

OWNERS AND OPERATORS HANDBOOK FOR SMALL COMMUNITY PUBLIC WATER SUPPLIES



This handbook is intended to help owners and operators of small community water supplies (subdivisions, mobile home parks, etc) understand state and federal laws and regulations that apply to their water supply. The handbook is easy to understand and you should read it even if you have owned or operated a supply for some time. New owners and operators should read the handbook so they are aware of the obligations they have.

Toward the end of the handbook is a list of commonly asked questions and commonly made mistakes.

If you wish to know about a certain item, check the table of contents and index to find the location.

PWS ID # MO- _____

TABLE OF CONTENTS

SECTION 1 – General regulatory requirements	Page 3
SECTION 2 – Monthly sampling for bacteria, general information	Page 4
SECTION 3 – Monthly sampling for bacteria, specific requirements	Page 6
SECTION 4 – Making sure your well is not the cause of bad samples	Page 10
SECTION 5 – What to do when a sample has bacteria in it	Page 12
SECTION 6 – Sample results	Page 14
SECTION 7 – What is a boil order	Page 15
SECTION 8 – Disinfection	Page 15
SECTION 9 – Change of owners or operators	Page 17
SECTION 10 – Non-compliance with regulations	Page 19
SECTION 11 – Certified operators	Page 24
SECTION 12 – Permits to dispense	Page 25
SECTION 13 – Inspections	Page 27
SECTION 14 – Correspondence from the department	Page 27
SECTION 15 – Well information form & contacts list	Page 27
SECTION 16 – Abandoned wells	Page 29
SECTION 17 – Responsibilities and duties of owners and operators	Page 29
SECTION 18 – Terrorism, Vandalism and Water System Security	Page 30
COMMONLY ASKED QUESTIONS	Page 31
COMMONLY MADE MISTAKES	Page 33
INDEX	Page 34

This handbook is a basic outline of information needed to help you meet regulatory requirements for your water system. The most important thing in this handbook is **CALL 417-891-4300** if you have any questions. This is the telephone number for the Department of Natural Resources Southwest Regional Office. Our mailing address is: Department of Natural Resources, Southwest Regional Office, 2040 W. Woodland, Springfield, MO 65807. **IF YOUR WATER SUPPLY IS IN THE OSAGE BEACH AREA:** We also have a small office located in Osage Beach, Missouri, but there is only one person that works in the public drinking water area and he is often working out of the office. The number there is **573-348-2442**.

If this handbook were all-inclusive and gave all necessary details about your water supply system it would be as thick as a dictionary, so **CALL US**. For convenience, the handbook is divided into sections of common problem areas.

SECTION 1 – General regulatory requirements

- A. State and federal law require that water supplies that serve water to the public meet certain standards. A public water supply is defined as any system that supplies water to at least fifteen (15) service connections or regularly serves an average of at least twenty-five (25) individuals daily at least sixty (60) days out of the year. This is done to protect the public from waterborne illnesses. The most important of these requirements is that sampling of the water be done. Normally, a sample for bacteria is required every month that you serve water to the public. If your system has more than one well and separate distribution systems, you may have to collect more than one sample each month. If you have a sample that has bacteria in it, you will be required to take more samples. You will be notified by telephone and by mail of sample results and the need to take more than the one sample each month. **THIS IS IMPORTANT.** Follow the instructions closely when you are told to collect more than one sample each month. Failure to follow instructions may mean you are in violation of state and federal regulations.
- B. You may either collect samples yourself or hire a contract operator to do the work. The following instructions are for owners that collect their own samples and use the state of Missouri laboratory. If you use a private laboratory you should follow their instructions. If you have a contract operator they should take care of all sampling. However, the owners of the system are still responsible and you should monitor the contract operator to ensure satisfactory results.
- C. You will, at various times throughout the year, get in the mail or by UPS water containers that are different from the monthly bacteria sample. These

are in addition to the monthly sample. These containers will have instructions included. If the instructions are not clear, call us. **DO NOT** delay taking these samples. These additional samples are not always mailed to the same address that you send your monthly routine samples so check the instructions carefully.

- D. Use the identification number you have been assigned on all correspondence and sampling forms. It is a seven digit number preceded by the letters MO. Be sure the seven digit number is on the carboned information form you fill out for the monthly sample. **IF YOU DO NOT PUT THE NUMBER ON THE FORM, YOU MAY NOT GET CREDIT FOR TAKING THE SAMPLE.** There are many public water supplies statewide and the state laboratory has thousands of samples to deal with.
- E. Failure to do sampling may result in legal action being taken against the owner and the operator of the public water supply. In the case of a small subdivision, each property owner may be liable as an owner of the system. See section 10 for more information on non-compliance with regulations.

SECTION 2 – Monthly sampling for bacteria, general information

- A. If your community public water supply has more than one well serving the system, you may need to collect and submit more than one water sample a month. For example, if there are 2 wells serving your system, and the wells are not actively interconnected (one well serves one portion of the subdivision or town, another well serves a different portion) you will need to collect 2 routine bacteriological water samples for the month. Water samples must be taken from a point in the distribution system that is representative for the area being sampled. If you want to collect samples directly from the well these should be in addition to the sample taken in the distribution.
- B. The sample you collect each month is referred to as the “routine” sample. It is important to follow proper procedures when collecting the monthly routine samples. Bacteria are everywhere and it is easy to contaminate the sample so establish a routine and follow it. It is best to have the same person collect the sample each month. If you do not have experience in collecting monthly samples **CALL US AND WE WILL SHOW YOU.**
- C. If it is late in the month and you suddenly realize you have not collected a sample for that month **CALL US. YOU CANNOT COLLECT TWO SAMPLES FOR THE NEXT MONTH AND GET CREDIT FOR THE PREVIOUS MONTH.** Complete all required parts of the carboned information form that is included in each box. Put your name and telephone

number so we can contact you if there is a problem. FAILURE TO PROVIDE REQUIRED INFORMATION WILL RESULT IN THE SAMPLE BEING DISCARDED AND NOT ANALYZED. If the form is not complete, the sample will not be accepted and you will have to collect another one.

D. PLEASE WRITE OR PRINT LEGIBLY. THE LABORATORY IS NOT FAMILIAR WITH YOUR HANDWRITING AND YOU MAY NOT GET CREDIT FOR THE SAMPLE IF THEY CANNOT READ A NAME OR NUMBER.

BACTERIOLOGICAL SAMPLING CARD

SEE REVERSE SIDE FOR INSTRUCTIONS

▲ LAB USE ONLY ▲		PUBLIC WATER SYSTEM NAME AND ADDRESS		BOTTLE NO.	
		SUPPLY NAME			
		STREET ADDRESS		MISSOURI DEPARTMENT OF HEALTH AND SENIOR SERVICES STATE PUBLIC HEALTH LABORATORY BACTERIOLOGICAL WATER ANALYSIS	
		CITY		CHLORINE RESIDUAL (AT COLLECTION POINT)	
		COUNTY		FREE _____ TOTAL _____ mg/l mg/l	
COLLECTION POINT		SAMPLE TYPE		SAMPLE DATE AND TIME	
		ROUTINE		MO DAY YR TIME	
		REPEAT			
		REPLACEMENT		COLLECTED BY	
		SPECIAL		DAYTIME PHONE NO.	
SAMPLE LOCATION ID		REPEAT LOCATION (CHECK ONE)		ANALYSIS RESULT	
		<input type="checkbox"/> ORIGINAL		LAB USE ONLY	
		<input type="checkbox"/> UP		<input type="checkbox"/> <1	
		<input type="checkbox"/> DOWN		<input type="checkbox"/> COLIFORM +	
PWS ID				<input type="checkbox"/> FC +	
				<input type="checkbox"/> FC -	
				<input type="checkbox"/> CWO	
				<input type="checkbox"/> OVER 30 HOURS RESULTS MAY NOT BE VALID	
				<input type="checkbox"/> TWO	
				<input type="checkbox"/> OVER 48 HOURS	

PLEASE RETURN BOTH COPIES

MO 580-0751 (8-01) LAB 10B

Routine:
Check this box for your monthly sample

Special: Check this box if you are submitting a sample that is not intended to be counted towards your monthly sample requirement. For instance, if you recently replaced your pump or a section of line and want to be sure that no contamination entered your system, submit a special sample. Therefore, if the sample is found to be present for bacteriological contamination, you will not receive a violation notice.

Repeat: Check this box if your routine sample is positive for coliform bacteria. For instance, if you sent in one routine monthly sample, and it was positive for coliform bacteria, you will need to submit 4 repeat samples. If you sent in more than one routine monthly sample, you will need to submit 3 repeat samples. A department representative will probably call you. However, you should always read the sample results letter for any instructions.

Replacement: Check this box if your sample is received by the lab over the time limit (30 hours) from the time you collected the sample, there was a lab accident, or there was incomplete information on the bacteriological sampling card. A department representative will more than likely contact you regarding submitting a replacement sample. You should always read the sample results letter you get for instructions.

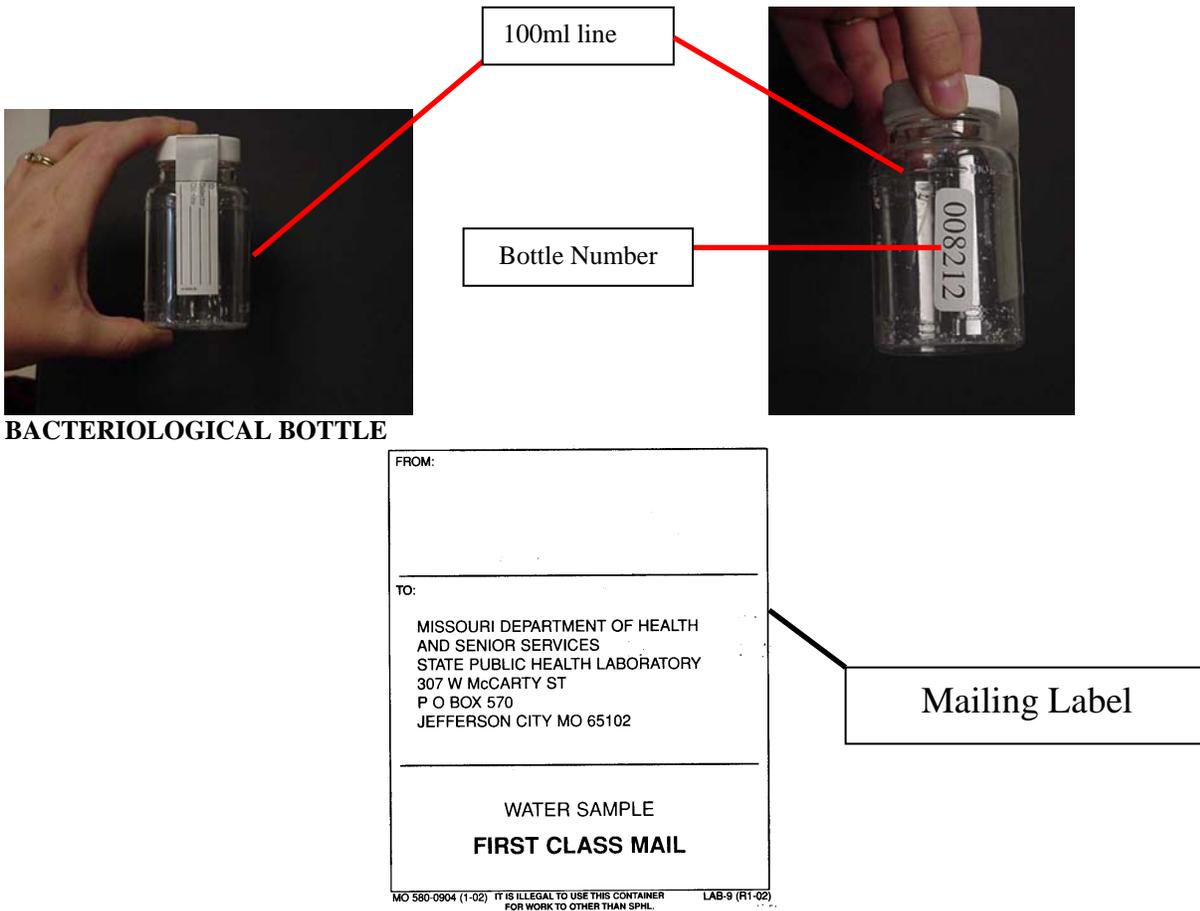
TIME: This is very important. Time is recorded in military time. For instance, if you collect a sample at 8 AM, you would write "0800", if you collect a sample at 3PM, you would write "1500." The lab will not accept samples that are over 30 hours in holding time. Below you will find a diagram that can assist you in determining the correct time to write on the sample card.

- E. After you collect the sample it must be to the laboratory within 30 hours or it will not be accepted. Therefore, if you mail the samples, do not collect on a Thursday, Friday or when holidays will interfere with delivery of the samples.

SECTION 3 – Monthly sampling for bacteria, specific requirements

You should have a faucet that has only cold water if possible. Mixing faucets can be used but increase the possibility of contamination. Outside faucets, such as frost-free hydrants, are undesirable because they are exposed to environmental contamination such as dust and insects. It is better to take the water sample before a water softener is used because a water softener is another place where contamination can occur. If there is any question about proper sampling places CALL US.

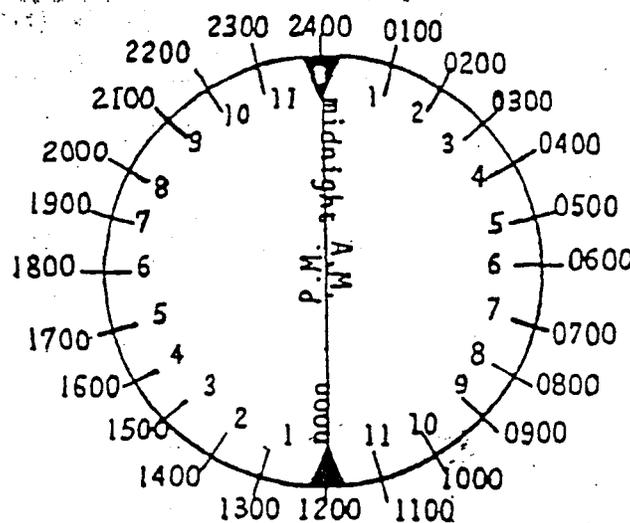
- A. Once you have selected the best possible sampling place, you should turn on the water and let it run for 2 or more minutes to flush the line. Next, you must disinfect the faucet so that bacteria that are on the faucet are not washed into the bottle when you collect the sample. Both chlorine bleach and heat may be used to disinfect the sample tap or faucet. If you use chlorine you must flush the faucet for 2 minutes after applying the chlorine so chlorine does not get into the bottle. **IMPORTANT: DO NOT ALLOW BLEACH TO SIT UNUSED IN THE LIGHT FOR A PROLONGED PERIOD OF TIME (over a week). THE DISINFECTION POWER OF THE BLEACH WILL WEAKEN OVER TIME AND THE BLEACH WILL BE USELESS IF LEFT OUT AND EXPOSED TO LIGHT.** There is a white powder in the bottles. It is supposed to be there, do not rinse it out. If you are not experienced in disinfecting faucets CALL US and we will give you a demonstration. USE CAUTION when handling the bottles. It is easy to contaminate a good water sample by careless handling. Do not take the lid off the bottle until you have a stream of water running and are ready to fill the bottle. Do not put the lid down, carefully hold it in your hand while filling the bottle. Fill the sample bottle up to or slightly above the 100ml mark on the neck of the bottle. Do not overtighten the lid. Be sure to include the sample information form in the box. Use the mailing label that is in the box. **DO NOT** place correspondence in the box with the bacteriological sample. Be sure to order more bottles before you run out. There is an orange order card in the large box of individual boxes, use it to order more bottles.



- B. If your sample has bacteria in it you will be called and notified. We may either have you collect more samples or have department staff collect more samples. If you collect the samples you have to mark them “repeat” instead of routine on the carboned information form. You will be given specific instructions when you are called. When you collect more than one sample at the same time, **FILL OUT A CARD FOR EACH BOTTLE AND EACH BOX**. If you are told that you have to collect 4 repeats then you have to have 4 bottles, 4 boxes, and 4 carboned information forms. Individual bottles are separated at the laboratory and if each bottle does not have its own carboned information form, it will be thrown out. After you collect the sample and fill out the carboned information form you have to get the sample to one of our laboratories. There is an address sticker in the box. You will mail to either the Jefferson City or Springfield laboratory.
- C. If the repeats are collected the month following the original coliform positive sample, you are **STILL RESPONSIBLE FOR COLLECTING THE ROUTINES** for that month. For instance, if you collected a routine sample on September 30 that was coliform positive, you will be required to collect 4 repeats in early October as well as 5 routine samples in the same month.
- D. You also may use certified private laboratories rather than use the state

laboratory. If you use a private laboratory **BE SURE THAT THE REPORT GETS MAILED TO THE DEPARTMENT**. Some private laboratories provide you a copy of the results but do not mail a copy to the Department of Natural Resources.

- E. Sometimes you will be called and told that you forgot to complete required information on the carboned information form and are required to send in another sample. This sample will be marked “replacement” instead of routine.
- F. There is a sample category called “special”. This is used only when the samples are not intended to be part of the sampling record for the supply. For example, an operator might collect a special sample after replacing a well pump to ensure that the water meets standards before using the water.
- G. **WHEN YOU GET A SAMPLE RESULTS LETTER CAREFULLY READ IT TO SEE IF THERE ARE INSTRUCTIONS.**



TIME: This is very important. Time is recorded in military time. For instance, if you collect a sample at 8 AM, you would write “0800”, if you collect a sample at 3PM, you would write “1500.” The lab will not accept samples that are over 30 hours in holding time. This diagram can assist you in determining the correct time to write on the sample card.

The following form outlines the method for collecting bacteriological samples:

METHOD FOR COLLECTING DRINKING WATER SAMPLES FOR BACTERIOLOGICAL ANALYSIS

This method is for collecting potable (drinking) water samples. Only samples collected in bottles prepared by the State Public Health Laboratories and collected in accordance with these instructions will be accepted for analysis. **DO NOT OPEN BOTTLES UNTIL ALL INSTRUCTIONS HAVE BEEN READ!**

The sample should be taken from a smooth-nosed cold water tap if possible. Avoid collecting samples from leaking taps that allow water to flow over the outside of the tap or from frost-proof hydrants (8) or hot-cold mixing faucets (9), since it is not practical to sterilize these fixtures.

- (1) Remove aeration devices and screens from faucets before sampling. Open the tap fully and let water run to waste for 2 or 3 minutes or until the service line has been thoroughly flushed.
- (2) Flame sterilize the tap from its nose to the valve, being certain that the open end has been well heated;

- OR -

Chemically disinfect the tap by thoroughly rinsing both the inside and outside of the tap with a 100 ppm solution of sodium hypochlorite (NaOCl). If tap cleanliness is questionable, provisions should be made to allow the solution to remain in contact with the tap for up to 15 minutes or to increase the strength of the solution to ensure adequate disinfection. Chemical disinfection should be used for plastic faucets or other sampling sites at which flame sterilization is not practical. (A 100 ppm sodium hypochlorite solution can be made by mixing 1/4 ounce (1.5 teaspoons) of household bleach with one gallon of clean water.)

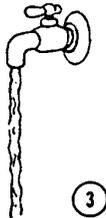
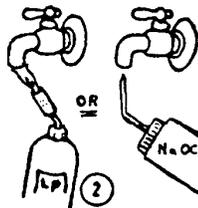
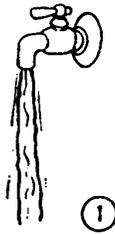
- (3) Flush the tap for an additional 2 or 3 minutes, then reduce to a gentle flow to permit filling the bottle without splashing.
- (4) **DO NOT RINSE THE SAMPLING BOTTLE and KEEP BOTTLE CLOSED UNTIL IT IS TO BE FILLED.** The bottles contain a chlorine neutralizer that is present in liquid or crystalline form. They are sterile and ready for use when shipped. A loose cap does not affect sterility.
- (5) Grasp the cap along the top edge and remove. **DO NOT TOUCH THE INSIDE OF THE CAP OR THE BOTTLE, AND DO NOT ATTEMPT TO CLEAN OR RINSE THE BOTTLE.**
- (6) Hold the bottle so that water entering it will not come in contact with your hands. Allow water to flow smoothly from the tap and fill the bottle, leaving 1/2 inch air space at the top (or fill to the black line present on some bottles). **SAMPLE WILL NOT BE TESTED IF THERE IS LESS THAN 1/2 INCH AIR SPACE IN THE BOTTLE.**
- (7) Replace cap on bottle and tighten securely.

SHIPPING INSTRUCTIONS

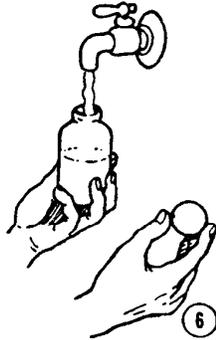
Due to the laboratory's mailing schedules, a water supply may receive bottles at the end of the week. **COLLECT SAMPLES ONLY ON MONDAY, TUESDAY, OR WEDNESDAY, EXCEPT IN AN EMERGENCY.** Samples should not be en route to the laboratory over a weekend or state holiday (New Year's Day, Martin Luther King Day, Lincoln's Birthday, Washington's Birthday, Truman's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, and Christmas.)

SHIP SAMPLES IMMEDIATELY AFTER COLLECTION. This is important because samples should be in transit no more than 24 hours for best analytical results. Check with your local postmaster for time of dispatch and collect the samples shortly before shipment to the laboratory. To ensure shortest shipping time, use first class postage. **SAMPLES RECEIVED IN THE LABORATORY MORE THAN 48 HOURS AFTER COLLECTION WILL NOT BE TESTED.**

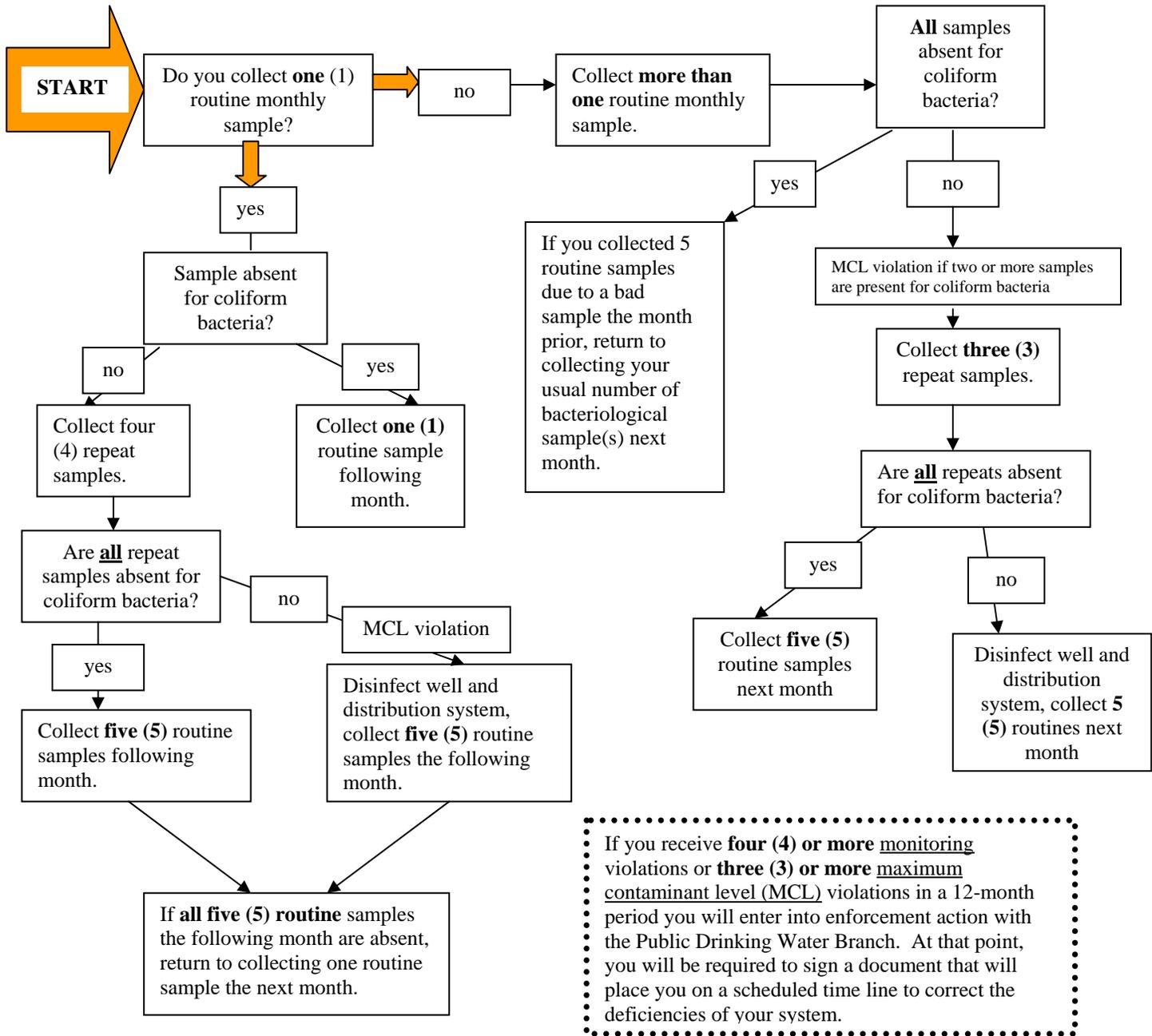
INFORMATION FORM: Fill out a separate form for each water sample submitted. Supply all information requested on the form and enclose with the sample container. Be certain that the number on the form matches the number on the bottle. **SAMPLES WITH INCOMPLETE COLLECTION INFORMATION WILL NOT BE TESTED.**



Bottle is clean and sterile
 Ready for sample
 (A loose cap does not affect sterility)



The following is a flow chart regarding the collection of bacteriological samples:



.....
 If you receive **four (4) or more monitoring** violations or **three (3) or more maximum** **contaminant level (MCL)** violations in a 12-month period you will enter into enforcement action with the Public Drinking Water Branch. At that point, you will be required to sign a document that will place you on a scheduled time line to correct the deficiencies of your system.

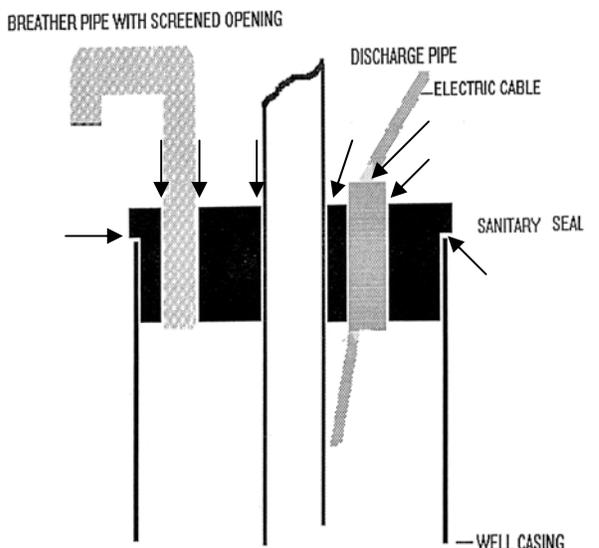
SECTION 4 – Making sure your well is not the cause of bad samples

A. Most groundwater in central Missouri meets regulatory standards. The most common failure is due to contamination that entered the well through the wellhead. The wellhead is the part of the wellpipe that extends above ground or floor level. Remember that a well is just a hole in the ground with a pipe in it and **the pipe extends down into the ground directly into the water** that you are pumping back to the surface to use. Therefore, if there is a way

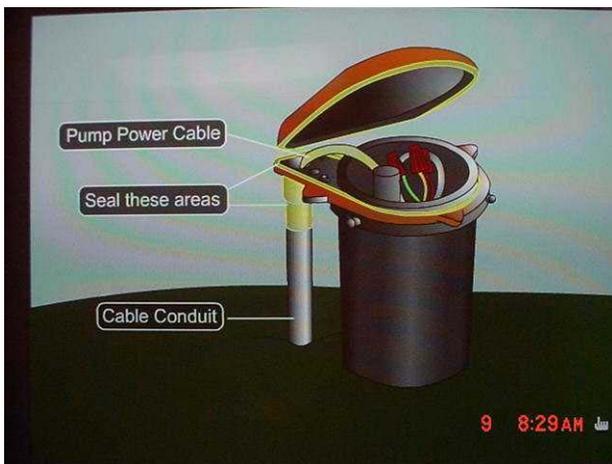
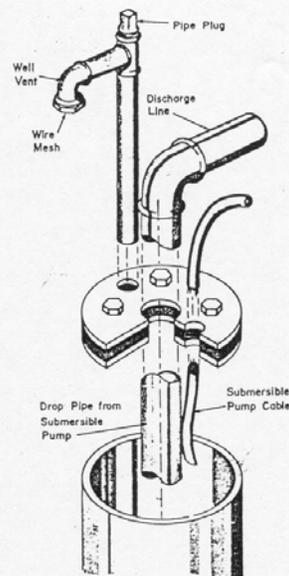
that environmental contamination such as dust, dirty water, insects, etc can get into your wellhead, it is a straight shot down into your water.

- B. Your first line of defense is to be sure the wellhead is sealed with caulk to prevent contamination from entering around the gasket, wiring, or piping. A downward pointing, screened vent should be the only opening in the wellhead. This vent is necessary to allow air to enter the well when water is being pumped out and to allow air to be expelled when the pump shuts off and underground water comes in to replace the water that was pumped out. These vents must be properly constructed and screened or contamination may enter along with air. It is not possible to tell by a casual examination if the wellhead is properly sealed. If the wellhead is located out of doors or is close to the ground, the possibility of contamination is increased. A department staff member can help you decide if improvements are needed.
- C. Sometimes wellheads are improperly constructed and that makes it more difficult to seal. A DNR inspector can examine your wellhead and tell you if improvements need to be made. The area around the wellhead, whether in a wellhouse or basement or wherever, should be kept clean so that contamination entering through the vent is minimized. The following document can assist you with determining key areas to seal on your wellhead. The arrows show sites where contamination can enter your well. **IF YOU HAVE WORK DONE ON YOUR WELL BE SURE TO DISINFECT IT OR YOU PROBABLY WILL GET BAD SAMPLES WHEN THE WELL IS PUT BACK INTO SERVICE.**

Well seal for submersible pump installation.



THIS WELL HEAD IS SHOWN WITH A NUMBER OF DEFECTS, THE VENT PIPE, SANITARY SEAL, POWER CABLE AND DISCHARGE PIPE ALL HAVE LEAKS.



The picture shown on the left is a pitless type well. It is structurally different than the well shown above due to the cap top. It is very important to insure that the cap on this type of well is securely fastened to guard against contamination entering the well.

SECTION 5 – What to do when a sample has bacteria in it

- A. Sometimes in spite of taking all of the precautions listed in sections above you may get a call from us telling you that you have bacteria in your water. You will then be given specific instructions that may include collection of repeat samples to confirm that the first routine sample was not a sampling error. If the repeat samples also have bacteria you may be instructed to disinfect the system. You can either do this yourself or have a well service company do it. If you decide to do it yourself you will be given

specific instructions on how to accomplish this. You will have to either flush the system or wait until the chlorine is gone through normal usage before you can take more samples.

B. WHENEVER YOU HAVE A SAMPLE WITH BACTERIA IN IT YOU ARE REQUIRED TO COLLECT 5 ROUTINE SAMPLES THE FOLLOWING MONTH.

A maximum contaminant level violations (MCL) is issued to a facility when two or more monthly bacteriological samples are present for coliform and/or e.coli bacteria.

If repeat samples have bacteria then it may be necessary to disinfect the system to kill the bacteria. Regional office staff will discuss the procedure with you. The following is guidance on how to properly disinfect your well and distribution system:

Disinfecting Small Drinking Water systems

The most commonly used method for disinfecting drinking water systems is by shock chlorination. Shock chlorination is the addition of chlorine to the water to obtain a concentration range of approximately 5 mg/L. The most commonly used form of chlorine is liquid household laundry bleach (unscented).

The amount of chlorine necessary to effectively disinfect a system is dependent on such factors as the amount of water in the system, physical layout of the system and level of contamination in the system. For systems contaminated with low concentrations of coliform bacteria without fecal bacteria, a concentration of chlorine of 5 mg/L can be used to effectively disinfect the system in most cases. The advantage of disinfecting at this concentration is the water can still be used for most domestic use (drinking, cooking, laundry and bathing). However, for systems contaminated with both coliform and fecal bacteria, a higher concentration of up to 50 mg/L may be used to disinfect the system. **At this higher concentration the water is not safe for domestic use.** The Missouri Department of Natural Resources - Southwest Regional Office should be contacted for assistance on determining the proper chlorine concentration and procedures to use for disinfection if you have fecal coliform in the water system. Unfortunately, the amount of chlorine that is necessary to kill all bacteria depends on several variables such as depth of well, type of aquifer, etc, so an exact formula cannot be given.

If you have unpressurized storage tanks, contact the regional office for assistance. Water systems which have only small volume pressure tanks for storage can use the following process to shock chlorinate their systems:

1. You should warn consumers that chlorine will be in their water. Introduce proper amounts of chlorine directly into the well(s). Chlorine may be put into the well by removing the vent tube and using a funnel to pour the bleach into the well. **THE CHLORINE MUST BE FLUSHED DOWN WITH WATER. THE BEST WAY IS TO CONNECT A WATER HOSE TO THE VENT TUBE AND LET IT**

RUN FOR 30 MINUTES OR MORE. THIS IS REQUIRED TO MIX THE CHLORINE WITH THE WATER IN THE WELL.

If you have a pitless system, remove the cap and look into the well. If you see wiring and pipes then you need to use a piece of pipe and funnel to bypass the wiring and pipes when you pour the bleach down the well. Remember to flush the bleach with water.

2. If possible, chlorine should be left in the well for at least 2 hours. The best way to do this may be to put the chlorine into the well late at night.
3. Let the chlorinated water work its way through the system for at least 24 hours.
4. Flush the chlorinated water from the system. If you have flush or fire hydrants, use them. If not, start by opening outside faucets and letting them run until the chlorine smell is gone. Everyone should run their indoor faucets until the chlorine odor is gone. If you do not have a chlorine test kit, a swimming pool kit may be used to check for chlorine. However, swimming pool test kits are not always sensitive enough to detect low levels of chlorine. See note below. After the chlorine is gone resampling can be done.
5. If you routinely add chlorine to your system by using a chlorine injection pump in the wellhouse then you may wish to increase the amount of chlorine you inject in addition to adding the chlorine to the well. Discuss this situation with regional office staff.

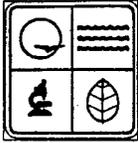
PLEASE NOTE:

Both household pet fish and bait fish are very sensitive to chlorine. Even at very low levels chlorine can kill them. You should not add water to fish tanks until the well, any storage tanks, all lines, and water softeners and heaters have been thoroughly flushed and all chlorine has been removed. A swimming pool test kit may not be sufficient to determine if the water is free of chlorine.

SECTION 6 – Sample Results

- A. When you take samples you will get a written confirmation of the results, good or bad. It may take some time before you get the written results but if the samples are bad you will be notified by telephone. When you get the written results, read the letter, there may be information or instructions you need. Keep the results in a file, you may need them in the future.

The following is a sample bacteriological report:



**Missouri Department Of Natural Resources
Public Drinking Water Program
P.O. Box 176
Jefferson City, MO 65102 (573)751-5331**



Public Water System Bacteriological Report

PWS Name :
Mail to :

PWS ID :

County :

Please notify us of any name and address changes

Date Collected :

Collector :

Sample Type :

Routine

Lab Sample ID :

Location Name:

Location ID:

Lab Results :

A

A=Coliform Absent. Sample(s) considered safe.



If the sample were present for coliform bacteria, the lab result would read 'P'.
SECTION 7 – What is a boil order?

- A. If a certain type of bacteria called E. coli is found in your water during the routine monthly sampling you may be required to have a boil water order at your supply. You will be informed if this happens and given information on what actions you must take. A boil water order means that the bacteria in the water make it unsafe to drink or use for human consumption in any way. This is a serious situation and you must follow all instructions given to you by the Department of Natural Resources personnel.

SECTION 8 – Disinfection

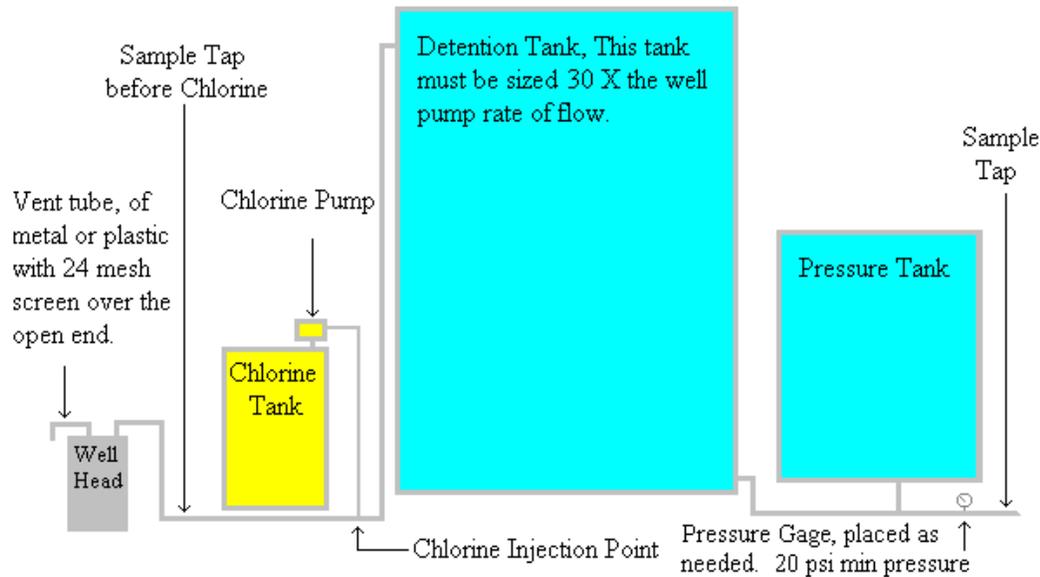
- A. Some water supplies disinfect the water pumped from the well before it is used. This is usually done for one or more reasons. One reason could be that the supply has had some bacteria in the water in the past and either voluntarily or was required to disinfect by the Department of Natural Resources or other state agencies. Sometimes an owner decides to disinfect as a routine safety precaution. Also, sometimes disinfection is done to improve taste and odor problems with the water.
- B. Disinfection is done by the use of a chlorine product to kill bacteria. This requires that chlorine be added to the water and then requires a time period

before the water is used to allow the chlorine to kill bacteria. This means that some storage volume is required to allow “contact time” for the chlorine to work. Department staff can assist you in determining if you have adequate contact time. Chlorine is usually added in the wellhouse with a small injection pump injecting a chlorine and water solution into the piping soon after the water comes out of the well. Systems that drop chlorine pellets into the well are not allowed because they cause corrosion to the well casing and it is not possible to accurately control the amount of chlorine in the water.

- C. If chlorine is added for only taste and odor problems then the department does not require a specific contact time.
- D. Any system that adds chlorine needs to monitor the chlorine level (residual) in the water at the point of use to ensure that an adequate level is being provided. Inexpensive test kits are available for testing the chlorine residual. Maintaining a chlorine residual is a method of providing assurance that enough chlorine is in the water to kill bacteria.



Pocket Colorimeter used for measuring chlorine residual. Shown at left is a CN-66 color disc/DPD pocket colorimeter. This instrument can be purchased from the Hach company by calling 1-800-227-4224. The test kit costs approximately \$38.95 plus shipping. The Hach chlorine tester is an example of what is available for analysis, however there are other varieties of chlorine testers available for purchase.



Example of a properly set up liquid chlorine injection system. This system is for a water supply that does not have a standpipe or other large non-pressurized storage system.

SECTION 9 – Change of Owners or Operators

- A. It is essential that the Department of Natural Resources have current information on who is the responsible person for the water system. If there is a change in owners, mailing addresses, or person who takes the water samples, call or write to the regional office. Do not put a note in the monthly sampling bottle box. The laboratory is a different department and notifying them does not notify the Department of Natural Resources. The following form must be completed when ownership changes for a facility that already has a permit to dispense:

MISSOURI DEPARTMENT OF NATURAL RESOURCES
 DIVISION OF ENVIRONMENTAL QUALITY
 PUBLIC DRINKING WATER PROGRAM
 P. O. BOX 176, JEFFERSON CITY, MO 65102
APPLICATION FOR TRANSFER OF OPERATING PERMIT

PWS ID NUMBER
MO -

NOTE: THE DEPARTMENT WILL PERFORM A PERMIT REVIEW TO ASSESS COMPLIANCE WITH THE CONTINUING OPERATING AUTHORITY REQUIREMENTS OF 10CSR60-3.020, THE APPLICABLE MAXIMUM CONTAMINANT LEVELS AND MONITORING REQUIREMENTS OF 10CSR60-1.010 THROUGH 4.110, AND THE MINIMUM POSITIVE PRESSURE REQUIREMENTS OF 10CSR60-1.030.

1.00-3.00 TO BE COMPLETED BY CURRENT PERMITEE (PRESENT OWNER/SELLER) OR THE DNR REGIONAL OFFICE. THE FOLLOWING ITEMS PRESENTLY APPLY TO THIS FACILITY:

1.00 FACILITY

NAME			TELEPHONE NUMBER
ADDRESS	CITY	STATE	ZIP CODE

2.00 CURRENT OWNER

NAME			TELEPHONE NUMBER
ADDRESS	CITY	STATE	ZIP CODE

3.00 OPERATING AUTHORITY (if same as owner, write same)

NAME			TELEPHONE NUMBER
ADDRESS	CITY	STATE	ZIP CODE

CONTINUED (OVER)

NOTE: THE DEPARTMENT WILL PERFORM A PERMIT REVIEW TO ASSESS COMPLIANCE WITH THE CONTINUING OPERATING AUTHORITY REQUIREMENTS OF 10CSR60-3.020, THE APPLICABLE MAXIMUM CONTAMINANT LEVELS AND MONITORING REQUIREMENTS OF 10CSR60-4.010 THROUGH 4.110, AND THE MINIMUM POSITIVE PRESSURE REQUIREMENTS OF 10CSR60-4.080(9). IF THE REVIEW SHOWS THE PROPOSED CONTINUING OPERATING AUTHORITY DOES NOT MEET THESE REQUIREMENTS, A COMPLIANCE AGREEMENT WILL BE NEGOTIATED. THE PERMIT TO DISPENSE WATER WILL BE DENIED UNTIL COMPLIANCE IS ACHIEVED.

THE FOLLOWING ITEMS (4.00-9.00) WILL APPLY AFTER COMPLETION OF TRANSFER (SALE) AND ARE TO BE COMPLETED BY THE APPLICANT FOR TRANSFER OF OPERATING PERMIT (BUYER) OR AUTHORIZED AGENT.

6.00 FACILITY			
NAME		PWS ID NUMBER	TELEPHONE NUMBER
ADDRESS	CITY	STATE	ZIP CODE
7.00 FUTURE OWNER			
NAME		TELEPHONE NUMBER	
ADDRESS	CITY	STATE	ZIP CODE
8.00 OPERATING AUTHORITY (If same as owner, write same)			
NAME		TELEPHONE NUMBER	
ADDRESS	CITY	STATE	ZIP CODE
9.00 FACILITY CONTACT			
NAME		TELEPHONE NUMBER	
TITLE			
10.00 ADDITIONAL INFORMATION			
ANTICIPATED EFFECTIVE DATE OF TRANSFER IN OWNERSHIP			
ARE ANY CHANGES IN QUANTITY OR QUALITY OF WATER PRODUCED BY THIS FACILITY PLANNED OR ANTICIPATED?			
<input type="checkbox"/> YES <input type="checkbox"/> NO IF YES, EXPLAIN (IF ADDITIONAL SPACE IS REQUIRED, ATTACH SHEET)			
11.00 SIGNATURE			
I CERTIFY THAT I AM FAMILIAR WITH THE INFORMATION GIVEN ABOVE, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF SUCH INFORMATION IS TRUE, COMPLETE AND ACCURATE, AND UPON OWNERSHIP TRANSFER, I AGREE TO ABIDE BY THE MISSOURI SAFE DRINKING WATER LAW SECTIONS 640.100 - 640.140, RSMo AND ALL RULES AND REGULATIONS UNDER THE MISSOURI SAFE DRINKING WATER LAW.			
A. NAME (TYPE OR PRINT)		B. PHONE NUMBER (area code & number)	
C. SIGNATURE		D. DATE SIGNED	

SECTION 10 – Non-compliance with regulations

A. Enforcement of the public drinking water standards is required by state and federal law and regulations. If you have violations of the regulations you may be required to sign a document agreeing to correct any observed deficiencies. If you are notified that you are in violation of any regulations please contact the Department of Natural Resources and one of our staff will discuss the violation and help you understand what you are required to do.

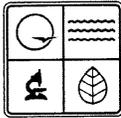


.....
: If you receive **four (4) or more monitoring**
: violations or **three (3) or more maximum**
: **contaminant level (MCL)** violations in a 12-month
: period you will enter into enforcement action with
: the Public Drinking Water Branch. At that point,
: you will be required to sign a document that will
: place you on a scheduled time line to correct the
: deficiencies of your system.
:

A maximum contaminant level violation (MCL) is issued to a facility when two or more monthly bacteriological samples are present for coliform and/or e.coli bacteria.

A monitoring violation is issued when you fail to collect a required monthly sample.

The following forms are examples of monitoring and maximum contaminant level violations for bacteriological quality:



Missouri Department of Natural Resources
 Water Protection and Soil Conservation Division
 Public Drinking Water Program
 P.O. Box 176
 Jefferson City, MO 65102-0176



**Notice of Noncompliance
 Public Notice Required**

Month
 Violation
 Occurred

Date of Report:
 PWS Name:
 Mail to:

PWS ID:

County:

Notice of
 Violation
 (NOV) for
 failing to send
 in a monthly
 bacteriological
 sample.

The following is a summary of the bacteriological analysis of water samples submitted for the period ending 5/31/2002

Sample Type	Number Required	Number Taken
Routine	1	0

Violation Type:

MONITORING (TCR), ROUTINE MAJOR

This is a violation of 10 CSR 60-4.020(1). No routine drinking water samples were collected for the testing of total coliform bacteria.

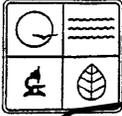
Required Actions:

1. The enclosures give instructions on how to perform public notice and a copy of the public notice itself to distribute, post and provide to any media.
2. Fill in the appropriate information requested on the certification page and sign where indicated.
3. Make copies of the certification and public notice (as seen by the public) for your files.
4. Send the completed certification and a copy of the public notice (as seen by the public) back to DNR at the address given.

For assistance, contact the JEFFERSON CITY REG OFFICE - JCRO at 573-751-2729 or the Public Drinking Water Program at (573) 751-5331.

23VIO

When issued an NOV for a monitoring or a maximum contaminant level violation for bacteriological quality, public notice must be made. After public notice has been posted, you are required to submit the public notice form and the certification of public notice to the Public Drinking Water Branch at the address listed on the form.



PUBLIC NOTICE-CUSTOMERS OF

**FAILURE TO MEET MICROBIOLOGICAL MONITORING REQUIREMENTS
FOR DRINKING WATER**

Public
Notice

**Este informe contiene información muy importante sobre su agua potable.
Tradúzcalo o hable con alguien que lo entienda bien.**

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During _____ did not test for total coliform bacteria and therefore cannot be sure of the quality of our drinking water during that time.

This is a violation of Missouri Public Drinking Water Regulations. The Missouri Department of Natural Resources requires that drinking water from this supply be tested for this type of bacteria by submitting at least one valid sample per month. Bacteriologically-contaminated water can cause a variety of disease symptoms. It is important that drinking water be routinely tested to ensure the safety of those who consume it.

Provide explanation of cause of monitoring failure:

For further information contact:

(Name and business address of system contact person)

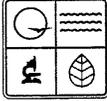
(phone #)

You may also contact the department at
Public Drinking Water Program at (573) 751-5331
or JEFFERSON CITY REG OFFICE - JCRO at 573-751-2729.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

23PN

Notice of Noncompliance for exceeding maximum contaminant level for bacteriological quality:



Missouri Department of Natural Resources
Water Protection and Soil Conservation Division
Public Drinking Water Program
P.O. Box 176
Jefferson City, MO 65102-0176



Notice of Noncompliance
Public Notice Required

Date of Report:
PWS Name:
Mail to:

PWS ID:
County:

Please notify us of any name and address changes.

The following is a summary of the bacteriological analysis of water samples submitted for the period ending

Sample Type	No. TC Positive	No. FC or EC Positive
Routine/Repeat	4	

Violation Type:
MCL (TCR), MONTHLY
This is a violation of 10 CSR 60-4.020(7)(A). Two or more samples tested positive for total coliform bacteria.

Required Actions:

1. The enclosures give instructions on how to perform public notice and a copy of the public notice itself to distribute, post and provide to any media.
2. Fill in the appropriate information requested on the certification page and sign where indicated.
3. Make copies of the certification and public notice (as seen by the public) for your files.
4. Send the completed certification and a copy of the public notice (as seen by the public) back to DNR at the address given.

For assistance, contact the at
or the Public Drinking Water Program at (573) 751-5331.

22VIO

Month violation occurred

Notice of Noncompliance for exceeding Maximum Contaminant Level for bacteriological

Public notice and the public notice certification form must be made and sent in to the Public Drinking Water Branch for maximum contaminant level (MCL) violations. The public notice and certification forms for an MCL violation are similar to those used for a monitoring violation.

SECTION 11 – Certified operators

- A. Community public water supplies are required to have a certified operator. An operator is the person who is in responsible charge of the water system. If you do not have a certified operator you can either have someone from your organization become certified or hire a contract operator.
- B. If you have a certificate, you must attend training to keep your certificate current. Check with the department to make sure you understand the

requirements to maintain your certificate.

SECTION 12 – Permits to dispense

- A. Each public water supply is required by state law to have a permit to dispense water to the public. There is no fee associated with the permit. This permit is similar to having a license for your automobile. Certain requirements must be met before a permit to dispense can be issued. One of the most important requirements is that the well be constructed according to standards. The water that is used by the public also has to meet all applicable standards according to the sampling program discussed earlier. If you do not have a permit to dispense you will be given an application to apply for one (see below).

- B. If the well you are using was not constructed to be used as a community supply, department staff will evaluate the records to determine if the supply can be “grandparented” and have a permit issued on the basis of the supply having been in use before the regulations were passed.

The following form must be completed and submitted along with any information you have concerning your water system, such as a well log, within thirty (30) days of becoming a public water supply. It is very important to find out any and all information concerning your well (date drilled, well driller, total depth, casing depth). The Public Drinking Water Branch will evaluate the compliance status of your water system and a permit to dispense will be issued after all permitting criteria are met.



Mel Gamuham, Governor • Stephen M. Mahfood, Director

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY

Jefferson City Regional Office

210 Hoover Road P.O. Box 176 Jefferson City, MO 65102-0176

(573)751-2729

FAX (573)751-0014

APPLICATION FOR PERMIT TO DISPENSE WATER COMMUNITY WATER SUPPLY

Name of Supply _____ PWS ID# _____

Address _____ City _____

County _____ Zip _____ Phone () _____

Person to Contact _____

Address _____ Phone () _____

Well information: _____ Storage: _____

Total Depth _____ feet Water Tower _____ gallons

Casing Depth _____ feet Pressure Tank(s) _____ gallons

Pump Capacity _____ gallons per minute Concrete Reservoir _____ gallons

Certification Number _____ Steel Tank(s) _____ gallons

Date Constructed** _____ Other: _____ gallons

*Note- If more than one well is being used, please write on the back. TOTAL: _____ gallons

**If an exact date of construction is not known, but the well is known to exist prior to July 1987, please indicate the approximate date on the application. A CONSTRUCTION DATE MUST BE GIVEN BEFORE THE APPLICATION WILL BE PROCESSED.

Average number of persons per day using water system: _____

Number of connections/hookups: _____

Water treatment (please describe): _____

I hereby request a permit to dispense water to the customers of:

Signature of Owner/Operator: _____

Title: _____

Date: _____



SECTION 13 – Inspections

- A. At least every few years a department inspector will visit your supply and make a visual inspection of your water system. If there are improvements that need to be made to ensure the safety of the water system, you will be notified at the time of the inspection and will receive a letter confirming the need for improvements.
- B. Also, during the inspection, records will be examined and you will be informed of any need for improvements.
- C. In addition to the routine visits mentioned in A, a special inspection may be scheduled if your water sampling results in unsatisfactory results.

SECTION 14 – Correspondence from the department

- A. In addition to the sampling results mentioned in SECTION 6 ‘A’ above, you will periodically receive correspondence from the department on a variety of issues. This correspondence is to inform you of changing requirements, sampling schedules, and other information you need to know as an owner or operator. PLEASE OPEN AND READ the correspondence. If you have any questions call us. Most correspondence should be filed and permanently retained.

SECTION 15 – Well information and contingency contact plan form

- A. We suggest that you use this page to record information about your well, to record maintenance done on the well, and to keep the name and telephone number of well maintenance services you have used.
- B. All community supplies are required to have an official Emergency Operations Plan (EOP). Please contact the Southwest Regional Office to obtain the appropriate forms your supply will need to complete in order to meet the requirement.

WELL INFORMATION AND CONTINGENCY CONTACT PLAN

The following information may be useful if it is necessary to perform maintenance on the well or water storage system. This is especially true if your usual well maintenance business happened to be unavailable or if the owner or manager of the water supply was unavailable. Having this information readily available may make the difference between being back into operation in a short time or having to shut down the system for several days. If you get a new operator this information will be valuable to them.

Names and phone numbers of three (3) facility personnel, such as owner, members of the homeowners association, water board, or other governing body, that have the authority to implement repair practices in an emergency situation, such as a pump outage, well and distribution system shock chlorination, water line break or leak, etc:

- 1 _____
- 2 _____
- 3 _____

Name and telephone of well service business. List second choice if possible.

Location of well. Sometimes wells are located in strange places, such as in the basement, under a paved driveway, etc. Give as much detail as possible.

Name and telephone of plumber or other necessary service personnel.

List any available information on well such as total depth of well, date pump and drop pipe was installed, size of pump, date well was drilled, depth of casing, name of company that originally drilled well, etc.

If there is any other emergency information, such as a connection with another supply that can be activated in case of need, give details here such as contact person and telephone.

SECTION 16 – Abandoned wells

If there is a well that is not in use and there are no plans to use it in the near future, then this is referred to as an abandoned well. A well may be abandoned for a variety of reasons, such as low production and poor water quality. Abandoned wells usually deteriorate because of lack of maintenance and pose a hazard to other wells in use in the area. When the casing rusts and the top of the well is not maintained, contamination can enter the well and cause wells still in use to be ruined. Department regulations require that a well that has not been in use for two years be abandoned according to guidelines established by the Geological Survey. For information on how to properly close an abandoned well so that it does not pose a threat to the groundwater and other wells, contact the regional office.

SECTION 17 – Responsibilities and duties of owners and operators

The most important duty of an owner and operator is to ensure that consumers have water that is safe to drink and use. This is done by ensuring the water meets all regulatory requirements. The following list is some of the specific job duties. In some water supplies, some of these duties may be delegated by the chief operator to other responsible persons in the organization. It is desirable that a list of job duties be established in writing so that all management officials and all consumers are aware of the requirements. In small systems, this list can be an important public relations tool in that it makes consumers aware of the extensive duties that are performed by operators. The list below should be added to as necessary for each specific water system.

1. Collect all required samples.
2. In chlorinated systems, maintain the chlorination equipment and monitor chlorine levels.
3. Notify consumers of conditions that impact the water system, including regulatory requirements for non-compliance.
4. Prepare and distribute consumer confidence report.
5. Supervise all repair and maintenance activities.
6. Maintain required certificate level.
7. Keep other management persons informed of status of water system.
8. Keep informed about new regulatory requirements.
9. Maintain records pertaining to water system.
10. Perform any necessary routine maintenance on the system.
11. Monitor water use and loss.
12. Keep informed of financial condition of water system.

Every owner and operator is responsible for ensuring that the water system is safe and reliable. One of the most important things that can be done is to

frequently do a brief visual inspection of the physical facilities. A daily inspection is recommended in all cases. If there is any type of treatment then a daily inspection would be needed to ensure that equipment is in working order.

The inspection should only take a few minutes and should be done by a person that is aware of how the system SHOULD be working. A daily routine could include the following items.

1. Visual check for signs of damage or vandalism, water leaks, burned wiring, leaking roof, etc.
2. Check the well vent to make sure the screen is intact. Check the wellhead to see if caulk or other material makes a tight seal.
3. If you have ultraviolet treatment be sure bulbs are working, any alarm lights are ok, and follow any recommended manufacturers checklist.
4. If you have chlorine disinfection, be sure the chlorine pump works when the well pump comes on. Check the level in the solution tank. Check for obvious leaks or corrosion around the chlorine pump, tank, and piping.
5. If there is a well meter, read and record water usage. This information may help determine the existence of an underground water line leak.
6. **EITHER FIX ANY PROBLEMS FOUND OR REPORT THEM TO A RESPONSIBLE PERSON.**

SECTION 18 – Terrorism, Vandalism and Water System Security

It is unlikely that foreign terrorists will target small community public water systems in southwest Missouri. However, homegrown copycat terrorists, vandals, disgruntled customers or employees, or random thrill seekers can easily do significant damage and cause a serious health hazard for systems that do not take basic precautions. The following is a list of minimum precautions that should be taken by all water system owners, operators, and responsible persons involved in the administration of the supply.

1. Wells and storage tanks should not be easily accessible. All wellheads should be inside a building. Buildings should be sturdy and strong doors with good locks should be installed. Keys to the locks should be limited to persons that have a need to enter the buildings and should be changed anytime personnel changes indicate that security could be compromised. Storage tanks should be protected by high chain link fences. If there is reason to believe that a structure is particularly vulnerable, motion detectors and alarm systems can be installed. Persons in the immediate vicinity of the wells and storage should be enlisted to have a neighborhood watch and be aware of necessary steps to be taken when suspicious activity is noticed.
2. All wells and storage tanks should be checked as frequently as is practical,

- daily would be ideal. These checks would only take a few minutes and would ensure that locks are secure and that no obvious tampering has occurred.
3. All consumers should be made aware that any noticed change in the water quality such as taste, color, or odor should cause them to not use the water until they contact responsible persons in charge of the water supply.
 4. Responsible officials of the water supply should have a written plan of action that outlines immediate steps that will be taken if there is a threat to the integrity of the water system. Notification of consumers is the most critical. A method must be devised that will notify consumers that water should not be used as soon as a danger has been verified.
 5. Determining what action to take to correct a verified terrorist attack on the system should be done only after consultation with the Department of Natural Resources. For example, if it was found that someone introduced a foreign substance into the water system, flushing of the system should be done only after it is determined that it would be safe to the public to flush the material onto the ground.

Commonly asked Questions:

- Q. Why do I have to do all this sampling and other stuff?
- A. Federal and state laws were passed to require that anyone who owns or operates a water source that serves water to the public meet certain minimum requirements. One of the most important requirements is that sampling be done to ensure that water served to the public meets minimum standards.
- Q. Has anyone ever benefited from all this expensive sampling?
- A. Yes. The awareness that water can be a carrier of disease was a great step toward improving public health. Waterborne illness is less common than a century ago but there are still major incidents such as Milwaukee, Wisconsin. Locally, there are still cases where water is found to be contaminated with E. coli, the class of bacteria that makes the news when contaminated food or water causes people to get sick and sometimes die. Chemical contamination is increasing, as evidenced by a major supply in Camden county that had to abandon a well because of contamination from a factory.
- Q. Why do you say I own a public water supply? We are just a small subdivision.
- A. Laws and regulations define a public water supply in several ways: If you have 15 or more living units (mobile homes, apartments, homes, etc) and/or 25 or more persons using the water on a year round basis then you are a public water supply. Also, if you serve 25 or more of the same persons over 6 months of the year (factories, schools, etc) you are a public water supply. And, if you have 15 or more service connections (motel units, etc), or serve

water (or use water in food preparation) to 25 or more individuals 60 or more days each year. By these definitions you see that even motels and restaurants that are open only during the summer are a public water supply.

Q. What do you mean when you say I am an “operator”?

A. An owner is the person(s) who legally owns the water system. This could be a homeowners association or an individual, or a city government. If you are the person that is responsible for taking care of the water supply, then you are referred to as the operator. An operator takes samples, is responsible for repairs, and is generally the person in charge of the water system. For a mobile home park, for example, the owner and operator may be the same person.

Q. How can I avoid being a public water supply?

A. There are two ways. One is to serve so few people that you do not meet the definitions listed above. The other is to abandon your well and connect the system to a city or water district and each consumer would have a meter and the city or water district would have the responsibility for sampling and other requirements.

Q. What happens if I refuse to take part in the program?

A. The federal Environmental Protection Agency and the state of Missouri Attorney General have the statutory authority to take legal action against owners and operators that do not comply with requirements.

Q. What does this cost me?

A. There is an annual laboratory fee. Most small systems will be charged \$200. There is also an annual primacy fee of up to \$2 per home. You have to pay postage costs to mail in monthly samples and may have to pay postage on other samples if you miss the prearranged pickup times. Also, the water system has to meet certain physical standards, so if your system is old and deteriorated, you may have to make improvements.

Q. This whole thing is new to me, is there anyone that can help me understand it all?

A. Yes. Department of Natural Resources staff can assist you in understanding the requirements and guide you through the regulatory process.

Q. I am going to sell my mobile home park. Is there anything I should do?

A. Yes. First, inform the Department of Natural Resources. You should inform the new owner that there are obligations concerning the water supply. A change of ownership form should be sent to the department. DO NOT send a note with one of your routine sample bottles.

Q. I am no longer associated with the water system. Why do I keep getting letters?

A. You must inform this office of any changes. It does not do any good to send a note with the monthly sample.

Q. What do I do with all this correspondence I receive from the department?

A. First, open and carefully read everything. This may be information about

your sampling schedule, about new requirements, about your certification, and other things you should know. Then establish a permanent file and keep it.

COMMONLY MADE MISTAKES

1. Getting in a hurry when taking the monthly sample and not carefully disinfecting and flushing the sample tap.
2. Not filling out carboned sample form correctly.
3. Collecting a sample on Thursday, Friday, a holiday, or just before a holiday.
4. Thinking that because a special sample was collected that the routine sample for the month can be skipped.
5. Not carefully reading all correspondence from the department.
6. Not collecting special samples quickly and missing the scheduled UPS pickup time.
7. Not routinely and frequently checking the well, pressure tanks, and other parts of the system to be sure they are in good working order.
8. For chlorinated or UV systems, not performing routine maintenance on a daily or as needed basis.
9. Collecting repeat samples does not mean that you do not have to collect routine samples for that month. For instance, if you collected a routine sample on September 30 that was coliform positive, you will be required to collect 4 repeats in early October as well as 5 routine samples.
10. Not THOROUGHLY disinfecting a well after you replace the well pump. You should also take a special sample before the well is returned to service.