000. The Department shall determine whether these operational data are substantially equivalent to data collected under the provisions of par. (2)(b) of this section. These data must also be representative of *Giardia lamblia* inactivation through the entire treatment plant and not just of certain treatment segments. Until the Department approves this request, the system is required to conduct monitoring under the provisions of par. (2)(b) of this section.

2. In addition to the disinfection profile generated under par. (2)(b) of this section, a PWS that has existing operational data may use those data to develop a disinfection profile for additional years. Such systems may use these additional yearly disinfection profiles to develop a benchmark under the provisions of sub. (3) of this section. The Department shall determine whether these operational data are substantially equivalent to data collected under the provisions of par. (2)(b) of this section. These data must also be representative of inactivation through the entire treatment plant and not just of certain treatment segments.

(d) The system shall calculate the total inactivation ratio as follows:

1. If the system uses only one point of disinfectant application, the system may determine the total inactivation ratio for the disinfection segment based on either of the methods in subd. pars. (2)(d)1a or (2)(d)1b of this section.

a. Determine one inactivation ratio ($CTcalc/CT_{99.9}$) before or at the first customer during peak hourly flow.

b. Determine successive $CTcalc/CT_{99.9}$ values, representing sequential inactivation ratios, between the point of disinfectant application and a point before or at the first customer during peak hourly flow. Under this alternative, the system shall calculate the total inactivation ratio by determining ($CTcalc/CT_{99.9}$) for each sequence and then adding the ($CTcalc/CT_{99.9}$) values together to determine (Σ ($CTcalc/CT_{99.9}$)).

2. If the system uses more than one point of disinfectant application before the first customer, the system shall determine the CT value of each disinfection segment immediately prior to the next point of disinfectant application, or for the final segment, before or at the first customer, during peak hourly flow. The ($CTcalc/CT_{99.9}$) value of each segment and (Σ($CTcalc/CT_{99.9}$)) shall be calculated using the method in subd. (2)(d)1 of this section.

3. The system shall determine the total logs of inactivation by multiplying the value calculated in subds. (2)(d)1 or 2 of this section by 3.0.

(e) A system that uses either chloramines or ozone for primary disinfection shall also calculate the logs of inactivation for viruses using a method approved by the Department.

(f) The system shall retain disinfection profile data in graphic form, as a spreadsheet, or in some other format acceptable to the Department for review as part of sanitary surveys conducted by the Department.

(3) Disinfection benchmarking. (a) Any system required to develop a disinfection profile under the provisions of subs. (1) and (2) of this section and that decides to make a significant change to its disinfection practice shall consult with the Department prior to making such change. Significant changes to disinfection practice are:

1. Changes to the point of disinfection;

2. Changes to the disinfectant(s) used in the treatment plant;

3. Changes to the disinfection process; and

4. Any other modification identified by the Department.

(b) Any system that is modifying its disinfection practice shall calculate its disinfection benchmark using the procedure specified in subds. (3)(b)1 through 2 of this section.

1. For each year of profiling data collected and calculated under sub. (2) of this section, the system shall determine the lowest average monthly *Giardia lamblia* inactivation in each year of profiling data. The system shall determine the average *Giardia lamblia* inactivation for each calendar month for each year of profiling data by dividing the sum of daily *Giardia lamblia* of inactivation by the number of values calculated for that month.

2. The disinfection benchmark is the lowest monthly average value (for systems with one year of profiling data) or average of lowest monthly average values (for systems with more than one year of profiling data) of the monthly logs of *Giardia lamblia* inactivation in each year of profiling data.

(c) A system that uses either chloramines or ozone for primary disinfection shall also calculate the disinfection benchmark for viruses using a method approved by the Department.

(d) The system shall submit information in subds. (3)(d)1 through 3 of this section to the Department as part of its consultation process.

1. A description of the proposed change;

2. The disinfection profile for *Giardia lamblia* (and, if necessary, viruses) under par. (b) of this section and benchmark as required by subd. (b)2. of this section; and

3. An analysis of how the proposed change will affect the current levels of disinfection.

SECTION 27. NR 809 Subchapter VI (title) is renumbered and amended to read:

Subchapter ~~VI~~ VII —
Reporting, Public Notification, Consumer Confidence Reports, and Record Keeping

SECTION 28. NR 809.80(4) (8)and (12) are created to read:

(4) When determining compliance with microbiological MCL's, and other microbiological monitoring required under Subch. I of this Chapter, the Department will accept analytical results only from

laboratories that report results directly to the Department and are certified under Chapter ATCP 77 for safe drinking water analyses.

(a) Results from microbiological samples collected to satisfy the requirements of Subch. I, shall be reported to the Department and the water supplier within 24 hours of the time the results are obtained by the laboratory except when results are obtained on a weekend or holiday, then the result shall be provided to the water supplier and the Department as soon as practicable.

(8) Systems shall maintain the results of individual filter monitoring taken under s. NR 809.765 for at least three years. Systems shall report that they have conducted individual filter turbidity monitoring under s. NR 809.765 within 10 days after the end of each month the system serves water to the public. Systems shall report individual filter turbidity measurement results taken under s. NR 809.765 within 10 days after the end of each month the system serves water to the public only if measurements demonstrate one or more of the conditions in pars. (8)(a) through (d) of this section. Systems that use lime softening may apply to the Department for alternative exceedance levels for the levels specified in pars. (8)(a) through (d) of this section if they can demonstrate that higher turbidity levels in individual filters are due to lime carryover only and not due to degraded filter performance.

(a) For any individual filter that has a measured turbidity level of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart, the system shall report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the system shall either produce a filter profile for the filter within 7 days of the exceedance (if the system is not able to identify an obvious reason for the abnormal filter performance) and report that the profile has been produced or report the obvious reason for the exceedance.

(b) For any individual filter that has a measured turbidity level of greater than 0.5 NTU in two consecutive measurements taken 15 minutes apart at the end of the first four hours of continuous filter operation after the filter has been backwashed or otherwise taken offline, the system shall report the filter number, the turbidity, and the date(s) on which the exceedance occurred. In addition, the system shall either produce a filter profile for the filter within 7 days of the exceedance (if the system is not able to identify an obvious reason for the abnormal filter performance) and report that the profile has been produced or report the obvious reason for the exceedance.

(c) For any individual filter that has a measured turbidity level of greater than 1.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of three consecutive months, the system shall report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the system shall conduct a self-assessment of the filter within 14 days of the exceedance and report that the self-assessment was conducted. The self assessment shall consist of at least the following components: assessment of filter performance; development of a filter profile; identification and prioritization of factors limiting filter performance; assessment of the applicability of corrections; and preparation of a filter self-assessment report.

(d) For any individual filter that has a measured turbidity level of greater than 2.0 NTU in two consecutive measurements taken 15 minutes apart at any time in each of two consecutive months, the system shall report the filter number, the turbidity measurement, and the date(s) on which the exceedance occurred. In addition, the system shall arrange for the conduct of a comprehensive performance evaluation by the Department or a third party approved by the Department no later than 30 days following the exceedance and have the evaluation completed and submitted to the Department no later than 90 days following the exceedance.

(12) Falsification or modification with intent to deceive, of any report or reporting requirement in this chapter is prohibited.

SECTION 29. NR 809.80 paragraphs are renumbered: (4) to (5), (7) to (9), (8) to (10), and (9) to (11).

SECTION 30. NR 809.80(5) is renumbered to (6) and amended to read:

~~(5)~~ (6) A public water system that uses a ground water source under the direct influence of surface water and does not provide filtration treatment shall report monthly to the Department the information specified in this subsection ~~on or after December 31, 1990, or 6 months after the department has determined that filtration is required in writing.~~

SECTION 31. NR 809.80(6) is renumbered to (7) and amended to read:

(7) A public water system that uses a surface water source or a ground water source under the direct influence of surface water and provides filtration treatment shall report monthly to the Department the information specified in this subsection. ~~on or after June 29, 1993, or when filtration is installed, whichever is later~~

(a) Turbidity measurements as required by s. NR 809.78 (2) (a) shall be reported within 10 days after the end of each month the system serves water to the public. Information that shall be reported includes:

1. The total number of filtered water turbidity measurements taken during the month and the highest daily turbidity measurement for each day.

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 s. NR 809.76 for the filtration technology being used.

3. The date and value of any turbidity measurements taken during the month which exceed 1.0 NTU for systems using conventional or direct filtration, or which exceed the maximum level set in s. NR 809.76.

(b) Disinfection information specified in s. NR 809.78 shall be reported to the Department within 10 days after the end of each month the public serves water to the public. Information that shall 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 0.2 mg/l and when the Department was notified of the occurrence.

3. The following information on the samples taken in the distribution system in conjunction with total coliform monitoring pursuant to s. NR 809.77:

a. Number of instances where the residual disinfectant concentration is measured;

b. Number of instances where the residual disinfectant concentration is not measured but heterotrophic bacteria plate count (HPC) is measured;

c. Number of instances where the residual disinfectant concentration is measured but not detected and no HPC is measured;

d. Number of instances where no residual disinfectant concentration is detected and where HPC is > 500/ml;

e. Number of instances where the residual disinfectant concentration is not measured and HPC is > 500/ml;

f. For the current and previous month the system serves water to the public, the value of "V" in the following formula: V = c + d + e/a + b ? 100

where:

a = the value in subd. 3. a.

b = the value in subd. 3. b.

c = the value in subd. 3. c.

d = the value in subd. 3. d.

e = the value in subd. 3. e.

g. If the Department determines, based on site specific considerations, that a system has no means for having a sample transported and analyzed for HPC by a certified laboratory within the requisite time and temperature conditions specified by s. NR 809.78 and that the system is providing adequate disinfection in the distribution system, the requirements of subpars. a. to f. do not apply.

4. A water supplier need not report the data listed in subd. 1. if all data listed in par. (b) remain on file at the system and the Department determines that the water supplier has submitted all the information required by par. (b) for at least 12 months.

(c) 1. If during any 4 hour monitoring period the turbidity exceeds 1.0 NTU or at any time during the month, turbidity measurements indicate the 95th percentile turbidity level of 0.5 NTU will be exceeded for that month, the water supplier shall inform the Department as soon as possible, but no later than the end of the next business day.

2. If at any time the disinfectant residual falls below 0.2 mg/l in the water entering the distribution system, the water supplier shall notify the Department as soon as possible, but no later than the end of the next business day. The water supplier also shall notify the Department by the end of the next business day whether or not the residual was restored to at least 0.2 mg/l within 4 hours.

SECTION 32. NR 809.81(1) is amended to read:

(1) Maximum contaminant level (MCL), treatment technique, variance, and conditional waiver violations. The owner or operator of a public water system which experiences a system event or fails to comply with an applicable MCL or treatment technique established by this chapter or which fails to comply with the requirements of any variance under s. NR 809.91 or conditional waiver under s. NR 809.90 shall notify persons served by the system as follows:

Note: Examples of system events include but are not limited to, loss of system pressure, distribution system main break with accompanying loss of pressure, or other evidence of loss of water source or distribution system sanitary integrity.

(a) Except as provided in par. (c), the owner or operator of a community water system shall give notice:

1. By publication in a daily newspaper of general circulation in the area served by the system as soon as possible, but in no case later than 14 days after the system event, violation, or failure. If the area served by a community water system is not served by a daily newspaper of general circulation, notice shall instead be given by publication in a weekly newspaper of general circulation serving the area; and

2. By mail delivery, by direct mail or with the water bill, or by hand delivery, not later than 45 days after the violation or failure. The department may waive mail or hand delivery if it determines that the owner or operator of the community water system in violation has corrected the system event, violation, or failure within the 45-day period. The department shall make the determination in writing and within the 45-day period; and

3. For system events or violation of the MCLs of contaminants that may pose an acute risk to human health, by furnishing a copy of the notice to the radio and television stations serving the area served by the community water system or by hand delivery to each customer as soon as possible but in no case later than 72 hours after the violation. The following violations are acute violations:

a. Occurrence of a waterborne disease outbreak, as defined in s. NR 809.04 (65), or a violation of the microbiological MCL or treatment technique which poses an acute risk to public health as defined in s. NR 809.30 (2).

b. Any system event or violation of the microbiological MCL or treatment technique which the department determines warrants emergency chlorination or a notification to boil water.

c. Violation of the MCL for nitrate, nitrite or combined nitrate and nitrite as defined in s. NR 809.11 (2) and determined according to s. NR 809.12 (9) (d).

SECTION 33. NR 809.81(5)(Lt) is amended by changing reference from subch. V to VI.

SECTION 34. NR 809.83, 809.833, 809.835, and 809.837 are created to read:

NR 809.83 Consumer Confidence Reports. (1) PURPOSE AND APPLICABILITY. Suppliers of water to community water systems shall deliver to their customers an annual report containing information on the quality of the water and the characterization of risks (if any) from exposure to contaminants detected in the drinking water delivered by their water system. The report shall be written in and accurate and understandable manner.

(a) Customers under this paragraph are defined as billing units or service connections to which water is delivered by a community water system.

(b) Detected under this paragraph refers to all contaminants identified in subch. I of this chapter and means: any quantity reported by a Safe Drinking Water Certified laboratory.

(2) EFFECTIVE DATES. (a) Each existing community water system shall deliver its report by July 1 annually. Reports shall contain data collected during, or prior to, the previous calendar year.

(b) A new community water system shall deliver its first report by July 1 of the year after its first full calendar year in operation and annually thereafter.

(c) A community water system that sells water to another community water system shall deliver the applicable information required in s. NR 809.833 of this Subchapter to the buyer system:

1. No later than, by April 1 annually or

2. On a date mutually agreed upon by the seller and the purchaser, and specifically included in a contract between the parties.

809.833 Content of the Reports. (1) Each community water system shall provide to its customers an annual report that contains the information specified in this section and s. NR 809.835 of this subchapter.

(2) INFORMATION ON THE SOURCE OF THE WATER DELIVERED. (a) Each report shall identify the source(s) of the water delivered by the community water system by providing information on:

1. The type of the water: e.g., surface water, ground water; and

2. The commonly used name (if any) and location of the body (or bodies) of water.

3. If a source water assessment has been completed, the report shall notify consumers of the availability of this information and the means to obtain it. In addition, systems are encouraged to highlight in the report significant sources of contamination in the source water area if they have readily available information. Where a system has received a source water assessment from the Department, the report shall include a brief summary of the system's susceptibility to potential sources of contamination, using language provided by the Department or written by the operator.

(3) DEFINITIONS. (a) Each report shall include the following definitions:

1. *Maximum Contaminant Level Goal or MCLG*: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

2. *Maximum Contaminant Level or MCL*: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

(b) A report for a community water system operating under a variance or an exemption issued under subchapter VIII of this chapter shall include the following definition: *Variances and Exemptions*: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

(c) A report which contains data on a contaminant for which EPA has set a treatment technique or an action level shall include one or both of the following definitions as applicable:

1. *Treatment Technique*: A required process intended to reduce the level of a contaminant in drinking water.

2. *Action Level*: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system shall follow.

(4) INFORMATION ON DETECTED CONTAMINANTS. (a) This subsection specifies the requirements for information to be included in each report for contaminants subject to mandatory monitoring (except *Cryptosporidium*). It applies to:

1. Contaminants subject to an MCL, action level, or treatment technique (regulated contaminants);

2. All other contaminants for which monitoring is required by subch. I of this chapter (unregulated contaminants); and

3. Disinfection by-products or microbial contaminants for which monitoring is required by subchapters IV and V of this chapter, except as provided under par. (5)(a) of this section, and which are detected in the finished water.

(b) The data relating to these contaminants shall be displayed in one table or in several adjacent tables. Any additional monitoring results which a community water system chooses to include in its report shall be displayed separately.

(c) The data shall be derived from data collected to comply with EPA and State monitoring and analytical requirements during calendar year 1998 for the first report and subsequent calendar years thereafter except that:

1. Where a system is allowed to monitor for regulated contaminants less often than once a year, the table(s) shall include the date and results of the most recent sampling and the report shall include a brief statement indicating that the data presented in the report are from the most recent testing done in accordance with the regulations. No data older than 5 years need be included.

2. Results of monitoring in compliance with requirements issued under 40 Code of Federal Regulations Sub. D, part 141, ss. 141.142 and 141.143 (Information Collection Rule) need only be included for 5 years from the date of last sample or until any of the detected contaminants becomes regulated and subject to routine monitoring requirements, whichever comes first.

(d) For detected regulated contaminants (listed in Appendix A to this subch), the table(s) shall contain:

1. The MCL for that contaminant expressed as a number equal to or greater than 1.0 (as provided in Appendix A to this subch);

2. The MCLG for that contaminant expressed in the same units as the MCL;

3. If there is no MCL for a detected contaminant, the table shall indicate that there is a treatment technique, or specify the action level, applicable to that contaminant, and the report shall include the definitions for treatment technique and/or action level, as appropriate, specified in par. (3)(c) of this section;

4. For contaminants subject to an MCL, except turbidity and total coliforms, the highest contaminant level used to determine compliance with requirements of this chapter and the range of detected levels, as follows:

a. When compliance with the MCL is determined annually or less frequently: the highest detected level at any sampling point and the range of detected levels expressed in the same units as the MCL.

b. When compliance with the MCL is determined by calculating a running annual average of all samples taken at a sampling point: the highest average of any of the sampling points and the range of all sampling points expressed in the same units as the MCL

c. When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all samples at all sampling points: the average and range of detection expressed in the same units as the MCL.

Note to paragraph 4.: When rounding of results to determine compliance with the MCL is allowed by the regulations, rounding should be done prior to multiplying the results by the factor listed in Appendix A of this subch.

5. For turbidity.

a. When it is reported pursuant to s. NR 809.40: the highest average monthly value.

b. When it is reported pursuant to the requirements of s. NR 809.755: the highest monthly value. The report should include an explanation of the reasons for measuring turbidity.

c. When it is reported pursuant to s. NR 809.755: the highest single measurement and the lowest monthly percentage of samples meeting the turbidity limits specified in s. NR 809.76 for the filtration technology being used. The report should include an explanation of the reasons for measuring turbidity.

6. For lead and copper: the 90th percentile value of the most recent round of sampling and the number of sampling sites exceeding the action level.

7. For total coliform:

a. The highest monthly number of positive samples for systems collecting fewer than 40 samples per month; or

b. The highest monthly percentage of positive samples for systems collecting at least 40 samples per month.

8. For fecal coliform: the total number of positive samples.

9. The likely source(s) of detected contaminants to the best of the operator's knowledge. Specific information regarding contaminants may be available in sanitary surveys and source water assessments, and should be used when available to the operator. If the operator lacks specific information on the likely source, the report shall include one or more of the typical sources for that contaminant listed in Appendix B to this subch. that are most applicable to the system.

(e) If a community water system distributes water to its customers from multiple hydraulically independent distribution systems that are fed by different raw water sources, the table should contain a separate column for each service area and the report should identify each separate distribution system. Alternatively, systems could produce separate reports tailored to include data for each service area.

(f) The table(s) shall clearly identify any data indicating violations of MCLs or treatment techniques and the report shall contain a clear and readily understandable explanation of the violation including: the length of the violation, the potential adverse health effects, and actions taken by the system to address the violation. To describe the potential health effects, the system shall use the relevant language of Appendix C to this subch.

(g) For detected unregulated contaminants for which monitoring is required (except *Cryptosporidium*), the table(s) shall contain the average and range at which the contaminant was detected. The report may include a brief explanation of the reasons for monitoring for unregulated contaminants.

(5) *Information on Cryptosporidium, radon, and other contaminants.*

(a) If the system has performed any monitoring for *Cryptosporidium*, including monitoring performed to satisfy the requirements of 40 Code of Federal Regulations Sub. D, part 141, s. 141.143 (Information Collection Rule), which indicates that *Cryptosporidium* may be present in the source water or the finished water, the report shall include:

1. A summary of the results of the monitoring; and

2. An explanation of the significance of the results.

(b) If the system has performed any monitoring for radon which indicates that radon may be present in the finished water, the report shall include:

1. The results of the monitoring; and

2. An explanation of the significance of the results.

(c) If the system has performed additional monitoring which indicates the presence of other contaminants in the finished water, the report shall include:

1. The results of the monitoring; and

2. An explanation of the significance of the results noting the existence of a health advisory or a proposed regulation.

(6) *Compliance with NPDWR.* In addition to the requirements of s. NR 809.835(4)(g), the report shall note any violation that occurred during the year covered by the report of a requirement listed below, and include a clear and readily understandable explanation of the violation, any potential adverse health effects, and the steps the system has taken to correct the violation.

(a) Monitoring and reporting of compliance data;

(b) Filtration and disinfection prescribed by subch. V of this chapter. For systems which have failed to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes which constitutes a violation, the report shall include the following language as part of the explanation of potential adverse health effects: Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites, which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

(c) Lead and copper control requirements prescribed by subch. II of this chapter. For systems that fail to take one or more actions prescribed by ss NR 809.541(4), NR 809.542, NR 809.543, NR 809.544 or NR 809.545, the report shall include the applicable language of Appendix C to this subch. for lead, copper, or both.

(d) For systems which violate the requirements of s NR 809.26(4), the report shall include the relevant language from Appendix C to this subch.

(e) Recordkeeping of compliance data.

(f) Special monitoring requirements prescribed by ss NR 809.13 and NR 809.26; and

(g) Violation of the terms of a variance, an exemption, or an administrative or judicial order.

(7) *Variances and Exemptions*. If a system is operating under the terms of a conditional waiver or variance issued under subch. VIII of this chapter, the report shall contain:

(a) An explanation of the reasons for the variance or exemption;

(b) The date on which the variance or exemption was issued;

(c) A brief status report on the steps the system is taking to install treatment, find alternative sources of water, or otherwise comply with the terms and schedules of the variance or exemption; and

(d) A notice of any opportunity for public input in the review, or renewal, of the variance or exemption.

(8) *Additional information*.

(a) The report shall contain a brief explanation regarding contaminants, which may reasonably be expected to be found in drinking water including bottled water. This explanation may include the language of subds. (8)(a)1. through 3. or systems may use their own comparable language. The report also shall include the language of subd. (8)(a)4. of this section.

1. The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

2. Contaminants that may be present in source water include:

a. *Microbial contaminants,* such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

b. *Inorganic contaminants,* such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

c. *Pesticides and herbicides,* which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

d. *Organic chemical contaminants,* including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.

e. *Radioactive contaminants,* which can be naturally occurring or be the result of oil and gas production and mining activities.

3. In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

4. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

(b) The report shall include the telephone number of the owner, operator, or designee of the community water system as a source of additional information concerning the report.

(c) In communities where non-English speaking residents comprise 5% or more of the population, the report shall contain information in the appropriate language(s) regarding the importance of the report or contain a telephone number or address where such residents may contact the system to obtain a translated copy of the report or assistance in the appropriate language.

(d) The report shall include information (e.g., time and place of regularly scheduled board meetings) about opportunities for public participation in decisions that may affect the quality of the water.

(e) The systems may include such additional information as they deem necessary for public education consistent with, and not detracting from, the purpose of the report.

809.835 Required additional health information. (1) All reports shall prominently display the following language: Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

(2) A system which detects arsenic at levels above 25 mg/l, but below the MCL:

(a) Shall include in its report a short informational statement about arsenic, using language such as: EPA is reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations.

(b) May write its own educational statement, but only in consultation with the Department.

(3) A system which detects nitrate at levels above 5 mg/l, but below the MCL:

(a) Shall include a short informational statement about the impacts of nitrate on children using language such as: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

(b) May write its own educational statement, but only in consultation with the Primacy Agency.

(4) Systems which detect lead above the action level in more than 5%, but fewer that 10%, of homes sampled:

(a) Shall include a short informational statement about the special impact of lead on children using language such as: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2

minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).

(b) May write its own educational statement, but only in consultation with the Department.

809.837 Report delivery and recordkeeping. (1) Except as provided in sub. (7) of this section, each community water system shall mail or otherwise directly deliver one copy of the report to each customer.

(2) The system shall make a good faith effort to reach consumers who do not get water bills, using means recommended by the primacy agency. EPA expects that an adequate good faith effort will be tailored to the consumers who are served by the system but are not bill-paying customers, such as renters or workers. A good faith effort to reach consumers would include a mix of methods appropriate to the particular system such as: Posting the reports on the Internet; mailing to postal patrons in metropolitan areas; advertising the availability of the report in the news media; publication in a local newspaper; posting in public places such as cafeterias or lunch rooms of public buildings; delivery of multiple copies for distribution by single-biller customers such as apartment buildings or large private employers; delivery to community organizations.

(3) No later than the date the system is required to distribute the report to its customers, each community water system shall mail a copy of the report to the primacy agency, followed within 3 months by a certification that the report has been distributed to customers, and that the information is correct and consistent with the compliance monitoring data previously submitted to the Department.

(4) No later than the date the system is required to distribute the report to its customers, each community water system shall deliver the report to any other agency or clearinghouse identified by the Department.

(5) Each community water system shall make its reports available to the public upon request.

(6) Each community water system serving 100,000 or more persons shall post its current year's report to a publicly accessible site on the Internet.

(7) The Governor of Wisconsin or his designee can waive the requirement of par. (a) of this section for community water systems serving fewer than 10,000 persons.

(a) Such systems shall:

1. Publish the reports in one or more local newspapers serving the area in which the system is located;

2. Inform the customers that the reports will not be mailed, either in the newspapers in which the reports are published or by other means approved by the Department; and

3. Make the reports available to the public upon request.

(b) Systems serving 500 or fewer persons may forego the requirements of subds. (7)(a)1. and 2. of this section if they provide notice at least once per year to their customers by mail, door-to-door delivery or by posting in an appropriate location that the report is available upon request.

(8) Any systems subject to this subch. shall retain copies of its consumer confidence report for no less than 5 years.

Note: Appendices A through C of Subchapter VI are found at the end of this chapter.

SECTION 35. NR 809.90 is repealed and recreated to read:

NR 809.90 Conditional waivers. (1) A public system is eligible to apply to the Department for a conditional waiver respecting compliance with a maximum contaminant level or treatment technique requirement for a period up to 3 years if:

(a) Because of the characteristics of the raw water sources which are reasonably available, the public water system cannot comply with a maximum contaminant level despite application of best technology, treatment techniques, or other means generally available (taking costs into consideration),

(b) Compelling factors (which may include economic factors) indicate that the public water system cannot comply with a maximum contaminant level or treatment technique requirement for a limited period of time,

(c) The public water system was in operation on the effective date of such maximum contaminant level or treatment technique requirement,

(d) For small systems, a conditional waiver is available for nonmicrobial contaminants only, and:

1. Applies to contaminants or treatment techniques that a national primary drinking water regulation was promulgated on or after January 1, 1986; and

2. The technology used to comply with the maximum contaminant level or treatment technique is approved by the Department, and,

3. Compliance with maximum contaminant levels or treatment techniques is not reasonably affordable through restructuring or consolidation changes, including ownership change and/or physical consolidation with another public water system, or obtaining financial assistance through the Wisconsin drinking water state revolving loan fund (DWSRF); and

4. The small system is financially and technically capable of installing, operating, and maintaining the applicable small system technology under subd 2.

(e) Granting of a conditional waiver will not result in an unreasonable risk to public health.

(2) The Department may grant a conditional waiver with the following requirements if the supplier of water has established that the criteria of sub. (1) have been met:

(a) Compliance, including increments of progress, by the supplier of water with each maximum contaminant level or treatment technique requirement within the time frame specified by the Department in the compliance schedule, and

(b) Implementation by the supplier of water of such control measures as the Department deems necessary until compliance with the maximum contaminant level or treatment technique requirement is achieved.

(c) Public water systems that use bottled water as a requirement for receiving a conditional waiver shall meet the following requirements:

1. The Department shall require and approve a monitoring program for bottled water. The public water system owner or operator shall develop and put in place a monitoring program that provides reasonable assurances that the bottled water meets all MCLs. The public water system owner or operator shall monitor a representative sample of the bottled water for all contaminants regulated under ss. NR 809.24 (1) to (2) and NR 809.11 during the first 3-month period that it supplies the bottled water to the public, and annually thereafter. Results of the monitoring program shall be provided to the Department annually.

2. The public water system owner or operator shall receive a certification from the bottled water company that the bottled water supplied meets all requirements of ATCP 40.07. The public water system owner or operator shall provide the certification to the Department the first quarter after it supplies bottled water and annually thereafter.

3. The public water system is fully responsible for the provision of sufficient quantities of bottled water to every person supplied by the public water system via door-to-door bottled water delivery.

(d) If the Department approves the use of a point-of-entry device as a requisite for granting a conditional waiver, the water supplier shall provide documentation that the device will not cause increased corrosion of plumbing materials which could increase contaminant levels at the consumer's tap.

(e) Additional requirements for conditional waivers shall include:

1. Proof of proper and effective installation, operation, and maintenance of any applicable treatment technologies,

2. Department specified monitoring requirements for the contaminant for which the conditional waiver is sought,

3. Other terms or conditions specified by the Department to ensure adequate public health protection, including but not limited to:

a. Public education requirements,

b. Source water protection requirements; and

c. Quarterly conditional waiver compliance reports to the Department.

(3) Before the Department may grant a conditional waiver under this subsection a class 1 public notice under ch. 985, Stats., and opportunity for a public hearing on the proposed conditional waiver shall be provided by the Department. A hearing held pursuant to a request under this paragraph is a class 1 hearing and shall be conducted in accordance with ch. 227, Stats.

(4) The Department may extend a compliance deadline not to exceed 3 years or 2 years for a small system conditional waiver, after the date a conditional waiver is granted under sub. (2) if the supplier of water establishes that:

(a) The public water system cannot meet the maximum contaminant level or treatment technique requirement without capital improvements which cannot be completed within the period of such conditional waiver,

(b) The supplier of water has entered into an enforceable agreement to become part of a regional public water system or, if the supplier of water needs financial assistance for the necessary capital improvements, the supplier of water has entered into an agreement to obtain such financial assistance, and

(c) The supplier of water is taking all practicable steps to meet the standard.

(5) The Department may renew an extension granted under sub. (4) if the supplier of water establishes that:

(a) The public water system does not serve more than 500 service connections,

(b) The public water system cannot meet a maximum contaminant level or treatment technique requirement without financial assistance for the necessary capital improvements, and

(c) The public water system is taking all practicable steps to achieve compliance with a maximum contaminant level or treatment technique requirement.

SECTION 36. NR 809 Appendices A through C to Subchapter VII are created to read:

Appendix A to Subchapter VII -- Converting MCL Compliance Values for Consumer Confidence Reports

Key:

AL=Action Level

MCL=Maximum Contaminant Level

MCLG=Maximum Contaminant Level Goal

MFL=million fibers per liter

mrem/year=millirems per year (a measure of radiation absorbed by the body)

NTU=Nephelometric Turbidity Units

pCi/l=picocuries per liter (a measure of radioactivity)

ppm=parts per million, or milligrams per liter (mg/l)

ppb=parts per billion, or micrograms per liter (g/l)

ppt=parts per trillion, or nanograms per liter

ppq=parts per quadrillion, or picograms per liter

TT=Treatment Technique

Contaminant	MCL in compliance units (mg/L)	multiply by...	MCL in CCR units	MCLG in CCR units
Microbiological Contaminants				
1. Total Coliform Bacteria	-	-	presence of coliform bacteria in 5% of monthly samples	0

2. Fecal coliform and *E. coli*	-	-	a routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive	0
3. Turbidity	-	-	TT (NTU)	n/a
Radioactive Contaminants				
1. Beta/photon emitters	4 mrem/yr	-	4 mrem/yr	0
2. Alpha emitters	15 pCi/l	-	15 pCi/l	0
3. Combined radium	5 pCi/l	-	5 pCi/l	0
Inorganic Contaminants				
1. Antimony	.006	1000	6 ppb	6
2. Arsenic	.05	1000	50 ppb	n/a
3. Asbestos	7 MFL	-	7 MFL	7
4. Barium	2	-	2 ppm	2
5. Beryllium	.004	1000	4 ppb	4
6. Cadmium	.005	1000	5 ppb	5
7. Chromium	.1	1000	100 ppb	100
8. Copper	AL=1.3	-	AL=1.3 ppm	1.3
9. Cyanide	.2	1000	200 ppb	200
10. Fluoride	4	-	4 ppm	4
11. Lead	AL=.015	1000	AL=15 ppb	0
12. Mercury (inorganic)	.002	1000	2 ppb	2
13. Nitrate (as Nitrogen)	10	-	10 ppm	10
14. Nitrite (as Nitrogen)	1	-	1 ppm	1
15. Selenium	.05	1000	50 ppb	50
16. Thallium	.002	1000	2 ppb	0.5
Synthetic Organic Contaminants including Pesticides and Herbicides				
1. 2,4-D	.07	1000	70 ppb	70
2. 2,4,5-TP [Silvex]	.05	1000	50 ppb	50
3. Acrylamide	-	-	TT	0
4. Alachlor	.002	1000	2 ppb	0
5. Atrazine	.003	1000	3 ppb	3
6. Benzo(a)pyrene [PAH]	.0002	1,000,000	200 ppt	0
7. Carbofuran	.04	1000	40 ppb	40
8. Chlordane	.002	1000	2 ppb	0
9. Dalapon	.2	1000	200 ppb	200
10. Di(2-ethylhexyl)adipate	.4	1000	400 ppb	400
11. Di(2-ethylhexyl) phthalate	.006	1000	6 ppb	0

12. Dibromochloropropane	.0002	1,000,000	200 ppt	0
13. Dinoseb	.007	1000	7 ppb	7
14. Diquat	.02	1000	20 ppb	20
15. Dioxin [2,3,7,8-TCDD]	.00000003	1,000,000,000	30 ppq	0
16. Endothall	.1	1000	100 ppb	100
17. Endrin	.002	1000	2 ppb	2
18. Epichlorohydrin	-	-	TT	0
19. Ethylene dibromide	.00005	1,000,000	50 ppt	0
20. Glyphosate	.7	1000	700 ppb	700
21. Heptachlor	.0004	1,000,000	400 ppt	0
22. Heptachlor epoxide	.0002	1,000,000	200 ppt	0
23. Hexachlorobenzene	.001	1000	1 ppb	0
24. Hexachlorocyclopentadiene	.05	1000	50 ppb	50
25. Lindane	.0002	1,000,000	200 ppt	200
26. Methoxychlor	.04	1000	40 ppb	40
27. Oxamyl [Vydate]	.2	1000	200 ppb	200
28. PCBs [Polychlorinated biphenyls]	.0005	1,000,000	500 ppt	0
29. Pentachlorophenol	.001	1000	1 ppb	0
30. Picloram	.5	1000	500 ppb	500
31. Simazine	.004	1000	4 ppb	4
32. Toxaphene	.003	1000	3 ppb	0
Volatile Organic Contaminants				
1. Benzene	.005	1000	5 ppb	0
2. Carbon tetrachloride	.005	1000	5 ppb	0
3. Chlorobenzene	.1	1000	100 ppb	100
4. o-Dichlorobenzene	.6	1000	600 ppb	600
5. p-Dichlorobenzene	.075	1000	75 ppb	75
6. 1,2-Dichloroethane	.005	1000	5 ppb	0
7. 1,1-Dichloroethylene	.007	1000	7 ppb	7
8. cis-1,2-Dichloroethylene	.07	1000	70 ppb	70
9. trans-1,2-Dichloroethylene	.1	1000	100 ppb	100
10. Dichloromethane	.005	1000	5 ppb	0
11. 1,2-Dichloropropane	.005	1000	5 ppb	0
12. Ethylbenzene	.7	1000	700 ppb	700
13. Styrene	.1	1000	100 ppb	100
14. Tetrachloroethylene	.005	1000	5 ppb	0
15. 1,2,4-Trichlorobenzene	.07	1000	70 ppb	70

16. 1,1,1-Trichloroethane	.2	1000	200 ppb	200
17. 1,1,2-Trichloroethane	.005	1000	5 ppb	3
18. Trichloroethylene	.005	1000	5 ppb	0
19. TTHMs [Total trihalomethanes]	.10	1000	100 ppb	0
20. Toluene	1	-	1 ppm	1
21. Vinyl Chloride	.002	1000	2 ppb	0
22. Xylenes	10	-	10 ppm	10

Appendix B to Subchapter VII -- Regulated Contaminants

Key:

AL=Action Level

MCL=Maximum Contaminant Level

MCLG=Maximum Contaminant Level Goal

MFL=million fibers per liter **mrem/year**=millirems per year (a measure of radiation absorbed by the body)

NTU=Nephelometric Turbidity Units

pCi/l=picocuries per liter (a measure of radioactivity)

ppm=parts per million, or milligrams per liter (mg/l)

ppb=parts per billion, or micrograms per liter (g/l)

ppt=parts per trillion, or nanograms per liter

ppq=parts per quadrillion, or picograms per liter

TT=Treatment Technique

Contaminant (units)	MCLG	MCL	Major Sources in Drinking Water
Microbiological Contaminants			
1. Total Coliform Bacteria	0	presence of coliform bacteria in 5% of monthly samples,	Naturally present in the Environment
2. Fecal coliform and *E. coli*	0	a routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or *E. coli* positive	Human and animal fecal Waste

3. Turbidity	n/a	TT	Soil runoff
Radioactive Contaminants			
1. Beta/photon emitters (mrem/yr)	0	4	Decay of natural and man-made deposits
2. Alpha emitters (pCi/l)	0	15	Erosion of natural deposits
3. Combined radium (pCi/l)	0	5	Erosion of natural deposits
Inorganic Contaminants			
1. Antimony (ppb)	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
2. Arsenic (ppb)	n/a	50	Erosion of natural deposits, Runoff from orchards; Runoff from glass and electronics production wastes
3. Asbestos (MFL)	7	7	Decay of asbestos cement water mains; Erosion of natural deposits
4. Barium (ppm)	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
5. Beryllium (ppb)	4	4	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries
6. Cadmium (ppb)	5	5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; runoff from waste batteries and paints
7. Chromium (ppb)	100	100	Discharge from steel and pulp mills; Erosion of natural deposits
8. Copper (ppm)	1.3	AL=1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
9. Cyanide (ppb)	200	200	Discharge from steel/metal factories; Discharge from plastic

			and fertilizer factories
10. Fluoride (ppm)	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
11. Lead (ppb)	0	AL=15	Corrosion of household plumbing systems; Erosion of natural deposits
12. Mercury [inorganic] (ppb)	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
13. Nitrate [as Nitrogen] (ppm)	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
14. Nitrite [as Nitrogen] (ppm)	1	1	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural Deposits
15. Selenium (ppb)	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines
16. Thallium (ppb)	0.5	2	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Synthetic Organic Contaminants including Pesticides and Herbicides			
1. 2,4-D (ppb)	70	70	Runoff from herbicide used on row crops
2. 2,4,5-TP [Silvex](ppb)	50	50	Residue of banned herbicide
3. Acrylamide	0	TT	Added to water during sewage/wastewater treatment
4. Alachlor (ppb)	0	2	Runoff from herbicide used on row crops
5. Atrazine (ppb)	3	3	Runoff from herbicide used on row crops
6. Benzo(a)pyrene [PAH] (nanograms/l)	0	200	Leaching from linings of water storage tanks and distribution

			lines
7. Carbofuran (ppb)	40	40	Leaching of soil fumigant used on rice and alfalfa
8. Chlordane (ppb)	0	2	Residue of banned termiticide
9. Dalapon (ppb)	200	200	Runoff from herbicide used on rights of way
10. Di(2-ethylhexyl) adipate (ppb)	400	400	Discharge from chemical factories
11. Di(2-ethylhexyl) phthalate (ppb)	0	6	Discharge from rubber and chemical factories
12. Dibromochloropropane (ppt)	0	200	Runoff/leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards
13. Dinoseb (ppb)	7	7	Runoff from herbicide used on soybeans and vegetables
14. Diquat (ppb)	20	20	Runoff from herbicide use
15. Dioxin [2,3,7,8-TCDD] (ppq)	0	30	Emissions from waste incineration and other combustion; Discharge from chemical factories
16. Endothall (ppb)	100	100	Runoff from herbicide use
17. Endrin (ppb)	2	2	Residue of banned insecticide
18. Epichlorohydrin	0	TT	Discharge from industrial chemical factories; An impurity of some water treatment chemicals
19. Ethylene dibromide (ppt)	0	50	Discharge from petroleum refineries
20. Glyphosate (ppb)	700	700	Runoff from herbicide use
21. Heptachlor (ppt)	0	400	Residue of banned termiticide
22. Heptachlor epoxide (ppt)	0	200	Breakdown of heptachlor
23. Hexachlorobenzene (ppb)	0	1	Discharge from metal refineries and agricultural chemical factories
24. Hexachlorocyclopentadiene (ppb)	50	50	Discharge from chemical factories
25. Lindane (ppt)	200	200	Runoff/leaching from insecticide used on cattle, lumber, gardens
26. Methoxychlor (ppb)	40	40	Runoff/leaching from insecticide used on fruits, vegetables, alfalfa, livestock
27. Oxamyl [Vydate](ppb)	200	200	Runoff/leaching from insecticide used on apples,

			potatoes and tomatoes
28. PCBs [Polychlorinated biphenyls] (ppt)	0	500	Runoff from landfills; Discharge of waste chemicals
29. Pentachlorophenol (ppb)	0	1	Discharge from wood preserving factories
30. Picloram (ppb)	500	500	Herbicide runoff
31. Simazine (ppb)	4	4	Herbicide runoff
32. Toxaphene (ppb)	0	3	Runoff/leaching from insecticide used on cotton and cattle
Volatile Organic Contaminants			
1. Benzene (ppb)	0	5	Discharge from factories; Leaching from gas storage tanks and landfills
2. Carbon tetrachloride (ppb)	0	5	Discharge from chemical plants and other industrial activities
3. Chlorobenzene (ppb)	100	100	Discharge from chemical and agricultural chemical factories
4. o-Dichlorobenzene (ppb)	600	600	Discharge from industrial chemical factories
5. p-Dichlorobenzene (ppb)	75	75	Discharge from industrial chemical factories
6. 1,2-Dichloroethane (ppb)	0	5	Discharge from industrial chemical factories
7. 1,1-Dichloroethylene (ppb)	7	7	Discharge from industrial chemical factories
8. cis-1,2-Dichloroethylene (ppb)	70	70	Discharge from industrial chemical factories
9. trans-1,2-Dichloroethylene (ppb)	100	100	Discharge from industrial chemical factories
10. Dichloromethane (ppb)	0	5	Discharge from pharmaceutical and chemical factories
11. 1,2-Dichloropropane (ppb)	0	5	Discharge from industrial chemical factories
12. Ethylbenzene (ppb)	700	700	Discharge from petroleum refineries
13. Styrene (ppb)	100	100	Discharge from rubber and plastic factories; Leaching from landfills
14. Tetrachloroethylene (ppb)	0	5	Discharge from factories and dry cleaners
15. 1,2,4-Trichlorobenzene (ppb)	70	70	Discharge from textile-finishing factories
16. 1,1,1-Trichloroethane (ppb)	200	200	Discharge from metal degreasing sites and other

			factories
17. 1,1,2-Trichloroethane (ppb)	3	5	Discharge from industrial chemical factories
18. Trichloroethylene (ppb)	0	5	Discharge from metal degreasing sites and other factories
19. TTHMs [Total trihalomethanes](ppb)	0	100	By-product of drinking water chlorination
20. Toluene (ppm)	1	1	Discharge from petroleum factories
21. Vinyl Chloride (ppb)	0	2	Leaching from PVC piping; Discharge from plastics factories
22. Xylenes (ppm)	10	10	Discharge from petroleum factories; Discharge from chemical factories

Appendix C to Subchapter VII – Health Effects Language

Microbiological Contaminants:

(1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

(2) Fecal coliform/E.Coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

(3) Turbidity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Radioactive Contaminants:

(4) Beta/photon emitters. Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.

(5) Alpha emitters. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

(6) Combined Radium 226/228. Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.

Inorganic Contaminants:

(7) Antimony. Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.

(8) Arsenic. Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

(9) Asbestos. Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.

(10) Barium. Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.

(11) Beryllium. Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.

(12) Cadmium. Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.

(13) Chromium. Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.

(14) Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

(15) Cyanide. Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

(16) Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.

(17) Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

(18) Mercury (inorganic). Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.

(19) Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

(20) Nitrite. Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

(21) Selenium. Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

(22) Thallium. Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.

Synthetic organic contaminants including pesticides and herbicides:

(23) 2,4-D. Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.

(24) 2,4,5-TP (Silvex). Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.

(25) Acrylamide. Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.

(26) Alachlor. Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.

(27) Atrazine. Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.

(28) Benzo(a)pyrene [PAH]. Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.

(29) Carbofuran. Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.

(30) Chlordane. Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.

(31) Dalapon. Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.

(32) Di (2-ethylhexyl) adipate. Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.

(33) Di (2-ethylhexyl) phthalate. Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.

(34) Dibromochloropropane (DBCP). Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

(35) Dinoseb. Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.

(36) Dioxin (2,3,7,8-TCDD). Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.

(37) Diquat. Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.

(38) Endothall. Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.

(39) Endrin. Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.

(40) Epichlorohydrin. Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.

(41) Ethylene dibromide. Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.

(42) Glyphosate. Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.

(43) Heptachlor. Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.

(44) Heptachlor epoxide. Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.

(45) Hexachlorobenzene. Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.

(46) Hexachlorocyclopentadiene. Some people who drink water containing hexachlorocyclopentadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.

(47) Lindane. Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.

(48) Methoxychlor. Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.

(49) Oxamyl [Vydate]. Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.

(50) PCBs [Polychlorinated biphenyls]. Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.

(51) Pentachlorophenol. Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.

(52) Picloram. Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.

(53) Simazine. Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.

(54) Toxaphene. Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.

Volatile Organic Contaminants:

(55) Benzene. Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.

(56) Carbon Tetrachloride. Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

(57) Chlorobenzene. Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.

(58) o-Dichlorobenzene. Some people who drink water containing o-dichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.

(59) p-Dichlorobenzene. Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.

(60) 1,2-Dichloroethane. Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.

(61) 1,1-Dichloroethylene. Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

(62) cis-1,2-Dichloroethylene. Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.

(63) trans-1,2-Dicholoroethylene. Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.

(64) Dichloromethane. Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.

(65) 1,2-Dichloropropane. Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.

(66) Ethylbenzene. Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.

(67) Styrene. Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.

(68) Tetrachloroethylene. Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.

(69) 1,2,4-Trichlorobenzene. Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.

(70) 1,1,1,-Trichloroethane. Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.

(71) 1,1,2-Trichloroethane. Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.

(72) Trichloroethylene. Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

(73) TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

(74) Toluene. Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.

(75) Vinyl Chloride. Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.

(76) Xylenes. Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
REPEALING, RENUMBERING, AMENDING, REPEALING AND RECREATING, AND CREATING RULES

IN THE MATTER repealing s. 114.07(5)(b); amending Chapter NR 114 (title) and Note, ss. 114.01, 114.03(16), 114.05(1) and (2), 114.10(1), (2), (3), (4), (5), (6), and (7), 114.12(2)(d), and 114.14(1)(h); repealing and recreating 114.07(5), and; creating 114.03(3m) and Note, 114.03(14m), 114.05(9), 114.11(4), and Subch. III of the Wisconsin Administrative Code pertaining to operator certification.

Analysis Prepared by Department of Natural Resources

Statutory authority: ss. 227.11(2)(a) and 281.17(3) and (8), Stats.
Statutes interpreted: ss. 281.17(3) and (8), Stats.

Proposed revisions to Chapter NR 114, Certification Requirements for Waterworks, Wastewater Treatment Plant, and Septage Servicing Operators, are submitted to the Natural Resources Board for approval of public hearing on the proposed revisions. The major revisions conform with EPA guidance promulgated in response to a new operator certification requirement for small public systems established under the 1996 Amendments to the Safe Drinking Water Act (SDWA). Revisions include: requirement for certified operator for other than municipal and nontransient noncommunity water systems; requirements for examination, continuing education, and sub-classification by type of treatment; and, requirement for certified operator to be available during each shift the system is in operation.

These new requirements will increase training and knowledge and therefore cost, required to operate other than municipal and nontransient noncommunity water systems. However, since these requirements will result in better knowledge of water system operation, regulatory requirements, and monitoring procedures, it should also result in better public health protection and better levels of regulatory compliance.

SECTION 1. Chapter NR 114 (title) and (Note) are amended to read:

CHAPTER NR 114

CERTIFICATION REQUIREMENTS FOR WATERWORKS, WASTEWATER TREATMENT PLANT, ~~AND~~ SEPTAGE SERVICING AND WATER SYSTEM OPERATORS.

Note: Pursuant to s. 281.98, Stats., any person who violates this chapter shall forfeit not less than $10 nor more than $5,000 for each violation. Each day of continued violation is a separate offense. ~~Chapter NR 114 as it existed on September 30, 1995 was repealed and a new chapter NR 114 was created effective October 1, 1995.~~

SECTION 2. NR 114.01 is amended to read:

NR 114.01 Purpose. The purpose of this subchapter is to establish rules for the certification of waterworks and wastewater treatment plant operators pursuant to s. ~~144.025 (2) (L)~~ 281.17 (3), Stats.

SECTION 3. NR 114.03(3m) and Note, and 114.03(14m) are created to read:

(3m) "Community water system" has the meaning given in s. NR 809.04(4).

NOTE: Section NR 809.04(4) defines "community water system" to mean "a public water system which serves at least 15 service connections used by year–round residents or regularly serves at least 25 year–round residents. Any public water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartment units, or 10 or more condominium units shall be considered a community water system unless information is available to indicate that 25 year–round residents will not be served."

(14m) "Water system" means an other than municipal community or a non-transient non-community water system as defined in pars. (a) and (b):

(a) "Other than municipal community water system" means a community water system that is not a municipal water system and is not a waterworks as defined in sub. (15). Examples of other than municipal community water systems include but are not limited to those serving mobile home parks, apartments and condominiums.

(b) "Non-transient non-community water system" means a non-community water system that regularly serves at least 25 of the same persons over 6 months per year and is not a waterworks as defined in sub. (15). Examples of non-transient non-community water systems include but are not limited to those serving schools, day care centers, and factories.

SECTION 4. NR 114.03(16) is amended to read:

(16) "WPDES permit" means a Wisconsin pollution elimination system permit issued under ~~ch. 147, Stats.~~ ch. 283, Stats.

SECTION 5. NR 114.05(1) and (2) are amended to read:

(1) Examinations and on–the–job experience shall be used to determine knowledge, skill and ability of the applicant to perform duties at a waterworks, or wastewater treatment plant. A score of 75% or higher shall be a passing score on each written examination. An applicant desiring to be certified to perform duties at a waterworks or wastewater treatment plant shall submit a completed application to the department at least 28 days prior to the established date of a written examination on an application form provided by the department. Fees as outlined in s. NR 114.06 shall accompany the application. Applicants shall be notified of their eligibility for examination.

(2) Written examinations shall be conducted week days at least 2 times annually in ~~all~~ 6 locations specified by the department ~~districts~~, except as provided in sub. (3).

SECTION 6. NR 114.05(9) is created to read:

(9) An applicant who holds a valid water system certification under subch. III in subclasses Z, I, L, or V may apply for and be granted certification in the same waterworks subclasses as listed in s. NR 114.10 without repeating the subclass examination.

SECTION 7. NR 114.07(5) is repealed and recreated to read:

(5) A person who desires to renew a certificate shall submit evidence of having met the continuing education requirements on forms approved or provided by the department for approved training courses or other credit which they have successfully completed during the 3–year period. These may include, but are not limited to, courses sponsored by the department, or any university, or technical school, technical sessions at meetings of professional organizations, in–house training and correspondence courses. Failure to successfully complete and document the appropriate number of hours of continuing education training within the 3–year period shall result in rejection of a certificate renewal application.

(a) Wastewater certified operators at Grades T, 1 and 2 require 18 hours per 3 year renewal period.

(b) Wastewater certified operators at Grades 3 and 4 require 24 hours per 3 year renewal period.

(c) Waterworks certified operators at Grades T and 1 require 18 hours per 3 year renewal period, except the operator–in–charge of a surface water treatment plant will be required to submit 24 hours per 3 year renewal period.

(d) For both waterworks and wastewater treatment certified operators, not more than 6 hours of health and safety training may be used per 3 year renewal period.

SECTION 8. NR 114.10(1) through (7) are amended to read:

(1) Subclass G – Groundwater source. All waterworks utilizing a groundwater source.

(2) Subclass Z – Zeolite and resin treatment. All waterworks providing zeolite softening or specific contaminant removal by resins.

(3) Subclass I – Oxidation and filtration treatment. All waterworks providing iron removal by oxidation and filtration.

(4) Subclass L – Lime-soda ash treatment. All waterworks providing treatment by the lime–soda ash process for iron removal or softening, or both.

(5) Subclass S – Surface water source. All waterworks utilizing a surface water source.

(6) Subclass D – Distribution system. All waterworks containing a distribution system.

(7) Subclass V – Specialized treatment. All waterworks providing special treatment such as, but not limited to, air stripping, granular activated carbon or others.

SECTION 9. NR 114.11(4) is created to read:

(4) To qualify for certification in any of the subclasses established in s. NR 114.10, the person shall meet the requirements of either par. (a) or par. (b).

(a) The person shall possess a high school diploma or a general equivalency diploma.

(b) The person shall have a minimum of 2 years experience operating a waterworks prior to (*effective date of rule*).

SECTION 10. NR 114.12(2)(d) is amended to read:

(d) At subclass S waterworks, the system shall have a person certified at Grade T or 1 in Subclass S on duty at all times of operation. If the designated operator–in–charge of a subclass S waterworks is not on duty during the operation of the system, the waterworks shall have another operator certified at Grade T or 1 in subclass S on duty during the operation of the system. If an operator position becomes vacant at a subclass S waterworks, the department may allow a system to operate a shift without a certified operator on duty as long as the non–certified operator on duty is working under the general supervision of a certified operator and the waterworks is making a good faith effort to fill the vacant position. On duty for subclass S waterworks means having a certified operator onsite except where the department has approved an automated treatment plant surveillance system and an operation plan for offsite control as a reliable substitute for having a certified operator on–site. In the review of automated systems, the department shall consider applicable factors, such as, history of plant operations, response time to alarms, offsite treatment adjustment capability, plant shutdown ability and demonstration of satisfactory operation and reliability of the automation system. ~~This requirement applies commencing one year from October 1, 1995.~~

SECTION 11. NR 114.12(2)(e) is created to read:

(e) The operator–in–charge of the operation of a subclass of waterworks shall be available during each operating shift. The operator-in-charge may designate, on a temporary basis (such as vacation or short term illness), an operator of appropriate subclass, to be available during each operating shift.

SECTION 12. NR 114.14(1)(h) is amended to read:

(h) By intentional or negligent action, caused or significantly contributed to a violation of any provision of ~~ch. 144 or 147~~ chs. 281 or 283, Stats., or any administrative codes, permits or orders adopted or issued under those chapters.

SECTION 13. NR 114 Subchapter III is created to read:

SUBCHAPTER III, CERTIFICATION OF WATER SYSTEM OPERATORS.

NR 114.26 Purpose. The purpose of this subchapter is to establish rules for the certification of water system operators pursuant to s. 281.17 (3), Stats.

NR 114.27 Applicability. The provisions of this subchapter are applicable to all owners and operators of water systems as defined in this subchapter.

NR 114.28 Definitions. In this subchapter:

(1) "Certificate" means a printed document issued by the department, pursuant to this subchapter, stating that the operator named therein has met the competency requirements for certification.

(2) "Certified operator" means a person who has met the requirements of this subchapter and has been issued a certificate by the department to work at a water system.

(3) "Classification" or "class" means a number assigned to a water system based on a rating system.

(4) "Community water system" has the meaning given in s. NR 809.04(4).

NOTE: Section NR 809.04(4) defines "community water system" to mean "a public water system which serves at least 15 service connections used by year–round residents or regularly serves at least 25 year–round residents. Any public water system serving 7 or more homes, 10 or more mobile homes, 10 or more apartment units, or 10 or more condominium units shall be considered a community water system unless information is available to indicate that 25 year–round residents will not be served."

(4) "Department" means the department of natural resources.

(5) "Direct responsible charge" means to provide detailed on-site technical direction of the operation of a water system.

(6) "Operate" means to be in direct responsible charge of a subclass of operations at a water system.

(7) "Operator-in-charge" means the person designated by the owner of a water system to be in direct responsible charge of a subclass of operations of the water system. Not included in this definition are managers, engineers, directors or the equivalent, who are not actually involved in day-to-day operations of the system.

(8) "Owner" means the state, county, town, town sanitary district, city, village, metropolitan sewerage district, corporation, firm, company, institution, association, utility district, school district, joint sewerage commission or individual owning or operating any water system.

(9) "Subclass" means a letter assigned a plant or system based upon a particular type of process at the plant and the letter assigned to a person based on passing an examination for a specific operational process.

(10) "Water system" means an other than municipal community or a non-transient non-community public water system as defined in pars. (a) and (b):

(a) "Other than municipal community water system" means a community water system that is not a municipal water system and is not a waterworks as defined in sub (11). Examples of other than municipal community water systems include but are not limited to those serving mobile home parks, apartments and condominiums.

(b) "Non-transient non-community water system" means a non-community water system that regularly serves at least 25 of the same persons over 6 months per year and is not a waterworks as defined in sub (11). Examples of non-transient non-community water systems include but are not limited to those serving schools, day care centers, and factories.

(11) "Waterworks" means a community water system owned by, or a private utility serving, a county, city, village, town, town sanitary district, utility district or a county–owned or state–owned public institution for congregate care or correction, which includes but is not limited to correctional institutions, correctional camp systems, county jails or houses of correction, mental health institutes, schools for the handicapped, hospitals, infirmaries and asylums.

NR 114.29 Classification of water systems. (1) The classification of each water system shall be class 1 and assigned one or more of the applicable subclasses listed in sub. (3) based on the operations performed at the system.

(2) Each water system shall be assigned a minimum of subclass O and additional subclasses for each treatment or process utilized and listed in sub. (3).

(3) The following subclasses are established for both water system classifications and operator certification:

(a) Subclass O - General water system operation. All water systems utilizing a groundwater source, surface water source, or purchased water from a waterworks. Any operator who holds a valid waterworks certification under subch. I in subclasses G, D, or S may also operate this water system subclass.

(b) Subclass Z - Zeolite and resin treatment. All water systems providing zeolite softening or specific contaminant removal by resins. Any operator who holds a valid waterworks certification under subch. I in subclass Z may operate this water system subclass.

(c) Subclass I – Oxidation and filtration treatment. All water systems providing iron removal by oxidation and filtration. Any operator who holds a valid waterworks certification under subch. I in subclass I may also operate this water system subclass.

(d) Subclass L - Lime-soda ash treatment. All water systems providing treatment by the lime-soda ash process for iron removal or softening, or both. Any operator who holds a valid waterworks certification under subch. I in subclass L may operate this water system subclass.

(e) Subclass V – Specialized treatment. All water systems providing special treatment such as, but not limited to, air stripping, granular activated carbon or others. Any operator who holds a valid waterworks certification under subch. I in subclass V may also operate this water system subclass.

NR 114.30 General requirements. Every water system shall have a designated operator-in-charge. No person may be an operator-in-charge of a water system subclass unless that person holds a valid certificate for that subclass issued pursuant to this chapter.

NR 114.31 Requirements for water system owners. The owner of a water system shall designate to the department the operator-in-charge of the water system. The designated operator-in-charge shall meet the requirements stated in s. NR 114.32. A person may be designated as the operator–in–charge for more than one subclass. Owners shall notify the department of changes within 30 days.

NR 114.32 Requirements for water system operators. **(1)** To qualify for certification in any of the subclasses established in s. NR 114.29, the person shall meet the requirements of either par. (a) or par. (b).

(a) The person shall possess a high school diploma or a general equivalency diploma.

(b) The person shall have a minimum of 2 years experience operating a water system prior to (*effective date of rule*).

(2) To qualify for certification in any of the subclasses established in s. NR 114.29, a person shall submit a completed application and successfully pass the examination for that subclass as stated in s. NR 114.33.

(3) The operator-in-charge of the operation of a water system subclass listed in s. NR 114.29 shall hold a valid certification for that subclass, except as noted in sub (4).

(4) Upon the addition of a subclass treatment process to a water system, the operator-in-charge of the system shall have 12 months to pass the necessary examination(s) and meet the requirements specified under this section.

(5) The operator-in-charge of a water system shall be available during each operating shift.

(6) To continue certification under this subchapter, each certified water system operator shall renew his or her certificate every 3 years as specified in s. NR 114.36.

NR 114.33 Applications and examinations. (1) A person desiring to be certified to perform duties at a water system shall submit a completed application form to the department at least 28 days prior to the established date of a written examination. Fees as outlined in s. NR 114.34 shall accompany the application form. Applicants shall be notified of their eligibility for examination.

(2) Examinations shall be used to determine knowledge, skill and ability of the applicant to perform duties at a water system. A score of 75% or higher shall be a passing score on each written examination.

(3) Written examinations shall be conducted at least 2 times annually in 6 locations specified by the department.

(4) Examinations for water system operations may not be issued to applicants who have not properly registered or who fail to identify themselves on request.

(5) Examination papers may not be returned to an applicant. Examination results will be mailed to applicant within 60 days of the examination date.

(6) Applicants who fail to pass a written examination may apply to the department for reexamination at a subsequent scheduled examination.

(7) The department shall provide a list of reference materials and study guides pertaining to each water system subclass.

(8) An applicant who holds a valid waterworks certification under subch. I in subclasses Z, I, L, or V may apply for and be granted certification in the same water system subclasses as listed in s. NR 114.29 without repeating the subclass examination.

NR 114.34 Fees.

(1) Fees for certification shall be as follows:

(a) Each written examination $25.00

(b) Three year renewal (per certificate) $45.00

(c) Late renewal penalty (per certificate) $25.00

(d) Reciprocal certification (per certificate) $100.00

(2) Fees shall accompany a completed application form.

(3) The renewal fee is due on the expiration date of the certificate. Any renewal application postmarked after the expiration date shall also include a $25.00 late renewal penalty.

(4) Fees may not be refunded to an applicant who fails to pass a written certification examination, who fails to appear to take the examination, or who fails to identify himself or herself on request.

(5) The department shall collect these fees pursuant to s. 281.17 (3), Stats. for uses including the administration of this chapter.

NR 114.35 Issuance of certificates. (1) Upon satisfactory fulfillment of the qualifications required by this subchapter, the department shall issue a certificate to a person indicating the water system subclasses for which the person has been certified.

(2) Certificates may be issued for reciprocal certification, without examination, in a comparable subclass to any person who holds a current certificate in any state, territory or possession of the United States, or any

country, if in the judgment of the department, the person requesting reciprocal certification has met the equivalent of the provisions of this subchapter in examinations.

(3) All certificates shall expire 3 years from the date of issuance. Certificates may be updated to show additional subclasses after passing an examination, but the original expiration date shall remain on the certificate. Updating a certificate for any reason, except renewal of certification as described in s. NR 114.36, shall not extend or change the expiration date. Certificates shall only be renewed subject to the requirements of s. NR 114.36.

NR 114.36 Renewal of certification. (1) A person who desires to renew a certificate shall submit a renewal application, the renewal fee and evidence of fulfilling the continuing education requirements of sub. (2).

(2) Certified water system operators require 6 hours of continuing education per 3-year renewal period. Evidence of these hours shall be submitted on forms approved or provided by the department for department required or approved training courses that they have successfully completed during the 3 year period. These may include, but are not limited to courses sponsored by the department, courses at any university or technical school, technical sessions at meetings of professional organizations, in-house training and correspondence courses.

(3) Failure to successfully complete and document the appropriate number of hours of continuing education training within the 3-year period shall result in rejection of a certificate renewal application.

(4) A person whose certification has expired may, within one year after expiration, be reinstated by submitting a renewal application, the renewal fee, the late penalty fee and evidence of the continuing education requirements of sub (2). A person not renewing within the one-year period after expiration will have to apply to take the necessary examinations for a new certificate.

NR 114.37 Sanctions. (1) The department may, on its own motion, make investigations and conduct hearings and may, on its own motion or on a signed and verified written complaint, revoke, suspend or refuse to renew as provided in this section any operators certificate, or reprimand the operator if the department finds that the holder of the certificate has done any of the following:

(a) Made a material misstatement in the application for certification or any application for a renewal of certification.

(b) Demonstrated incompetence to operate the system.

(c) Failed to notify the department of a violation of a maximum contaminant level as required in ch. NR 809 or the construction requirements of ch. NR 811 by the operator-in-charge of a water system operation.

(d) Failed to provide public notification of a violation of ch. NR 809.

(e) Falsified any monitoring, operating or other records submitted to the department, or provided by the department.

(f) By intentional or negligent action, caused or significantly contributed to a violation of any provision of ch. 281 or 283, Stats., or any administrative codes, permits or orders adopted or issued under those chapters.

(g) Used deception or any form of dishonesty when writing examinations, or removing examination materials from the examination site.

(2) Notice of revocation of, suspension of or refusal to renew a certificate shall be served on the certified operator and shall state the reasons for revocation, suspension or refusal to renew.

(3) Revocation of, suspension of or refusal to renew a certificate shall take effect on the 10th day after the notice is served, unless the certified operator files a written answer with the department prior to the 10th day. If an answer is filed, the revocation, suspension of or refusal to renew is stayed and the department shall conduct a hearing on the matter within 30 days after receipt of the answer. At least 10 days prior to the date of the hearing, the department shall send a written notice to the operator indicating the date, time and location of the hearing. The final determination of the department, including the basis for the decision, shall be provided in writing to the operator. A suspended operator may not be the operator-in-charge of a facility for the duration of the suspension.

(4) Application may be made for taking the necessary examinations for a new certificate one year after the date of revocation or refusal to renew.

(5) Any order revoking or suspending a certificate is subject to judicial review as provided in ch. 227, Stats.

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
REPEALING, RENUMBERING, AMENDING, REPEALING AND RECREATING, AND CREATING RULES

IN THE MATTER of renumbering 811.10(3), 811.13(4), (5), and (6), and 811.16(11) to (20); renumbering and amending 811.13(3m) and 811.16(21); amending 811.01, 811.04(2)(a), 811.08(5), 811.10(2), 811.16(4)(d), 811.29(1)(h) and (i), and 811.33(2)Note; and creating 811.10(3), and 811.11(8) of the Wisconsin Administrative Code pertaining to operation and design of community water systems.

Analysis Prepared by Department of Natural Resources

Statutory authority: ss. 227.11(2)(a), 280.11(1), and 281.17(8) Stats.
Statutes interpreted: ss. 280.11(1) and 281.17(8), Stats.

Proposed revisions to Chapter NR 811, Requirements for the Operation and Design of Community Water Systems, are submitted to the Natural Resources Board for approval of public hearing on the proposed revisions. The major revision to this chapter is a change in the definition of community water system to match the definition in Chapter NR 809 and Chapter NR 108. Other revisions allow greater flexibility, provide greater clarity or correct past errors in the code.

These revisions should not significantly impact any systems other than to make the code easier to understand and provide systems more flexibility in meeting the requirements of the code.

SECTION 1. NR 811.01 is amended to read:

NR 811.01 Applicability. This chapter governs the general operation, design and construction of community water systems and the construction of any water system serving 7 or more homes, 10 or more duplexes, 10 or more mobile homes, 10 or more condominiums units, or 10 or more apartments. The standards for design and construction shall be considered minimum standards for new facilities and the minimum standards to which existing facilities shall be upgraded when improvements are undertaken at those facilities except for existing systems where all of the living units are owned by a single owner and the owner provides information indicating that less than 25 year-round residents will be served. These standards may be imposed on a case-by-case basis to existing facilities when the department determines that a potential health risk exists.

SECTION 2. NR 811.04(2)(a) is amended to read:

(a) All suppliers of water for municipal water systems shall submit monthly reports on forms supplied by the department to the appropriate ~~district~~ regional office of the department as required by s. NR 108.06 (4). Computer generated forms are acceptable if, at a minimum, all the required data are submitted on the form, and if the form of the report receives the approval of the appropriate department district office prior to use. Reports shall include the following data if applicable:

1. Daily quantities of water pumped;
2. Daily quantities of chemicals added to the water;
3. Daily operation of treatment processes;
4. Results of chemical, physical or other tests performed for plant control;
5. Calculated theoretical daily residuals and residual test results;
6. Groundwater depth measurements, static and pumping, at least weekly where applicable;
7. Totals and averages of the above where spaces are provided on the report form;
8. Other data determined necessary by the department.

SECTION 3. NR 811.08(5) is amended to read:

(5) Maintenance. Each supplier of water shall perform routine maintenance to ensure proper operation of the water system. A schedule shall be established for flushing dead-end mains or mains in other areas to remove sediment or water of poor quality. A number of hydrants and valves shall be exercised each year depending on system size so that all are routinely exercised. Record keeping shall be established to insure routine scheduling and performance of valve and hydrant exercising and maintenance. Water storage facilities shall be emptied and inspected at least once every 5 years and maintenance provided as necessary. Interior and exterior paint coatings for steel elevated water storage tanks or treatment structures shall be inspected by a person trained to evaluate the integrity of the paint system at least once every 5 years and repainted as necessary to maintain structural integrity. The supplier of water may perform the inspection if

experienced in paint inspection. Upon completion of the water storage facility inspection a report shall be submitted to the department documenting the condition of the storage facility.

SECTION 4. NR 811.10(2) is amended to read:

(2) Provisions for a permit system of no more than 5 years that will allow retention of private water supply systems which are found to be safe and in compliance with ch. NR 812 with the limitation that the owner shall demonstrate a need for continued current use. The permit shall require, but not be limited to the following:

(a) Bacteriological sampling, consisting of obtaining a minimum of ~~2 consecutive safe samples taken a minimum of 2 weeks apart~~ one safe sample taken prior to issuing or reissuing the permit, to establish that the water is safe for human consumption.

(b) Prohibition of cross-connections between any private well and pump installations and the municipal water system.

SECTION 5. NR 811.10(3) is created to read:

(3) Qualifications of the inspectors determining compliance with ch. NR 812.

SECTION 6. NR 811.10(3) is renumbered to (4).

SECTION 7. NR 811.11 is created to read:

(8) Emergency Operations. Each community water system shall develop a plan to prepare for, respond to, mitigate and recover from all types of emergency situations, including such hazards as floods, tornadoes and other natural disasters.

(a) Municipal systems shall have an emergency operation plan including, at a minimum:

1. A list of local and State emergency contacts.

2. A system for establishing emergency communications.

3. Any mutual aid agreements the utility has with other communities for sharing personnel, equipment and other resources during an emergency.

4. Standard procedures for emergency water production.

(b) Other-than-municipal systems shall have an emergency operation plan including, at a minimum:

1. A list of plumbers, electricians or other contractors that would be available to respond in emergency situations.

2. Procedures for obtaining a back-up water source.

SECTION 8. NR 811.13(3m) is renumbered to (4) and amended to read:

~~(3m)~~(4) Engineering report requirements. The report shall, in all cases, indicate the basis of design and shall include the following specific data, if applicable:

SECTION 9. NR 811.13(4) is renumbered to (5), (5) to (6), and (6) to (7).

SECTION 10. NR 811.16(4)(d)2. and 3. are amended to read:

2. Two hundred feet between a well and any sanitary sewer main, sanitary sewer manhole, lift station or single family residential fuel oil tank. A lesser separation distance may be allowed for sanitary sewer mains where the sanitary sewer main is constructed of water main materials and joints and pressure tested in place to meet current AWWA C600 specifications. In no case may the separation distance between a well and a sanitary sewer main be less than 50 feet.

3. Four hundred feet between a well and a septic tank or soil adsorption unit receiving less than 8,000 gallons per day, a cemetery or a storm water drainage pond.

SECTION 11. NR 811.16(11) is renumbered to (10), (12) to (11), (13) to (12), (14) to (13), (15) to (14), (16) to (15), (17) to (16), (18) to (17), (19) to (18), and (20) to (19).

SECTION 12. NR 811.16(21) is renumbered to (20) and amended to read:

(20) Observation wells and test wells. (a) Observation wells, monitoring wells, test wells, treatment wells or other wells constructed as part of the water system shall be constructed in accordance with the requirements for permanent community wells if they are to remain in service after completion of the groundwater supply and if they are located on the well site~~. unless this requirement is waived by the department.~~ If not to remain in service, the wells shall be abandoned in accordance with s. NR 811.17. Monitoring wells constructed off the well site shall meet the requirements of ch. NR 141.

SECTION 13. NR 811.29(1)(h) and (i) are amended to read:

(h) ~~Have the~~ The floor drain may be connected to a sanitary sewer where available provided that the pump station floor is at least one foot above the elevation of the nearest sanitary sewer manhole rim. Where a sanitary sewer is available but a manhole is not located nearby, the department may require installation of an additional manhole;

(i) ~~Have the floor drain terminate a minimum of 25 feet from the pump station if discharge is to the ground surface~~. The floor drain may discharge to the ground surface provided that the discharge location is at least 25 feet from the pumphouse. A greater distance may be required for drains of pump stations serving wells constructed in sand and gravel formations. French drains are prohibited.

Note: The Department recommends that the floor drains from chemical feed rooms discharge to sanitary sewer whenever possible.

SECTION 14. NR 811.33(2)(Note) is amended to read:

Note: The number of homes when using Figure no. 1 may be reduced by one-third to use the figure for apartment units, condominium units and mobile homes.

ORDER OF THE STATE OF WISCONSIN NATURAL RESOURCES BOARD
REPEALING, RENUMBERING, AMENDING, REPEALING AND RECREATING, AND CREATING RULES

IN THE MATTER amending 108.02(13)(a) and (b), 108.04(1), and 108.04(2)(b) and (f) of the Wisconsin Administrative Code pertaining to plans and specifications submittals for reviewable projects.

Analysis Prepared by Department of Natural Resources

Statutory authority: ss. 227.11(2)(a) and 281.41(1), Stats.
Statutes interpreted: s. 281.41(1), Stats.

Proposed revisions to Chapter NR 108, Requirements for Plans and Specifications Submittal for Reviewable Projects and Operations of Community Water Systems, Sewerage Systems and Industrial Wastewater Facilities, are submitted to the Natural Resources Board for approval of public hearing on the proposed revisions. The major revision simply alters the definition of community water system to comport with Chapters NR 809, and NR 811. Other changes simply allow greater flexibility in plan submission.

These revisions should have no significant impact on regulated systems other than to allow greater flexibility in submitting plans.

SECTION 1. NR 108.02(13)(a) and (b) are amended to read:

(a) Any new community water system ~~intended to serve 15 or more living units or having source capacity greater than 70 gallons per minute.~~ or any water system intended to serve 7 or more homes, 10 or more apartments, 10 or more mobile homes, or 10 or more condominium units.

(b) Any improvements, extensions or alterations which may affect the quality or quantity of water delivered by an existing community water system ~~intended to serve 15 or more living units or having source capacity greater than 70 gallons per minute~~ or delivered by a water system serving 7 or more homes, 10 or more apartments, 10 or more mobile homes, or 10 or more condominiums units except distribution systems not in streets or easements, or water systems where all of the living units are owned by a single owner and the owner provides information indicating that less than 25 year-round residents will be served.

SECTION 2. NR 108.04(1) is amended to read:

(1) Preliminary plans. Prior to preparation of final plans and specifications for a water supply facility, an industrial wastewater facility or industrial pretreatment facility, a conceptual design report of the proposed system may be submitted. Upon request the department will provide written comments on the acceptability of the concept and advice regarding design requirements.

SECTION 3. NR 108.04(2)(b) and (f) are amended to read:

(b) Three sets of final plans and specifications shall be submitted for all reviewable projects except water main and sanitary sewer extensions in which case only ~~2 sets need~~ 1 set needs to be submitted. Additional sets of plans and specifications may be required for sewerage improvements that are eligible for state or federal grants-in-aid. ~~One set of all approved plans and specifications will be affixed with the department's stamp of approval and returned to the owner~~.

(f) Plans shall be made on a high grade paper that will not crack when folded nor tear with reasonable usage. The maximum plan size should be 24l ? 36l; and sheets in the same set of plans shall be numbered. The scale in feet to which the plans are drawn, the north point, the date and the name of the designer and owner shall, in all cases, be indicated. Drawings obtained from the manufacturer or supplier containing proprietary names or symbols will not be accepted for approval. All plans shall be drawn to a suitable scale not smaller than one inch equaling 40 feet for detailed plans and, whenever practicable, not smaller than one inch equaling 100 feet for general plans. Reductions of full scale plans with an appropriate scale for the reduced plans not smaller than one inch equaling 100 feet may be accepted by the department provided that the plans are clear and legible. Plans for modifications of or extensions to existing waterworks, sewerage systems, industrial wastewater facilities or industrial pretreatment facilities shall clearly indicate the connections or relations thereto, and, if not already on file with the department, shall include plans of the existing system or facility.

AUG 1 4 2000

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Tommy G. Thompson, Governor
George E. Meyer, Secretary

101 S. Webster St.
Box 7921
Madison, Wisconsin 53707-7921
Telephone 608-266-2621
FAX 608-267-3579
TTY 608-267-6897

August 10, 2000

Mr. David Austin
Wisconsin Senate
Room 155
State Capitol

Subject: Clarification of Department of Natural Resources responses to Wisconsin Legislative Council comments on Clearinghouse Rule 00-002.

Dear Mr. Austin:

First, I apologize for the misunderstanding resulting from the comments in my background memo accompanying our final revisions of rules identified by the Council as Clearinghouse Rule 00-002. In my background memo I stated: "*All comments were accepted and changes to the proposed rules were made except where suggested wording or style might dilute rule stringency or could interfere with other rule components which were not included in the proposed revisions.*" The problem with this statement was that I didn't explain which of the 120 comments were not fully implemented. Hopefully I can rectify that error in this letter.

The following comments did not result in changes to the original text of rule changes provided to the Council (comment numbers are from the Clearinghouse Report to the Agency, on Rule 00-002)

Section 2., comment aw. *The material numbered s. NR809.80(4), on pags43 and 44, should be rewrtiien in the active voice to clarify who is responsible for taking what actions. This is particularly important because these provisions bring in a third party, testing laboratories, in addition to the department and water system operators.*

Response: No questions were raised on this language by labs or facilities at public hearings nor at a meeting with the Wisconsin Environmental Laboratory Association (WELA) board in May 2000. Conversations with laboratory representatives during the time period from March 2000 through June 2000, indicated they understood their responsibilities under these regulations. Therefore the existing language was left as written.

Section 2., comment be. *Section NR 114.28 duplicates many of the definitions contained in the other subchapters of chapter NR 114. To minimize duplication, the department may want to consider creating a single section of definitions that would apply to the entire chapter.*

Response: Interestingly enough this course of action was suggested at a code development work group meeting but rejected because it was noted that prospective operators would not look beyond the specific subchapter which covered the type of certification they desired. It was argued that repeating the definitions in each subchapter made it easier for prospective operators to find what they needed. That is why some definitions are already repeated in each subchapter and why we again repeated them in this subchapter.

Section 5., comment z. *The purpose and application of Appendices A to C to ch. NR 809 are not entirely obvious. Some explanatory text with each of these appendices would be helpful.*

Response: Actually these appendices are referred to in several portions of NR 809.833. The paragraph and subparagraphs refer to each of the appendices for their specific purposes. We thought that was adequate to address the purpose of the appendices.

Section 5., comment aa. *The heading of the second column of the table in Appendix A to ch. NR 809 states that the column is the MCLs in "compliance units" which it states are in mg/l. However, at least some MCLs are in units that cannot be converted to mg/l such as those in pCi/l or mrem/yr.*

Response: This table was block copied directly from the federal regulations with no changes or notes. We decided to leave it just as it was copied from the federal regulations.

Section 5. comment ab. *The headings of the fourth and fifth columns of Appendix A to ch. NR 809 state that entries in those columns are in "CCR units"; however the term "CCR unit" is neither defined nor explained in the key.*

Response: This table was block copied directly from the federal regulations with no changes or notes. We decided to leave it just as it was copied from the federal regulations.

Section 5., comment ac. *The department may wish to number the subheadings in Appendices A and B to ch. NR 809. This would allow the department to make future amendments to the appendices by referring to the specific line in each table, without having to reproduce the entire table.*

Response: We didn't desire to do the additional numbering at present. However, we intend to rewrite the entire chapter in the future and we will retain this comment for consideration at that time.

Section 5., comment ad. *There are no units specified for the second and third columns of the table in Appendix B to ch. NR 809.*

Response: The contaminant and units (for all columns) are identified in column one.

Section 5., comment ae. *The term "other than municipal community water system" in ch. NR 114 is unnecessarily cumbersome. Why not simply say "nonmunicipal community water systems"?*

Response: The term "other than municipal community water system" abbreviated as OTM is also used in ch. NR 811 and we wanted to retain a continuity of definitions and terminology between codes.

Section 5., comment ag. *The term "owner" in NR 114.28(8) should simply say "a person who owns or operates a water system."*

Response: The definition as provided, matches the previous definition of "owner" in NR 114. This convoluted definition was found to be necessary when the department had problems identifying exactly who the owner was in some enforcement cases. We therefore opted to stick with this definition which matches the "owner" definitions of the other subchapters of NR 114.

Section 5., comment ah. *It is unclear what effect the amendment to s. NR 811.01 will have if it is not accompanied by amendments of the pertinent definitions and specific provisions of that chapter.*

Response: The language added to s. NR 811.01 simply matches existing definitions for community water systems found in s. NR 811.02. The reason the language was repeated in s. 811.01 is because many contractors or consultants read only the "applicability" section and fail to realize that certain small water