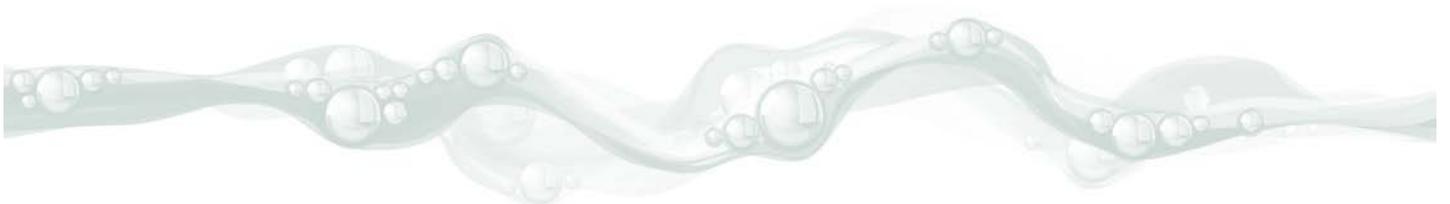


**An Owner's/Operator's  
Handbook  
for**

# *Safe Drinking Water*



For  
Transient  
Non-community  
Public  
Drinking Water  
Systems

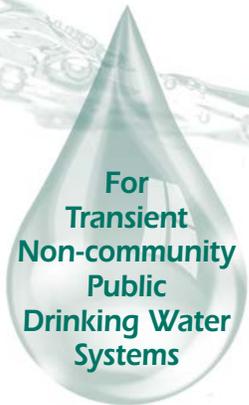




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## Introduction

Safe drinking water – we take it for granted, but everyone in the state depends on it. Safe water is essential for health, business prosperity, and community growth.

As an owner/operator of a public water system, your job is to provide safe water to all users. Preventing contamination and planning for future system needs will help you accomplish this.

Wisconsin's Department of Natural Resources (DNR) oversees construction and operation of public water systems to make sure water is safe to drink and use. However, as legal manager of the water system, **it is your job to monitor drinking water quality**. This guide will help you develop, assess, and maintain a quality water supply. This guide highlights where you must meet legal obligations and can help you provide consumers with safe drinking water.

## What are the safe drinking water requirements and where do they come from?

The Safe Drinking Water Act (SDWA) of 1974 is a federal law that sets health and safety standards for public drinking water in the United States. It was the nation's first comprehensive drinking water law. Under the law, the United States Environmental Protection Agency (USEPA) establishes National Primary Drinking Water Regulations (NPDWRs) for drinking water quality. In addition, the SDWA includes a requirement that the USEPA establish and enforce standards that public drinking water systems must adhere to. All states must meet these standards. States are given primary enforcement responsibility for public water systems in their state if they meet certain requirements.

## What systems are regulated by the Safe Drinking Water Act?

The SDWA governs *public* water systems. Both EPA and DNR define a public water system as one that provides water for human consumption through piping and provides water to at least 15 service connections. Or, it regularly serves an average of at least 25 people daily for at least 60 days per year. There are four types of Public Water Systems in Wisconsin. They are municipal, other-than-municipal, non-transient non-community, and transient non-community water systems (TNC).

### This booklet is designed for TNC public water systems.

Transient, non-community public water systems serve at least 25 people at least 60 days of the year. They do not serve the same 25 people over 6 months of the year.

Contaminants can be associated with either acute health effects or chronic health effects. Acute health effects occur after consuming only a small amount of contaminated water. Chronic health effects are those that occur only after consumption of contaminated water for a long period of time. Therefore, TNC public water system owners are not required to test for contaminants associated with chronic health effects because these systems do not serve the same people day after day. Transient non-community public water system owners must monitor water for acute contaminants including microbiological organisms, nitrite (one time only), and nitrate.

Examples of TNC public water systems include motels, restaurants, parks, taverns, churches, and gas stations.

**Note:** The word “serve” means that water is available for serving, not that people are necessarily known to drink the water. “Human consumption” includes drinking, bathing, showering, cooking, dishwashing, and maintaining oral hygiene. In addition, “bathing” includes all personal hygiene needs in a home, business, or school setting.

## What is the Wisconsin Department of Natural Resources' responsibility?

The DNR oversees the SDWA for Wisconsin. The DNR works with water supply systems to protect the health and welfare of users, and to protect our state's water resources. Below is a list explaining DNR's duties.

### Acronyms and Abbreviations

<b>DNR</b> .....	Department of Natural Resources
<b>GWR</b> .....	Federal Groundwater Rule
<b>MCL</b> .....	Maximum Contaminant Level
<b>mg/L</b> .....	milligrams per liter
<b>NON</b> .....	Notice of Non-compliance
<b>NOV</b> .....	Notice of Violation
<b>NPDWR</b> ...	National Primary Drinking Water Regulations
<b>PWS</b> .....	Public Water System
<b>SDWA</b> .....	Safe Drinking Water Act
<b>SLH</b> .....	State Laboratory of Hygiene
<b>TNC</b> .....	Transient Non-community
<b>TP</b> .....	Temperature/Pressure
<b>TTV</b> .....	Treatment Technique Violation
<b>USEPA</b> ....	United States Environmental Protection Agency

#### ♦ **Technical Assistance:**

Department of Natural Resources Drinking Water Supply Specialists help public well operators on compliance issues for the SDWA. *The DNR works in partnership with public water system owners to help prevent compliance problems before they occur.*

♦ **Inspections:** Department of Natural Resources staff inspect water systems to evaluate them for the risk of contamination, well code compliance, and to ensure the well and pressure system are in good sanitary condition. The technical, managerial, and financial ability of public water systems to provide safe drinking water consistently and cost-effectively will also be evaluated.

♦ **Enforcement:** Department of Natural Resources staff enforces both state and federal SDWA regulations so that all systems are in compliance with drinking water quality and water system installation and operation regulations.

## What are your responsibilities?

You must provide drinking water that meets state and federal drinking water standards. Information regarding Maximum Contaminant Levels (MCLs) for TNC public water systems can be found in the MCL reference section of this handbook. The basic requirements include:

**Sampling** – Annual samples must be collected and analyzed for bacteria & nitrate. A small number of TNC systems sample quarterly for bacteria and nitrate. A one-time nitrite sample is required for each well servicing TNC systems. Although, in cases where nitrite levels are elevated, more frequent nitrite sampling may be required.

Most TNC water system owners receive water sampling kits annually from the DNR, usually between January and May. Sampling lab slips are sent to facilities that use a lab other than the State Laboratory of Hygiene (SLH). An example of a public water lab slip has been included as A1 in Appendix A. An example SLH water test request form has been included as A2. If a certified private lab is utilized have them provide lab slips for you. After you get the kit, you should sample as soon as possible to meet SDWA requirements, but not before the date included on the lab slips. Please mail your samples **within two weeks** of receiving the sampling kit, so that the mailer may be used again for another water system. Everyone benefits from the cost savings realized by reusing the sample kit mailers. Compliance bacteriological samples must be analyzed within 30 hours of collection. Make arrangements with the analyzing laboratory prior to sample collection to assure 30 hour hold time compliance.

The DNR has contracts with Public Health Departments in numerous counties to collect annual samples and conduct sanitary surveys every five years at TNC water systems. **Transient non-community systems in the following counties\* will not receive a water testing kit in the mail. A certified county sanitarian, or an individual under their supervision, will take your water sample for you.**

Adams	Juneau	Rusk
Ashland	Kenosha	Sauk
Barron	LaCrosse	Sawyer
Bayfield	Lafayette	Sheboygan
Buffalo	Lincoln	St. Croix
Burnett	Manitowoc	Taylor
Chippewa	Monroe	Trempealeau
Clark	Oneida	Vernon
Dane	Ozaukee	Vilas
Dodge	Pepin	Walworth
Douglas	Pierce	Washburn
Dunn	Polk	Washington
Eau Claire	Portage	Waukesha
Fond du Lac	Price	Waupaca
Jackson	Racine	Winnebago
Jefferson	Rock	Wood

State-owned facilities are not covered by county contracts and are the responsibility of DNR public water specialists assigned to those counties.  
*\*Reflects participation at time of publication.*

**If your facility changes owners or acquires a new address/ fire number, please contact the DNR to let them know about the change. Information required for change of address or ownership is included on page 9 of this brochure.** This will ensure the kit is mailed to the correct person. To test early, contact the Water Supply Specialist assigned to your county. The assigned individual can be determined using the DNR staff directory.

- ◆ Use and complete the laboratory testing slips included with the kit.
- ◆ Analytical results from state certified laboratories will be sent electronically to the DNR with a paper copy sent to you.
- ◆ If a private laboratory is used, **you must provide the laboratory with the DNR lab slip that is sent to you** (Appendix A1). Keep a copy of test results for your own files!

**For Seasonal systems** – (a system only open for part of the year), kits are usually mailed at least 30 days before you open. Take the water samples when the well is operating for the season, and if possible, within 30 days **before** serving water to the public. If the kit doesn't arrive before you open, contact the Water Supply Specialist assigned to your county. The assigned individual can be determined using the DNR staff directory.

**Well Construction** – Ensure that your water system is built and maintained according to state standards.

Transient non-community water well and pump systems must meet construction requirements of Wisconsin Administrative Code ch. NR 812, Well Construction and Pump Installation (Wisconsin Well Code). In addition, Wisconsin Well Code contains certain set back requirements from known contamination sources.

To meet construction and set back requirements, you should work with a licensed water well driller or pump installation contractor before making modifications to your water system.

- ◆ For a list of certified well drillers, pump installers and licensed professionals handling well filling and sealing in your area go to: [dnr.wi.gov](http://dnr.wi.gov), Search: wells. Then select *homeowner help*

You should also discuss your plans with the DNR Drinking Water Specialist in your area.

Transient, non-community water systems must gain approval to install a water treatment device used to treat a health-related contaminant, not just nitrate. Contact the DNR if you have questions about treatment approval requirements.

As an owner and operator of a TNC system it is essential that you understand the following:

- 1. Maintenance** – Wells and pumping facilities must be kept in a safe and sanitary condition by sealing any cracks and crevices in the upper terminus of the well, replacing any damaged vent screens, and maintaining a sanitary seal on the wellheads. The area surrounding your well(s) should be maintained in good sanitary condition to provide a safe, dependable water supply. Well and pump maintenance should be conducted by state certified individuals and distribution system maintenance should be conducted by a licensed master plumber.
- 2. Record Keeping** – Keep copies of sampling results and inspection reports for your own records. You'll want these as a historical record in case you decide to sell your property or have customer questions. Lab reports can also help prove you sampled in case there are reporting errors.

### 3. Cross-connections –

A cross-connection is the actual or potential path whereby contaminated water may enter the potable water system. Department of Natural Resources regulations do not require a cross-connection control program for TNC systems. However, TNC systems must ensure that there are no unprotected physical connections between the public water system and any pipes or other components whereby potentially unsafe materials may be drawn into the water system. Cross-connections with resulting backflow of contaminants, while a very important water quality issue, may also be a very important liability issue for a public water system of any size. Installation of backflow prevention devices will prevent cross-connection with contamination sources. Protecting the water system cannot be over-emphasized given the historical water system contamination events attributed to cross-connections. All backflow prevention devices should be inspected regularly. Caution must be exercised when a backflow prevention device is installed on a water service line. Two basic changes can occur in the hydraulics of the system served:

- a) There is a drop in pressure due to the device that may cause noticeable changes in how water consuming equipment operates. More importantly, the available firefighting capabilities may be diminished.
- b) Since backflow will not occur, this could create a serious issue because of hot water heaters and similar vessels located downstream from the backflow preventer device. Once this route has been blocked with a backflow preventer, pressure can build up from water that is heated. If the hot water

temperature/pressure (TP) valve is not working correctly or is not correctly installed, the tank can, under certain circumstances, explode. Such cases have been documented. The installation of pressure expansion tanks can avoid the problem.

- 4. Separation Distances** – In order to maximize protection of public health, public water supplies need to be separated from potential sources of contamination. Minimum horizontal separation distances between potential sources of contamination and a TNC water supply well(s) are subject to Table A of Wisconsin Administrative Code s. NR 812.08. Required setback distances are dependent on the date the public water supply well was installed. Transient non-community water systems have to be alert to encroachment potentials and must take action as necessary to protect the system and components from potential contamination sources.

- 5. Disinfection** – Disinfection is a necessary maintenance procedure following replacement of components, repairs, or during emergency conditions if water system pressure is lost. Disinfection of the well and distribution system will be necessary following positive results for microbiological testing. Disinfection will ensure that any microbiological contaminants that may have entered the water system are destroyed. Failure to adequately disinfect the water system following replacement, repair of components, or during emergency conditions may result in coliform positive results in routine samples. For best results, disinfection of your system should be conducted by a licensed well driller or pump installer.

**6. Sanitary Surveys** – Transient non-community systems in counties with contracts with the DNR will have sanitary surveys conducted every five years by county health professionals or an agent of the county. State-owned facilities in those counties will have sanitary surveys conducted by DNR professionals as well as facilities in counties currently not under contract.

The Federal Groundwater Rule (GWR) requires that “eight elements” be reviewed during a sanitary survey of public groundwater systems. Issues identified with a system during the sanitary survey process are assigned three categories; significant deficiency, deficiency, or recommendation depending on the severity of the problem. Issues that present an immediate health threat to system users are assigned as significant deficiencies. The GWR also requires that significant deficiencies identified during a sanitary survey are followed up on and corrected in a timely manner according to an approved corrective action plan with specified due dates for required actions.

A groundwater system with a significant deficiency will be issued something called a Treatment Technique Violation (TTV) if they fail to correct a significant deficiency by an agreed upon due date. Within 120 days of receiving written notification by the DNR of a significant deficiency, groundwater system owners must reach agreement with the department on appropriate due dates for making corrections, unless the state requires more immediate corrections. Failure to reach this agreement will also result in a TTV.

If a system is issued a TTV the facility owner will receive a Notice of Violation (NOV) from the DNR. The facility owner is required to give public notice for the TTV within 30 days of receiving the NOV. The public notice must be posted for as long as the violation or situation persists, but in no case for less than seven days. The facility owner is required to submit a copy of the public notice to the DNR within 10 days of completing the posting.

### Collecting Samples for Bacteriological and Nitrate and Nitrite Tests

The importance of having good water sampling sites and using good sampling technique cannot be over-emphasized. A bad sample site or poor sampling technique can result in the presence of coliform bacteria in a sample even though there might not be a problem with the water. Any presence of coliform bacteria in a routine sample will generate the expense and time of taking repeat samples within 24 hours of notification of the positive result, investigative samples, and five distribution samples the following month.

Sites selected should be clean, have fairly consistent water use, and be representative of water throughout the distribution system according to the written monitoring site plan. The monitoring site plan must consist of sampling points at sites scattered throughout various zones of the distribution system. Conform bacteria sample locations to avoid include swivel-type faucets, dead-ends, drinking fountains, and taps served by water softeners. Do not take routine bacteriological samples directly from the well.

Conversely, samples for nitrite and nitrate nitrogen should be collected from a smooth-end tap located between the well and pressure tank. Samples for nitrite and nitrate nitrogen should not be collected from the distribution system.

### Procedure

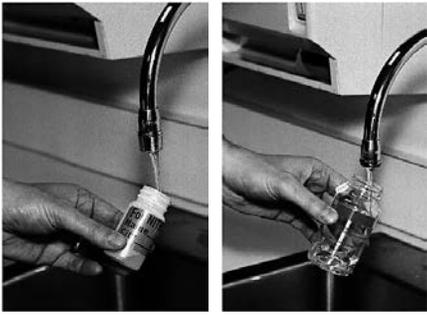


#### Step 1

Complete nitrate and bacteriological test request forms with a ballpoint or waterproof pen. Note: the sample cannot be processed without a collection date and time. Compliance bacteriological samples must be analyzed within 30 hours of sample collection. Nitrate samples must be analyzed within 48 hours of sample collection if collected in an unpreserved bottle or 14 days if the sample is preserved. Make arrangements with the analytical laboratory you choose to analyze samples from your public water system to ensure hold time compliance. **Samples received outside prescribed hold times will not be analyzed and resampling will be required.**

#### Step 2

Fill both bottles. For bacteriological samples, follow the standard sterilization and collection process outlined on the back of the bacteriological form. Securely tighten caps. Nitrate should be collected at the entry point (sample tap prior to the pressure tank) and bacteriological samples from the distribution system, (sink faucet),



if possible. If both need to be collected from the same faucet, the bacteriological sample should be collected first. If possible write the date, time and sample location with a permanent marker on each bottle.



**Step 3**  
Place each bottle in a small zip-lock bag. Place bagged nitrate bottle in one of the large zip-lock bags and fill at least 3/4 full with ice and seal.



**Step 4**  
Place ice bag/ nitrate bottle and bacteria bottle in the Styrofoam shipper. **do not** tape styrofoam lid.



**Step 5**  
Place test request forms in second large zip-lock bag and place on top of styrofoam shipper.



### Step 6

Close box so the address label and “priority mail” sticker shows. Secure cardboard box with tape. Be sure to ship samples by priority rate\* and mail on Monday, Tuesday, or Wednesday only. Shipping samples on Thursday or Friday may delay analyses, therefore not meet required hold time. **Samples received outside prescribed hold times will not be analyzed and resampling will be required.**

### Kit content:

- ◆ 2 bottles (1 for bacteriological analysis and 1 for nitrate analysis)
- ◆ 2 analysis request forms (1 for bacteriological analysis and 1 for nitrate analysis)
- ◆ 2 small zip-lock bags (1 for each bottle)
- ◆ 2 large zip-lock bags (1 for ice & 1 for forms)
- ◆ 1 Styrofoam shipper with cardboard box

\* **Warning:** Hold time is defined as the time between sample collection and actual analysis. Compliance bacteriological samples must be analyzed within 30 hours and nitrite samples must be analyzed within 48 hours of sample collection. Preserved samples for nitrate nitrogen must be analyzed within 14 days of sample collection and unpreserved samples must be analyzed within 48 hours of collection. In most cases, shipping by priority rate mail will meet this requirement. However, there may be areas of the state where a higher shipping rate is needed to meet this requirement. Check with your local post office for the proper delivery rate or use a different carrier (UPS, FEDEX, Speedee, etc.) to meet this requirement. Analyses must be conducted by state certified laboratories.

## What sampling is required?

The tables on page 7 shows the major groups of drinking water contaminants. It also includes the minimum frequency that TNC public water system owners must test for them. If a contaminant is detected, you must follow retesting procedures and strict instructions for informing the public about the problem. Your DNR contact person will help you with a public notice. Retesting and public noticing is continued until the system can reliably show that it is free of contamination.

## What happens if I don't monitor correctly?

Failure to monitor within the proper schedule violates the monitoring and reporting provisions of the SDWA and Wisconsin Administrative Code ch. NR 809, Safe Drinking Water. You will be required to post a public notice, describing the violation.

Laboratories certified by the Department to conduct SDWA water testing include:

### Wisconsin State Laboratory of Hygiene Environmental Health Division

2601 Agriculture Drive  
P.O. Box 7996  
Madison, WI 53707-7996  
800-442-4618 or 608-224-6202



To find a certified lab for water testing in your area, go to: [dnr.wi.gov](http://dnr.wi.gov), Search: *lab certification*.

Then select the *water testing* tab.

## General Sample Monitoring Schedule for Transient, Non-community systems

Contaminant	Minimum Monitoring Frequency	Health Risks
<b>Bacteria</b>	Annually or quarterly, or monthly, depending on system size and type	<i>E. coli</i> may indicate the presence of disease causing viruses; symptoms include: may include diarrhea, cramps, nausea and vomiting
<b>Nitrate</b>	Annually	may cause “blue baby syndrome” in infants, (shortness of breath, blueness of skin), birth defects, and miscarriages
<b>Nitrite</b>	One time	may cause “blue baby syndrome” in infants, (shortness of breath, blueness of skin), birth defects, and miscarriages

Water samples must be analyzed at a laboratory certified for Safe Drinking Water analysis. Go to: [dnr.wi.gov](http://dnr.wi.gov), Search: *lab certification*. Under the *water testing* tab you will find a lab certified for Safe Drinking Water analysis.

Department of Natural Resources staff will initiate the environmental enforcement process as needed to return systems to compliance.

See Figure 1 on page 11 for a flow chart of actions you must take if your bacteriological sample analysis comes back with coliform bacteria detected.

### Maximum Contaminant Levels (MCLs)

The SDWA standards that your public drinking water must meet are called MCLs. A MCL is the maximum allowable level of a substance that you can deliver to the customer from your public water system. The following table has the most recent levels available as of this printing. Maximum Contaminant Levels can change with regulation changes, so if you're not sure or you have questions, contact a regional DNR Water Supply Specialist or a DNR Environmental Program Associate.

Contaminant Regulated Compounds	MCL
<b>Bacteria</b>	0 (any detection)
<b>Nitrate</b>	10 milligrams per liter (mg/L)
<b>Nitrite</b>	1 mg/L

### How will I know when my water has exceeded a MCL?

A Safe Drinking Water Act certified laboratory must perform all of the analyses required by state drinking water regulations. Certified laboratories will know if any of your analytical results exceeded a MCL, and they will notify you of the results. The DNR reviews your results and informs you of any violations and follow-up sampling needed and public notification requirements (see Figure 1 on page 11 for follow-up procedures for an unsafe bacteria sample).

### What do I do if my water exceeds a MCL?

If your water exceeds a MCL (nitrite, nitrate or bacteriological), you must issue a public notice to users of the system. You must also take immediate action to return the drinking water to a safe condition. The degree of follow-up action depends on the type and amount of contamination. The DNR public drinking water staff and/or contract county staff will work closely with you to determine the degree of follow-up necessary for your water system. When a MCL violation occurs, a notice of non-compliance is issued to the system which summarizes actions to be taken until the system is back in compliance with federal and state regulations. Failure to follow the prescribed steps necessary to regain compliance with state and federal regulations will result in action by the DNR through the environmental enforcement process which could lead to eventual referral to the Department of Justice for prosecution.

If a routine bacteriological sample comes back positive, water system owners are required to collect a check sample at the location of the positive sample, three repeat samples at different locations, and one sample from each well. The sample from the well is called a ‘triggered’ sample. One of the 4 repeat samples can serve as both a triggered source sample and one of the repeat samples if collected from a well. Check, repeat, and triggered source samples must be collected within 24 hours of notification from the lab of a positive routine sample. The samples should be collected at the locations specified in Figure 1 on page 11. If any of the check or repeat samples come back positive for coliform bacteria the system has exceeded the MCL. If all 4 check and repeat samples come back negative for the presence of coliform bacteria,

the system is required to collect an additional 5 distribution samples the following month. These sample sites should be predetermined based on the monitoring site plan implemented for your facility.

If nitrite or nitrate sample results indicate an exceedance of the MCL, the water supplier shall take a confirmation sample within 24 hours of the water supplier's receipt of notification of the analytical results of the first sample. Water suppliers unable to comply with the 24 hour sampling requirement shall immediately notify the customers served by the public water system and meet public notification requirements. Water suppliers exercising this option shall take and analyze a confirmation sample within 2 weeks of notification of analytical results of the first sample. The results of the original and confirmation sample shall be averaged and used to determine public water system compliance. Public water systems remain out of compliance with the MCLs for nitrate, nitrite or combined nitrate and nitrite until results of 4 consecutive quarterly samples are less than the MCL. Failure to monitor shall result in a monitoring and reporting violation.

Transient non-community water systems, at the discretion of the DNR, can operate with nitrate levels above 10 mg/L but not above 20 mg/L if the water supplier demonstrates all of the following to the satisfaction of the Department:

- ◆ The water will not be available to children under 6 months of age or women who are or may become pregnant.
- ◆ The water supplier meets the public notification requirements in s. NR 809.958, including continuous posting of the fact that nitrate levels exceed 10 mg/L and the potential health effects of exposure.

- ◆ Local and state public health authorities are notified annually of nitrate as nitrogen levels that exceed 10 mg/L.



- ◆ A supply of bacteriologically safe drinking water, containing less than 10 mg/L nitrate as nitrogen, is provided for infants less than 6 months of age.
- ◆ No adverse health effects will result.

## Reporting

When determining compliance with any water quality monitoring, or drinking water MCLs, the DNR shall accept analytical results only from laboratories that report results directly to the DNR in a DNR approved electronic format and are certified under ch. ATCP 77, ch. NR 149 for safe drinking water analyses.

Results of microbiological samples shall be reported to the DNR and water supplier within 24 hours of the time results are obtained by the laboratory. When results are obtained on a weekend or holiday, the results shall be provided to the water supplier and the DNR as soon as practicable.

The water supplier shall report to the DNR, no later than 24 hours after receiving the test results, the failure to comply with any MCL, monitoring requirement, or treatment technique set forth in ch. NR 809.

## Public Notification

The owner of a public water system must notify persons served by the system of any microbiological, nitrate, nitrite or Treatment Technique Violations whether due to failure to meet the required MCL (water quality), failure to perform required monitoring (water sampling), or failure to correct significant

deficiencies (sanitary surveys). Public notice requirements are divided into 3 tiers, to take into account the seriousness of the violation or situation and of any potential adverse health effects that may be involved.

- ◆ **Tier 1** public notice must be given within 24 hours and is required for SDWA violations and situations with significant potential to have serious adverse effects on human health as a result of short-term exposure. Examples of violations requiring Tier 1 public notification are:

1. Sample results exceeding the MCL for nitrate or nitrite
2. Microbiological results whereby:
  - a. A routine sample showing *Escherichia Coli* (*E. coli*) positive is followed by any repeat total coliform positive, or
  - b. Any repeat sample showing *E. coli* positive occurs.
  - c. Sample results exceed the MCL for total coliform (none were *E. coli* positive) AND a minimum 0.5 mg/L free chlorine residual CANNOT be achieved and maintained throughout the distribution system within 4 hours of learning of the results.
3. Total coliform positive samples are not tested for *E. coli*
4. Nitrate or Nitrite confirmation samples are not collected within 24 hours of learning of the high nitrate or nitrite results.

- ◆ **Tier 2** public notice must be given within 30 days and is required for SDWA violations and situations with potential to have serious adverse effects on human health. Examples of violations requiring Tier 2 public notification include:

1. Sample results exceed the MCL for total coliform (none were *E. coli* positive) AND a minimum 0.5 mg/L free

chlorine residual CAN be achieved and maintained throughout the distribution system within 4 hours of learning of the results.

2. Failure to correct significant deficiencies identified during routine sanitary surveys within the established compliance timeframe. If the significant deficiency is not corrected within the prescribed timeframe a Treatment Technique Violation (TTV) is triggered which generates Tier 2 public notification requirements.

💧 **Tier 3** public notice must be given within 1 year and is required for SDWA violations or situations not included in Tier 1 and Tier 2. Examples of violations requiring Tier 3 public notification include:

- a. Failure to collect sample for total coliform,
- b. Failure to collect routine samples for nitrite or nitrate.

The notification may be made by appropriate media, such as radio and television, but it must always be posted in conspicuous locations throughout the area served by the public water system. The public notification must be made as soon as practical after the system learns of the violation, but no later than the time frames established for the respective violation Tier. If the violation requires Tier 1 notification the system must provide public notice as soon as practical, but no later than 24 hours after the system learns of the violation.

Posting must continue for as long as the violation exists, but in no case less than seven days even if the violation or situation is resolved. It is the responsibility of the water system owner/operator to notify the DNR in the event required sample kits are not received. The failure of the DNR or laboratory

to automatically provide a sample kit is not grounds for a waiver of public notification requirements.

Tier of public notice required for each violation is included in Appendix A to Subchapter VII – Public Notification of Drinking Water Violations, Wisconsin Administrative Code NR 809.950.

When a MCL for a chemical constituent is exceeded (nitrite or nitrate at TNC systems), you must notify the public water system users of the condition. Contact DNR public drinking water staff right away for public notification instructions. The notification must contain at a minimum, the contaminant found and its reported concentration, health effects of exposure, measures being taken to alleviate the problem, and the name and telephone number of someone who can provide the consumer with more information. This notice must be posted at all drinking water outlets. The type of notification required will depend on the severity of the contamination, the type of population being served, and the urgency of the situation. The DNR will help you determine what language to put in your public notification.

Whenever you notify the public, make sure you forward a copy of that notification to your assigned DNR drinking water staff person. The DNR staff working with your water system must be able to verify that notification was provided to customers in order for your system to be considered in compliance with this requirement. You will be required to submit a compliance verification form indicating you have complied with post notice requirements. A public notification rule handbook is available which outlines the public notification rules in an easy-to-read format and offers suggestions to systems on distribution options and includes a series of templates

that apply to the most common violations for each type of system. It is available on-line at:

Go to: [epa.gov](http://epa.gov), Search: *PN Handbook March 2010*. From the search results, select the first option.

**Remember:** It is the responsibility of the water system operator to collect required samples. The failure of a certified laboratory to automatically provide a sample kit is not grounds for a waiver of public notification requirements.

## Change of Ownership Notification

If the ownership of your facility has changed or will change soon, please provide the information listed below to the DNR public water supply specialist assigned to your facility or a DNR environmental program associate. If you have an old mailing label, you can attach it and just fill in the new information.

- Public Water System (PWS)  
Number (if known)
- System Name (Old and New)
- Previous Owner
- Previous Address
- Previous phone/fax/e-mail
- Previous Sampler
- Previous Sampler Address
- New Owner
- New Owner Address
- New phone/fax/e-mail
- New Sampler
- New Sampler Address/email/phone



## Websites referenced in handbook

Department of Natural Resources (DNR) website: [dnr.wi.gov](http://dnr.wi.gov)

To find the DNR Bureau of Drinking Water and Groundwater web page, go to [dnr.wi.gov](http://dnr.wi.gov), Search: *drinking water*

The USEPA provides approved health effects language for public notification. This can be found in Wisconsin Administrative Code ch. NR 809, Safe Drinking Water. USEPA language for health effects for regulated contaminants is available on the web. Go to: [epa.gov](http://epa.gov), Search: *PN Handbook March 2010*. From the search results, select the first option.

For more specific definitions of public water systems, read Wisconsin Administrative Code ch. NR 809, Safe Drinking Water Standards. NR 809 is available at public or go to [dnr.wi.gov](http://dnr.wi.gov), Search: *drinking water*. Then select *Laws & Rules*.

For names of DNR personnel and office locations, go to [dnr.wi.gov](http://dnr.wi.gov), Search: *DNR staff directory*.

Water samples must be analyzed at a laboratory certified for Safe Drinking Water analysis. A list of these labs is available on the DNR's website [dnr.wi.gov](http://dnr.wi.gov).

Bacteriological samples must be analyzed by a Department of Agriculture, Trade, and Consumer Protection certified laboratory. To find a certified lab for water testing in your area, go to: [dnr.wi.gov](http://dnr.wi.gov), Search: *lab certification*. Then select the *water testing* tab.

For a list of certified well drillers, pump installers, and licensed professionals handling well filling and sealing in your area go to: [dnr.wi.gov](http://dnr.wi.gov), Search: *wells* then select *homeowner help*

## Wisconsin Department of Natural Resources

101 S. Webster Street  
Box 7921  
Madison, WI 53707-7921

## Contact Us

**Customer Service Staff are here to assist you  
7 days a week, 7 a.m. to 10 p.m.**

Call Toll Free  
1-888-WDNRINFO  
(1-888-936-7463)

### How may we help you?

**Chat** available from  
7 a.m. to 9:45 p.m.

**Call** a representative  
7 a.m. to 10 p.m.

**Email** your question.

### Toll free hotlines

**Violation Hotline:**  
1-888-936-7463  
phone

**Emergency Spill Hotline:**  
1-800-943-0003  
phone

**WE'RE HERE FOR YOU.**

"¿Cómo puedo ayudarle?"

"How may I help you?"

"Kuv pab koj tau licas?"

CALL CENTER STAFF available 7 days a week, 7am-10pm  
Toll-free 1-888-WDNRINFO (1-888-936-7463)  
ONLINE CHAT at [dnr.wi.gov/contact/](http://dnr.wi.gov/contact/)

**Customer Service**  
WISCONSIN DEPARTMENT OF NATURAL RESOURCES

**Bilingual Services are available**

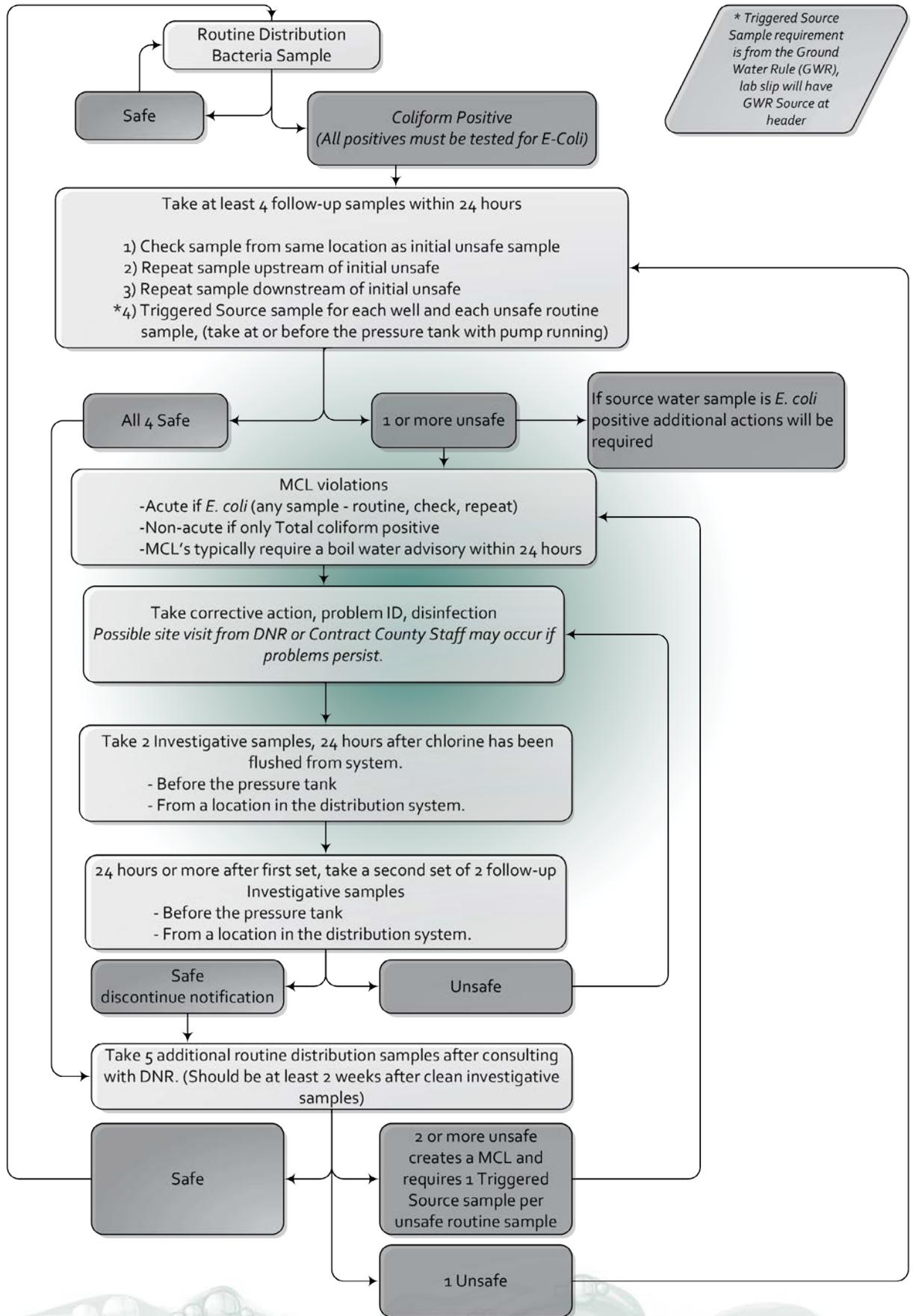
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*This publication is available in alternative format (large print, Braille, audiotape etc.) upon request. Please call 608/266-0821 for more information.*



**Figure 1 - Bacteriological Sampling Flow Chart for Transient Non-community Water Systems**



# Appendix A - Sampling Information - A1 Public Water Laboratory Slip

DNR Drinking Water Program  
 DG/5  
 P.O. Box 7921  
 Madison, WI 53707

## Public Water Supply BACTERIOLOGICAL ANALYSIS (ENCLOSE FORM WHEN SENDING SAMPLE TO LAB)

Form 3300-51  
 Rev. 08/12

### Section I: System Information (to be completed by Department of Natural Resources/SAMPLER)

System Name: \_\_\_\_\_ System Type: MC \_\_\_ NN \_\_\_ OC \_\_\_ TN \_\_\_  
 (Check one) Region  
 Address: \_\_\_\_\_ City: \_\_\_\_\_ County: \_\_\_\_\_ Code: \_\_\_\_\_  
 PWS ID#: \_\_\_\_\_ DNR Contact: \_\_\_\_\_

Sampler Phone/Name/Address (Notify DNR Contact of Corrections)	<h3>Sampler</h3> <p>If the laboratory has the ability to fax or e-mail results to you and you would like the lab to do that, please provide the appropriate information (leave blank if you prefer a paper copy):</p> Fax number: _____ E-mail: _____
<b>Sample Source (location):</b> <input type="checkbox"/> D - Distribution System <input type="checkbox"/> W - Well	<b>Sample Type (check one only):</b> <input type="checkbox"/> D - Routine Distribution Compliance and Follow-ups <input type="checkbox"/> N - New Construction <input type="checkbox"/> C - Check: Taken at same location as Unsafe Sample <input type="checkbox"/> I - Investigation Unsafe Sample Collection Date: ___/___/___ <input type="checkbox"/> W - (Raw) Water Unsafe Sample ID: _____    WI Unique Well No: _____ <input type="checkbox"/> R - Repeat    Entry Point ID: _____

**Special Instructions:** \_\_\_\_\_  
**Collect sample between:** \_\_\_/\_\_\_/\_\_\_ and \_\_\_/\_\_\_/\_\_\_ **SAMPLES MUST BE ANALYZED WITHIN 30 HOURS OF COLLECTION. SEE SAMPLING INSTRUCTIONS ON BACK.**

### Section II: Sample Information (to be completed by SAMPLER -- ALL ITEMS REQUIRED)

Sample Collection Date: \_\_\_/\_\_\_/\_\_\_ Time: \_\_\_\_\_ : \_\_\_\_\_  a.m.  p.m.  
 Address where sample was collected (example: "114 Water Street"): \_\_\_\_\_  
 Monitoring Point ID: \_\_\_\_\_ Location of sample tap (example: "Laundry Tap"): \_\_\_\_\_  
 Name of Sampler: \_\_\_\_\_

### Section III: System Test Result Information for Systems Who Use Continuous Chlorination (to be completed by SAMPLER)

**If your system uses continuous chlorination, the chlorine residual level at the time this sample was collected must be reported below. Systems who do not continuously chlorinate may skip this section.**

Storet Code	Parameter	SDWA Method	Results	MRDL	Units
50060	CHLORINE TOTAL RESIDUAL			4.0	MG/L
50064	CHLORINE FREE AVAIL			4.0	MG/L
50066	COMBINED AVAILABLE CHLORINE			4.0	MG/L

### Section IV: Lab Test Results (to be completed by LAB) Lab has 24 hours to electronically report results to DNR per NR 809.80

<b>Laboratory Results</b> <input type="checkbox"/> Safe (Coliform Absent) <input type="checkbox"/> Unsafe (Coliform Present) and: <input type="checkbox"/> Fecal/E Coli Present <input type="checkbox"/> Fecal/E Coli Absent _____/_____/_____ Date PWS Notified of Unsafe <input type="checkbox"/> Invalid (Submit another Sample) <input type="checkbox"/> Old <input type="checkbox"/> Frozen <input type="checkbox"/> Overgrown <input type="checkbox"/> Lab Accident <input type="checkbox"/> Chlorine Present <input type="checkbox"/> Shipping Problem	<b>Approved Enzyme Substrate Method (Each method requires 100 mL of sample)</b> <input type="checkbox"/> Colilert® <input type="checkbox"/> E*Colite® <input type="checkbox"/> Chromocult® <input type="checkbox"/> Colilert-18® <input type="checkbox"/> MI Agar <input type="checkbox"/> Coliscan® <input type="checkbox"/> Colisure® <input type="checkbox"/> ReadyCult® <input type="checkbox"/> Colitag™ <input type="checkbox"/> Other: _____ (Print Approved Enzyme Substrate Method)	
Laboratory Name	Date Received	Sample ID
WI Bacteriological Certification Number	Laboratory Phone Number	Date Reported to PWS

# A2 - State Laboratory of Hygiene Water Test Request Form



## WATER TEST REQUEST FORM

**Wisconsin State  
Laboratory of Hygiene**  
 http://www.slh.wisc.edu/ehd  
 Environmental Health Division  
 2601 Agriculture Drive  
 P.O. Box 7996  
 Madison, WI 53707-7996  
 (608)224-6202 (800)442-4618

*Check tests desired. If no test is indicated, Bacteria will be tested.  
 There is a cost for each test. Please refer to the separate price list*

**Bacteria**  
 **Fluoride**

**Nitrate**  
 **RUSH Nitrate** *Refer to price list.*

**Report/Bill to:**  
*(Please print clearly or use your address label)*

Name: \_\_\_\_\_  
 PO Box: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Phone: \_\_\_\_\_

**Check one report option:**

- E-mail Address \_\_\_\_\_  
 Dedicated FAX Number \_\_\_\_\_  
 US Mail: the P.O. Box or Address line from above will be used.

If none of the options above are selected, a printed report will be sent by US mail.

**Customer ID :**

**Reason for test:**

- Annual Test (A)       New Well (N)  
 Pump Work/Maint (K)       Real Estate (E)  
 Investigation (I)       Other (O)

**Well Information:**

*Complete this section ONLY if you have a well*

Unique Well # \_\_\_\_\_ Example : AB123

Well Construction Date: \_\_\_\_\_

- Drilled (D)       Jetted (J)  
 Driven Point (W)       Dug (G)  
 Other (X) \_\_\_\_\_  
 (Check if same as Report/Bill name and address)

Owner Name: \_\_\_\_\_

Owner Address: \_\_\_\_\_

Owner City: \_\_\_\_\_

Owner State: \_\_\_\_\_ ZIP: \_\_\_\_\_

Owner Phone: \_\_\_\_\_

(circle one)

**Collection Date:** \_\_\_/\_\_\_/\_\_\_ **Time** \_\_\_:\_\_\_ (am/pm)

Collected By: \_\_\_\_\_

County: \_\_\_\_\_

Professional License #: \_\_\_\_\_

Address Sampled:  (Check if same as Report/Bill name and address)

(If private well, also complete Well Information section)

**Sample Source:**

- Kitchen Tap (PK)       Bathroom Tap (PT)  
 Pressure Tank Tap (PP)       Milk House (PM)  
 Basement Tap (PE)       Laundry Tap (PL)  
 Sample Faucet (PD)       Outside Tap (PH)  
 Other (PO) \_\_\_\_\_       Spring (PS)

**Bacti Only:**

- Swimming Beach       Pool

**(Laboratory Use Only)**

**BACTI RESULTS (Total Coliform)**

- SAFE  
 UNSAFE  
 E. COLI ABSENT       E. COLI PRESENT

**Attention: Important Shipping Information**  
**Be sure to ask when your package will arrive at the lab.**

Use the Red and White label for commercial delivery service.  
 United Parcel Service 800-742-5877      FedEx 800-463-3339  
 Dunhams 800-236-7127      Spee-Dee 715-341-4960

Use the Orange label for US Postal Service. Included is a priority mail sticker or envelope. Some Wisconsin regions are standard 2-day delivery to the lab, for other areas the priority only guarantees it will arrive within 3 days, most arrive in 1-2 days.  
 US Postal Service 608-246-1220



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