

**TRANSIENT NON-COMMUNITY
PUBLIC WATER SYSTEM'S GUIDE**

**EPA Region 8
Drinking Water Unit**

TRANSIENT NON-COMMUNITY PWS GUIDE

WHY DID I RECEIVE THIS GUIDE?

As a transient non-community public water system (PWS), you are required to fulfill certain requirements. This document provides information on how to meet those requirements and should be saved for future reference.



A transient non-community (TNC) PWS is a water system where at least 25 people (not necessarily the same people) are present and have access to the water any 60 or more days out of the year. This includes water used for drinking, food preparation, bathing, showering, tooth brushing or dishwashing. Typical examples of transient public water systems include campgrounds, gas stations, dude ranches, rest areas, hotels and restaurants.

Using this guide may help you avoid many of the common mistakes that lead to violations, including missed monitoring and failure to submit plans for approval before making substantial changes to your water system.

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FOR YOUR INFORMATION...

Wyoming is the only State that has not applied for delegation of the Safe Drinking Water Act. Thus EPA Region 8 implements the Safe Drinking Water Act as the Primacy Agent. The State of Wyoming and EPA Region 8 coordinate activities to ensure that consumers are served safe drinking water. See page 15 for more information.

MAIN REQUIREMENTS FOR A TNC PWS

The following outlines requirements for transient public water systems. The list is not meant to be all-inclusive, but does highlight requirements that are considered most important by the Region 8 EPA Drinking Water Unit.

1. Total Coliform Bacteria Monitoring

All public water systems are required to monitor in their distribution system for total coliform bacteria to determine compliance with the maximum contaminant level (MCL). No more than one sample during a month may be total coliform positive. Transient public water systems are required to monitor for total coliform bacteria at least every calendar quarter.

2. Nitrate and Nitrite Monitoring

All public water systems are required to monitor for nitrate and nitrite according to a schedule issued by the Drinking Water Unit in order to determine compliance with the maximum contaminant levels. Transient public water systems are required to monitor for nitrate at least annually and nitrite at least one time, unless specified otherwise.

3. Construction Plans and Specifications

Detail plans must be submitted for review and approval by Wyoming Department of Environmental Quality (DEQ) before making any substantial changes to a public water system. Please call Wyoming DEQ for more information at 307-777-7781 or visit the following website:
<http://deq.state.wy.us/wqd/www/Permitting/Pages/PWS.asp>

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MONITORING REQUIREMENTS

Transient public water systems are required to perform water quality monitoring on a regular basis. The monitoring results must meet minimum EPA quality standards. It is the water system's responsibility to make sure that all monitoring requirements outlined in the monitoring schedules provided by EPA Region 8 are met within the required time frame.

Note: The following are minimum requirements for transient public water systems serving a population less than 1,000 per day. Transient public water systems serving populations greater than 1,000 per day should consult EPA Region 8.

Contaminant	Ground Water System	Surface Water System*	Sample Tap	Sample Point (SP) Code
Total Coliform Bacteria	1 sample each calendar quarter	1 sample per month	Collect from the distribution system according to your sample site plan	DSxx
Nitrate	1 sample per year (as scheduled)	1 sample per year	Collect from the entry point to the distribution system (first tap after any treatment)	Sample Point listed on your schedule (SPxx)
Nitrite	One time	One time		

*Surface and/or GWUDI water systems are also required to report continuous turbidity and disinfection monitoring as part of a Surface Water Monthly Operating Report. Contact Mindy Mohr with EPA Region 8 at 303-312-6525 for more information.

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MONITORING REQUIREMENTS CONTINUED

WHERE DO I COLLECT THE SAMPLES?

Total coliform bacteria samples should be taken from the distribution system according to your sample site plan. The appropriate sample point (SP) to use when filling out the paperwork is DSxx.

Nitrate and nitrite samples should be taken from the entry point to the distribution (the first available tap after any treatment). The appropriate sample point is indicated by a star on your system's schematic.

WHAT IF I ONLY OPERATE PART OF THE YEAR?

* Seasonal public water systems must notify EPA Region 8 if there have been any changes to the operating season of the facility. Please call Charla at 303-312-6280.



- Transient public water systems are required to monitor according to their monitoring schedules issued by EPA Region 8 for every monitoring period, or partial monitoring period, that the system is “open.”
- If you have any questions, please do not hesitate to call us as we really are here to assist you!

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HOW DO I ARRANGE TO HAVE MY WATER TESTED?

CONTACT AN EPA REGION 8 CERTIFIED LABORATORY

Contact a laboratory that is certified by EPA Region 8 for the required test (contaminant). Contact us at (303) 312-6700 if you want a list of laboratories certified for drinking water testing mailed or faxed to you. This information can also be found at <http://www.epa.gov/region8/waterops/docs/certifiedlabs.pdf>. If you do not use an EPA Region 8 certified laboratory, the results **will not** be accepted.

**USE AN
EPA CERTIFIED
LABORATORY FOR
DRINKING WATER
TESTING**

COLLECT THE DRINKING WATER SAMPLE

The laboratory will send a sampling kit which includes sampling containers and instructions on how to properly collect the drinking water sample. Call the laboratory if you have any questions after reading the instructions. Total coliform bacteria samples should be collected at location(s) identified in your sample site plan. Nitrate and nitrite samples should be collected from the first tap following any treatment.



GIVE THE LAB COMPLETE INFORMATION FOR REPORTING

Tell the laboratory that you are a public water system (PWS). Your monitoring schedule contains most of the information you need to complete the forms, and a copy may be sent to the laboratory to arrange for testing. Please be sure to include your PWS number on all sample forms. Should you need a copy of your monitoring schedule, please call Barbara at 303-312-6700.

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HOW DO I ARRANGE TO HAVE MY WATER TESTED? CONTINUED

The laboratory normally needs the following information to report results:

Total coliform bacteria

Public water system (PWS) name, address, PWS identification number (PWSID), sample collection date and time, sample collector, sample class (usually routine), sample monitoring point and type of analysis. A phone number where you can be reached is also helpful.

The form is a standard laboratory request form. It includes fields for:

- Company Name: PUBLIC WATER SYSTEM
- Request Address: 12345 Main St, City, State, Zip
- Sample Origin: TAP
- Special Report Parameters: ELI (checked)
- Sample Identification: Includes a table for sample ID, collection date, time, and location.
- Custody Record: A table for tracking the sample from collection to analysis.

Nitrate or nitrite

Public water system name, address, PWSID number, sample monitoring point, sample collection date and time, sample collector, and sample purpose (usually compliance).

This is a smaller version of the laboratory request form, showing the same structure and fields as the larger one above.

KEEP COPIES OF ALL TEST RESULTS IN A FILE

You are responsible for ensuring the required testing is done. The laboratory should send you a copy of your results. If you do not receive this report, contact the laboratory to check if the results were sent to EPA Region 8 and request a copy. It is your responsibility to submit sample results to EPA Region 8. Keep in mind that labs do not send nitrate/nitrite sample results to EPA.

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WHAT ARE TOTAL COLIFORM BACTERIA?

Total coliform bacteria are common in the environment and are generally not harmful. Testing for total coliform bacteria is required because it is a relatively easy, quick and inexpensive way to determine if drinking water may be contaminated with other, potentially harmful organisms. If a total coliform bacteria sample tests positive, the laboratory is required to further test for fecal coliform and/or *E. coli*, which 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, some of the elderly, and people with severely compromised immune systems.



How to Avoid Contaminating Total Coliform Bacteria Samples During Collection

- Carefully follow the instructions provided by the laboratory
- Avoid taps with a leak at the stem
- Avoid faucets that swivel
- Remove aerators or screens before collection
- Flush tap for at least 5 minutes
- Sanitize tap
- Be careful not to touch the inside or mouth of the bottle or cap
- Do not rinse out the sample bottle before collection
- Bottle should be open only during collection of the sample

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WHAT HAPPENS IF I HAVE A POSITIVE TOTAL COLIFORM RESULT?

“TC positive” means coliform bacteria is present.

“TC negative” means coliform bacteria is absent.

ONLY if there is a fecal or *E. coli* positive sample contact Charla with EPA at 303-312-6280 IMMEDIATELY.

If a routine sample result is TC+, EC+ or FC+ positive:

- **Collect four repeat samples within 24 hours** of being notified of a TC positive result (consult your sample site plan for where to take the samples). Contact Charla if you need more time due to a weekend or holiday. Repeat samples must be labeled as Repeat, or you may not receive credit for collecting the samples. Results of all repeat samples must be reported to EPA Region 8 by the end of the next business day following analysis.
- The lab will test the routine and any positive repeat samples for fecal coliform and/or *E. coli* bacteria.
- Results of the routine and repeat samples will determine if public notification or a water use advisory is necessary.
- **Collect 5 samples in the month following the total coliform positive sample.**

An acute MCL violation occurs when there is any combination of positive samples where at least one routine or one repeat sample is fecal positive or *E. coli* positive. A boil order must be issued as soon as possible but no later than 24 hours after the violation, and continue until a set of 4 repeat samples are total coliform negative.

A monthly MCL violation occurs when total coliform is present in two or more samples during any month, and fecal coliform or *E. coli* is not detected. In this case, a boil order is not necessary, but a public notice must be issued no later than 30 days after notification of the violation.

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WHAT ARE NITRATE AND NITRITE?

Nitrate and nitrite contamination of drinking water usually results from runoff of agricultural fertilizers, or from human or animal wastes, such as feedlots or faulty septic systems. Since agriculture is a common industry in Wyoming, monitoring for nitrate contamination is a priority for EPA Region 8.



Infants below the age of six months who drink water containing nitrate or nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome, which is indicated by blueness of the skin. Symptoms in infants can develop rapidly, with health deteriorating over a period of days. Adults and children older than six months can drink the tap water, but women who are pregnant or nursing or persons with specific health conditions may wish to consult their doctor.

WHAT HAPPENS IF I HAVE A HIGH NITRATE RESULT?

The Maximum Contaminant Level (MCL) for nitrate is 10 mg/L. If a sample result is greater than 10 mg/L:

- **Contact Tiffany at EPA Region 8 immediately at (303) 312-6521.**
- **Collect another nitrate sample within 24 hours** after you are notified of the high nitrate result. If the confirmation sample cannot be taken within 24 hours, you must issue a public notice and collect a sample as soon as possible, but no later than two weeks after notification.
- Results of the initial sample and the confirmation sample are used to determine if an MCL has been exceeded. If the confirmation sample is not collected, the MCL violation is confirmed.

If the MCL violation is confirmed, a public notice must be issued within 24 hours and continue as long as the violation exists. Also, the frequency of nitrate monitoring may be increased.

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PUBLIC NOTIFICATION

A transient public water system must issue a public notice if a maximum contaminant level (MCL) is exceeded, if a sample is not taken during the required monitoring period or if the results are not reported to EPA Region 8.

Public notices for acute total coliform and nitrate/nitrite MCL violations must be issued as soon as possible, but in no case later than 24 hours after being notified of the violation. Public notices for other violations must be issued as soon as practical, but no later than 30 days after being notified of the violation. If your system fails to monitor, you have up to one year after the violation to issue your public notice.

Public notices should be issued using one or more of the following methods in order to reach all persons served:

- Continuous posting in conspicuous places throughout the area served by the water system for as long as the violation exists
- Hand delivery to all consumers, repeated as directed by EPA Region 8.

Additional requirements for public notification of MCL violations may be established during consultation with EPA Region 8.

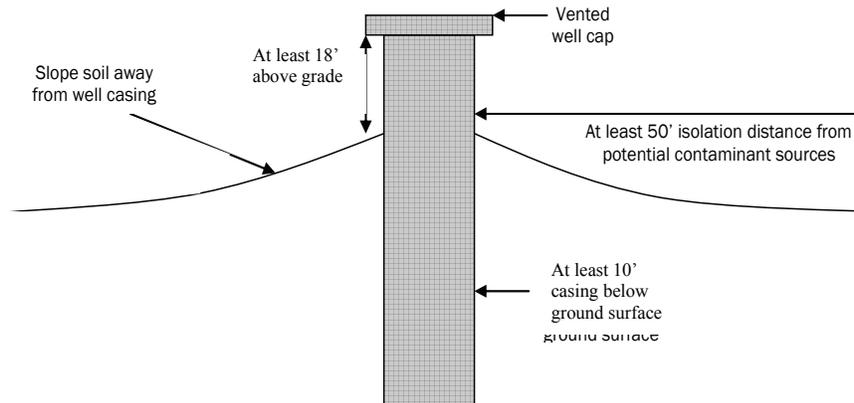
If you are required to issue a public notice for a violation, EPA Region 8 will send a sample public notice and verification form. Following issuance of the public notice, the verification form should be completed and signed and sent to EPA Region 8 along with a copy of the public notice.



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PREVENTING CONTAMINATION

- Maintain isolation distance of at least 50 feet between well and potential sources of contamination (i.e. septic tanks).
- Provide a secure and intact well cap with a screened vent (locking well cap is recommended)
- Extend well casing at least 18 inches above grade
- Slope soil surface away from the well to drain surface runoff away from well
- Well should have at least 10 feet of casing
- Inspect well routinely for problems such as:
 - cracked, corroded or damaged well casing
 - broken or missing well cap
 - settling and cracking of surface seals
- Protect well from potential vehicle damage
- Disinfect drinking water wells after repairs or modifications
- Have the well tested as directed for total coliform bacteria, nitrate and other constituents of concern
- Keep accurate records of any well maintenance, such as disinfection or sediment removal, that may require the use of chemicals in the well
- Hire a professional well driller for any new well construction, modification, or abandonment and closure



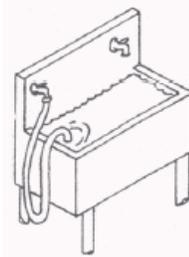
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PREVENTING CONTAMINATION CONTINUED

- Properly abandon unused wells (more information can be found at the following website:
<http://deq.state.wy.us/wqd/groundwater/index.asp>)
- Avoid storing, mixing or using pesticides, fertilizers, degreasers, fuels, and other pollutants near the well
- Do not dispose of wastes in wells
- Pump and inspect septic systems as often as recommended by your local health department
- Never dispose of hazardous materials in a septic system
- Maintain water treatment units as recommended by manufacturers (replace filter cartridges, regenerate salt, etc.)
- Remove plumbing dead-ends
- Eliminate cross-connections and install backflow prevention devices

Some potential cross-connections in a small water system are:

- ◇ Garden hose attached to an unprotected hose bib & immersed in a non-potable liquid
- ◇ Boilers (heating units)
- ◇ Many hand-held pesticide or herbicide applicators
- ◇ In-ground lawn irrigation systems Connections with unapproved, abandoned or non-potable wells
- ◇ Stock tanks with hoses



Example of a cross-connection:
hose in polluted water



Example of a backflow-prevention device: double-check valve assembly

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DETAIL PLANS AND SPECIFICATIONS

Public water systems are required to obtain approval by Wyoming DEQ before beginning construction or installation of a public water system or making a substantial change, such as adding a new well or new treatment process. A transient public water system interested in making a change to their system should call the Wyoming DEQ at 307-777-7783 .



Change of Ownership Notification

If the ownership of your transient public water system has changed or will change soon, please fill out this form and mail it to EPA Region 8 (please see addresses on back page).

PWSID Number: _____

County: _____

Previous System Name: _____

Previous Owner: _____

Previous Owner Address: _____

Previous Phone: _____

Previous Fax/E-mail: _____

New System Name: _____

New Owner: _____

New Owner Address: _____

New Phone: _____

New Fax/E-mail: _____

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WYOMING DEQ VS. EPA REGION 8

Wyoming is the only State that does not have primacy for the Safe Drinking Water Act. The responsibilities for ensuring that drinking water is safe in Wyoming are shared between the Wyoming Water Quality Division of Wyoming DEQ and the EPA Region 8. Public eating and drinking establishments are monitored by either the Wyoming Department of Agriculture Consumer Health Services Division or a local health department. If an infectious pathogen or poison is suspected in the water supply, the Wyoming Department of Health becomes involved.

Region 8 is responsible for the following activities:

- Monitoring/reporting of water testing
- Sanitary surveys
- Technical assistance to water system operators
- Laboratory certification
- Compliance determinations
- Formal enforcement
- Homeland security

The State of Wyoming is responsible for the following activities:

- Plan and specification review
- Construction/well drilling permits
- Water rights
- Operator certification
- Capacity development
- Source water and well head protection
- Operation of state laboratories
- Food and beverage inspections
- Financing drinking water projects
- General public health

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WYOMING DRINKING WATER UNIT

Region VIII, US EPA
Drinking Water Unit
Mail Code: 8P-W-DW
**1595 Wynkoop St.
Denver, CO 80202**

Hours: 7:30 am-5:00 pm M-F

Telephone Numbers

Business Hour Voice: 303-312-6312
Business Hour Voice: 1-800-227-8917
Fax: 303-312-6131
24-Hour Message: 303-312-6327



Visit us on the web!

<http://www.epa.gov/region8/water/dwhome/index.html>

Be sure to sign up for **Drinking Water Watch** at <http://www.epa.gov/region8/waterops/index.html>. Go to the “**Registration and Account Maintenance**” page and click on the following link “[Non-EPA users only - request a new account](#)”. After you enter your information you can sign up for e-mail reminders to remind you when your various contaminants for which you monitor are due. It’s a great tool to keep your system in compliance!!! If you have any questions, please contact Janet LaCombe at 303-312-6287.



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