Missouri Department of Health and Senior Services  
P.O. Box 570, Jefferson City, MO 65102-0570 Phone: 573-751-6400 FAX: 573-751-6010  
RELAY MISSOURI for Hearing and Speech Impaired 1-800-735-2966 VOICE 1-800-735-2466  
  
Peter Lyskowski Jeremiah W. (Jay) Nixon  
Acting Director Governor  
  
   
  
   
  
   
  
Missouri Public Water Systems  
  
November 10, 2015  
  
Dear Public Water System Owners/Opcerators:  
  
The Missouri State Public Health Laboratory (MSPHL) is in the process of implementing a new  
Laboratory Information Management System (LIMS) in its drinking water bacteriology testing  
laboratory. The OpenELIS (OE) LIMS will provide the laboratory with improved sample management  
capability, improved data integrity and reduced potential for human data entry error. In addition, the  
system will provide improved reporting capabilities, including direct electronic data exchange with the  
Missouri Department of Natural Resources’ (MDNR) Safe Drinking Water Information System  
(SDWIS). SDWIS is the computer system MDNR uses to store regulatory water testing data and report  
testing results to you and the U.S. Environmental Protection Agency. In addition, the new OE LIMS will  
provide a web portal that MSPHL clients can use to access their own test results in real time.  
  
As the MSPHL implements this new computer system, several changes will be made in the way you  
collect and submit water samples for testing. This letter and information packet will provide you with  
information to help educate you on these changes.  
  
NEW SAMPLE BOTTLES:  
  
Beginning in August 2015, the MSPHL began using a larger sample bottle for water bacterial testing.  
This bottle has a shrink wrap seal and two lines to indicate the proper sample volume. Please read the  
attached “SAMPLE COLLECTION INSTRUCTIONS?” for details on how to use these new bottles.  
Sample volume MUST be within the two lines on the bottle (100 — 120 mL) to be acceptable for  
testing. You may continue to use your old bottles until the MSPHL can ship you new ones. Once you  
have received the new bottles, please discard or recycle the old bottles.  
  
NEW SAMPLE INFORMATION FORMS:  
  
The traditional sample information “card” that has been used for more than twenty years Is being  
replaced by the Environmental Sample Collection Form. An example form is attached. Please read the  
attached instructions for information on properly completing the new form.  
  
Changes to the form include the following:  
  
1. Form size is expanded to a single 8 4” x 11” sheet of paper. The form is no longer in a triplicate  
carbon copy format. You may choose to photocopy for your records if you prefer. Note: MDNR  
does not require a public water system to retain copies of sample collection forms: however, you  
might utilize them for system inspections.  
  
2. The form is printed by the OE LIMS and will be pre-populated with your Public Water Supply  
ID number, PWS name, address and county. Forms should not be shared with other supplies.  
  
www.health.mo.gov  
  
Healthy Missourians for life.  
The Missouri Department of Health and Senior Services will be the leader in promoting, protecting and partnering for health.  
  
AN EQUAL OPPORTUNITY / AFFIRMATIVE ACTION EMPLOYER: Services provided on a nondiscriminatory basis.

Contract operators will be provided with forms for all the supplies they operate. Blank forms will  
be available for MDNR Regional Office staff use.  
  
3. ‘The form requires all requested information to be printed by the collector. There are no longer  
check boxes for Sample Type or Repeat Location.  
  
4. Facility ID, Sample Collection Point ID and Location for the sampling site MUST be  
provided by the collector. This information is available from your MDNR approved PWS  
sampling plan. MDNR will be providing all public water systems with a current copy of their  
approved sampling plan. This information is required by SD WIS and is used by MDNR to  
ensure regulatory compliance requirements have been met. Failure to complete this information  
on the sample collection form may result in a non-compliance report from MDNR.  
  
5. A Collector Signature line has been added. The sample collector must sign the form to attest the  
information provided is accurate to the best of their knowledge.  
  
The MSPHL will begin shipping the new forms to public water systems in late November or early  
December. Please begin using the new forms December 16, 2015. Discard all the old forms (“cards”)  
at that time.  
  
NEW SAMPLE INSTRUCTIONS:  
  
Sample instructions have becn revised to include changes to the bottle and sampling form. The  
instructions include detailed information on how to collect the sample using the new bottle, how to  
complete the new sample collection form, how to best ship samples to the MSPHL using the free  
MSPHL courier system, and how to register for the new MSPHL web portal. A copy of these  
instructions is attached.  
  
NEW WEB PORTAL FOR RESULTS REPORTS  
  
The OE LIMS provides a web portal that may be used by systems to view and print their test result  
reports, check status of samples, download sample information into Excel, and receive automated emails  
when samples are received at the laboratory, and when sample results are ready to be viewed. For  
information on how to gain access to this portal, please contact Shondra Johnson, LIMS Administrator  
  
at Shondra.Johnson@health.mo.gov or at 573-751-3334.  
  
IMPLEMENTATION DATES:  
  
The MSPHL intends to implement the OpenELIS LIMS on December 1, 2015. There will be a two  
week testing period in which laboratory staff will run the new LIMS in conjunction with our current  
manual, paper-based system to ensure the OE LIMS is operating properly. You may continue to submit  
samples as you currently do, using the old sample information card, throughout this time.  
  
On December 16, 2015, the MSPHL plans to “go-live” with the new OE LIMS. Samples submitted  
after that date should be submitted on the new Environmental Sample Collection Form. At that time, the  
MSPHL Test Results Web Portal will also be available to those systems that have been granted access.  
  
The MSPHL and MDNR understand that there will be a lot of changes to a system that has been in place  
for many years. The MSPHL is excited about the added benefits from this new system, and we ask for  
your patience as we implement the OpenELIS LIMS at the Missouri State Public Health Laboratory.

If you have any questions, please contact the MSPHL Environmental Bacteriology Unit at 573-75 1-  
  
3334. You may also contact your MDNR Regional Office for additional information on sample  
collection.  
  
Once again, thank you for your patience and understanding as we implement these changes.  
  
Pratik Ro Vos  
  
Patrick R. Shannon  
Manager, Environmental Bacteriology Unit  
  
Missouri Department of Health and Senior Services  
State Public Health Laboratory  
  
101 North Chestnut St.  
  
P.O. Box 570  
  
Jefferson City, MO 65102  
  
Phone: 573-751-3334  
  
Email: Pat.Shannon@health.mo.gov  
Web: www.health.mo.gov/Lab

Order #: 984 MANET REPORT TO: BILL TO:  
  
Pages in Order: 1 of 1 65 MIAN 82 MNO  
  
Containers in Order: 1 ADRIAN MO DEPARTMENT OF NATURAL RESOURCES  
16 E 5TH ST 1101 RIVERSIDE DRIVE  
ADRIAN, MO 64720 JEFFERSON CITY, MO 65102  
  
Requested Analyses/Tests  
  
PUBLIC DRINKING WATER BACTERIAL ANALYSIS  
Total Coliform Bacteria and E. coli (Present/Absent Test)  
PRINT LEGIBLY. Instructions for completing form are supplied in the Collection Kit. For compliance monitoring questions, contact the  
  
Missouri Department of Natural Resources-Public Drinking Water Branch at (573) 751-5331 or your regional office. For laboratory test  
results or testing questions, contact the Missouri State Public Health Laboratory at (573) 751-3334.  
  
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Environmental  
Sample Collection Form  
  
Collected Date: Collected Time:  
PWS Id: M01010001 Facility Id: DS  
Sample Type: Oe Sample Collection Poin  
Location: Collector.  
Collector Phone: Sample Category: Bacterial  
Repeat Location: Bottle Number:  
Free Chlorine: Total Chlorine:  
  
Collector Signature: County: BATES  
  
   
  
Missouri Department of Health & Senior Services  
  
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SD 062015

SAMPLE COLLECTION INSTRUCTIONS | [CIES anesourr  
  
bom TPA]  
PUBLIC DRINKING WATER for COLIFORM BACTERIA ANALYSIS | EAMREC a] DEPARTMENT OF  
eee) NATURAL RESOURCES  
  
   
  
This sample kit and collection method is for public drinking water regulatory compliance and special samples.  
Only samples collected in bottles supplied by the Missouri State Public Health Laboratory (MSPHL) and collected  
in accordance with these instructions will be accepted for testing. PLEASE READ THESE INSTRUCTIONS  
COMPLETELY BEFORE COLLECTING SAMPLES.  
  
Sample Containers:  
  
Sample bottles from the MSPHL contain a chlorine neutralizer that is present in powder or liquid form. The bottles  
are sterile and ready for use when shipped. Do not rinse the contents from the container and keep the bottle  
closed until it is to be filled.  
  
Shrink Wrap Seal:  
  
Remove the seal by pulling down on the red strip  
and pealing shrink wrap from both the cap and  
bottle. Discard all shrink wrap. Do not attempt to  
reseal lid with shrink wrap still attached.  
  
Two Fill Lines: —\_\_——\_\_\_\_  
  
Fill the bottle until the water sample level is \_ an  
BETWEEN THE TWO LINES. Place the bottle .  
  
on a level surface to check the sample level.  
Samples below the 100 mL (lower) line WILL  
NOT BE TESTED duc to insufficient sample  
volume. Samples above the 120 mL (upper) line  
WILL NOT BE TESTED due to overfilled  
bottle. Technical protocol and EPA requirements  
dictate that bottles must have sufficient air space  
to add testing reagents and to mix the sample  
properly.  
  
   
   
  
ma <—— Vax. fill line  
  
<— Min. fill line  
  
If the bottle is overfilled past the 120 mL line, For More Information, please contact:  
  
pour off water until the sample volume is between  
the two lines before shipping to MSPHL. MSPHL  
WILL NOT adjust sample volume once the  
sample 1s received at the lab.  
  
Missouri Department of Health and Senior Services  
State Public Health Laboratory  
  
Environmental Bacteriology Unit  
  
101 North Chestnut St., P.O. Box 570  
  
Jefferson City, MO 65102  
  
Phone: 573-751-3334  
There is no longer a label to record sample PAX: 573-522-4032  
information on the bottle. DO NOT WRITE ON Email: labweb1 @health.mo.gov  
THE BOTTLE. Please complete a sample inane  
information form for each sample submitted for  
testing. DATE AND TIME OF SAMPLE  
COLLECTION and the BOTTLE NUMBER  
(from sticker on bottle) ARE REQUIRED. A form  
for each bottle is included in this sample kit.  
  
No Paper Label:  
  
Website: www.health.mo.gov/Lab  
  
   
  
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Bacteriological Sample Collection Procedures  
  
Assemble all of the sampling supplies. Before you begin, wash your hands  
thoroughly before handling supplies. Go to the sampling location(s) specified  
in your Missouri Department of Natural Resources (MDNR) approved  
sampling site plan. ‘The sample should be taken from a clean. smooth-nosed cold  
water faucet if possible. Avoid drinking fountains, leaky faucets, hot/cold  
mixing faucets and frost-proof yard hydrants since it is not practical to  
sterilize these fixtures. If possible, remove any acrators, strainers or hoses  
that are present because they may harbor bacteria. Follow the procedures below  
when collecting the sample. Instructions for completing the environmental  
sampling form are on the following page.  
  
   
  
1. Open the cold water tap for about 3 minutes before collecting the sample.  
  
This should adequately flush the water line of any debris. Ell sample bottle until water level is  
  
2. Flame-sterilize the tap and/or chemically disinfect the tap. Do not flame- between the two lines an the bottle  
sterilize if tap is plastic or if aerators are attached. Disinfect tap by  
thoroughly rinsing both the inside and outside of the tap with a mixture of 50%  
house-hold bleach (NaOCI) and 50% tap water. Take extreme care with strong  
bleach (oxidizing) solutions.  
  
3. Flush the tap for an additional 3 minutes with cold water, and then reduce  
to a gentle flow to about the width of a pencil. Do not change the water flow  
once you have started sampling as this could dislodge contaminants in the tap.  
  
4. Remove the plastic shrink wrap seal by pulling down on the red strip and  
pealing the shrink wrap from both the cap and bottle. Discard the shrink  
wrap. Do not attempt to reseal the lid with shrink wrap still attached.  
  
5. Grasp cap along top edge and remove carefully. Do not touch the inside  
with your fingers. Hold the bottle in one hand and the cap in the other. Do not  
lay the cap down or put it in a pocket! Also, take care not to contaminate the  
sterile bottle or cap with your fingers or permit the faucet to touch the inside of  
  
Bottle is clean and sterile, the bottle. ii enya  
ltemovenand dncont atic «ay 9+ Hold the bottle so that water entering the bottle will not come in contact with  
your hands or the outside of the bottle.  
  
7. Fill the bottle until the water sample level is BETWEEN THE TWO  
LINES on the bottle (100 — 120 ml). Preferably, the sample level should be at ;  
or just slightly above the 100 ml line. Sample levels below the 100 ml (lower) po non vse  
line WILL NOT BE TESTED duc to insufficient sample volume. Sample  
levels above the 120 ml (upper) line WILL NOT BE TESTED due to  
  
G) overfilled bottle. If the bottle is overfilled, you may pour off any excess water "OT SotP MIEING FaucET  
to get the sample level between the two lines. Place the cap on the bottle and  
screw it down tightly.  
  
8. Fill out the Missouri Department of Health and Senior Services (DHSS)  
State Public Health Lab (SPHL) Environmental Sample Collection Form  
using waterproof ink. See attached document for instructions on properly  
completing the sample collection form and for shipping instructions.  
  
9. For single samples, neatly fold the sample collection form into thirds (standard  
letter fold), roll around the bottle and place in the shipping box. For multiple  
samples. fold the forms once or more as needed, and place in the shipping box  
alongside the samples. If needed, use bubble pack or folded paper to fill space.  
Do not use shredded paper. Seal the box with a single strip of shipping tape and  
affix the return address label to the top of the box.  
  
   
  
   
   
  
Maw Fill Line  
Min Fill Line  
  
DO NOT USE.  
  
   
  
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INSTRUCTIONS FOR COMPLETING ENVIRONMENTAL SAMPLE COLLECTION FORM  
Public Drinking Water Bacterial Analysis  
  
PRINT LEGIBLY using water proof ink. A standard ink pen is sufficient. Complete ALL sample information lines on the form.  
Some sections of the form may already be completed by the laboratory computer system when the forms are printed. To make  
corrections, please draw a single line through the inaccurate information and print the corrected information behind it. The  
sections of the form and directions for completing cach line are as follows:  
  
   
  
Order #: For Missouri State Public Health Lab (MSPHL.) purposes only. Pages in Order and Containers in Order indicate number of  
forms and sample bottles shipped in the sample kit order.  
  
REPORT TO: Public water system’s name and shipping address on file with Missouri Department of Natural Resources (MDNR).  
Please review and correct if necessary. Result reports will be mailed to this address.  
  
BILL TO: Scction defaulted to the MDNR. There are no charges for public water testing at the MSPHL.  
  
Requested Analysis/Tests:  
This section will state PUBLIC DRINKING WATER BACTERIAL ANALYSIS. If it does not, you may have the wrong collection  
  
form. Please contact the MSPHL or MDNR for the proper form. Do not use forms from a local county health agency as those forms are  
for private well water samples. Your MDNR Regional Office can provide blank forms for your use.  
  
Complete or correct the following information:  
  
All lines are considered required information. Failure to complete a line may result in an invalid sample.  
  
Collected Date: Enter the date of sample collection in the format YY YY-MM-DD. Use 4 digits for year and 2 digits for month and date.  
November |, 2015 would be written as 2015-11-01.  
Collected Time: Enter the time of sample collection using 24-hour military format hh:mm.  
PWS ID: If blank, enter your 7-digit Public Water System ID number as assigned by MDNR (MO##it HHH),  
Facility ID: Defaulted to DS (Distribution System) for routine samples. If submitting a sample type other than Routine, enter the Facility  
1D number from your system’s MDNR approved sample site plan (for example DS#, WL#, WT#).  
Sample Type: Enter one of the following options:  
Routine — Regular monthly monitoring samples.  
Repeat — A series of 3 or 4 repeat samples (4 if you only take | routine per month) must be taken for each routine sample that tests  
positive (Present) for coliform bacteria. All repeats must be taken on the same day, within 24 hours of being notified of the  
coliform positive sample. Site locations are based on the approved site sampling plan. Typically these samples will consist of one  
from the site of the original unsafe sample location, one within 5 service connections upstream, one within 5 service connections  
downstream, and one from a location specified or approved by MDNR. If your system is a ground water system serving less than  
1,000 people without 4 log virus inactivation, one repeat sample (the fourth repeat) may be collected from the source/well prior to  
treatment. See Repeat Location below.  
Replacement — All samples which are not tested because they were invalid, incomplete information, outdated, broken in transit,  
frozen, etc., must be replaced with a single sample from the same location within 24 hours of being notified.  
Source/Well — If your system is a ground water system without chlorine contact time (4 log virus inactivation or removal), one  
sample must be collected from each well/source, prior to any treatment, active at the time of the positive sample(s).  
Special — Any sample that does not count for compliance. These may include samples to check disinfection practices on repairs or  
new construction or for seasonal public water systems prior to serving water to the public.  
Sample Collection Point ID: Enter the sampling point ID number from your system’s MDNR approved sample site plan. This number is  
required. DO NOT LEAVE BLANK. If you have questions about your Sample Collection Point ID, please contact the MDNR.  
Location: Enter the address or name of the collection location associated with the Sample Collection Point ID above. (Important Note:  
The Location is tied to the Sample Collection Point ID from the approved site sampling plan and will be the location printed on  
the final analysis report. If the location entered on the collection form does not match the final report, contact MDNR.)  
Collector: Enter your last name, first name.  
Collector Phone: Enter your 10-digit day time phone number.  
Sample Category: This will always be Bacterial and is already filled out for you.  
Repeat Location: If the sample type above is Repeat, enter the repeat location for this sample: upstream, downstream, original, source or  
other. If other, please describe the location.  
Bottle Number: Enter the number from the label on the bottle. This is used to match collection forms to samples.  
Free Chlorine: Enter the free chlorine test level in mg/L (if your system is chlorinated).  
Total Chlorine: Enter the total chlorine test level in mg/L (if your system is chlorinated).  
Collector Signature: By signing you attest that the information provided is accurate to the best of your knowledge.  
County: Enter the county name for the collection point if it is not already filled out for you.  
All other sections of the Environmental Sample Collection Form are for MSPHL use only. If you have any questions, please contact the  
MSPHL Environmental Bacteriology Unit at (573) 751-3334 or your local MDNR Regional Office (see next page for phone numbers).  
  
   
  
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Shipping Instructions  
  
Per U.S. Environmental Protection Agency requirements, public water samples must be received by the laboratory and tested  
within 30 hours of the date and time of collection. The MSPHL and MDNR recommend you use the free Department of Health  
and Senior Services (DHSS) contract courier for overnight delivery to the MSPHL. This courier picks up at most local public health  
agency offices and hospitals (Note: Not all hospitals will accept water samples for courier pick up). For sample drop off locations and  
times, please go to http://www. health.mo.gov/lab/courierservices.php and click on the interactive map or the listing of drop off locations  
  
by county; or you may call the MSPHL courier liaison at (573) 751-4830, or the MDNR Public Drinking Water Branch (PDWB) at (573)  
526-1124.  
  
Please note the courier is allowed to pick up samples within one hour of the scheduled time (before or after). The earliest pick up  
time is at 10:30 a.m. To ensure your samples meet the transit time requirement of 30 hours, it is important that you collect your samples in  
the morning and have them dropped off at the courier pickup point one hour prior to the scheduled time.  
  
Use of the U.S. Postal Service or other commercial carriers such as Fed Ex or UPS will require additional charges and may not meet the  
30 hour transit time requirement.  
  
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.)  
  
Public water supplies may use the new MSPHL Test Results Web Portal to retrieve preliminary test results on-line. For information on  
how to register as a user for the web portal and to receive email notifications, please contact the MSPHL LIMS Administrator at  
shondra.johnson@health.mo.gov or call 573-751-3334. These preliminary test results are for informational purposes only. Official test  
  
results are available on-line within 2 or 3 business days at the MDNR Drinking Water Watch website http://dnar.mo.gov/DWW/.  
In addition, the official bacteriological sample reports will be mailed by MDNR within 4 or 5 business days.  
  
Additional sample bottles can be ordered on-line at hitp://www.health.mo.gov/lab/specimentestforms.php or by calling the MSPHL  
Central Services Unit at (573) 751-4830.  
  
Sometimes in spite of taking all of the precautions you may get a call from MDNR or results by mail notifying you that coliform or  
E. coli bacteria are present in your water. You will be given specific instructions that may include collection of repeat samples to confirm  
  
that the first routine sample was not a sampling error. Please call the MDNR Regional Office staff and they will discuss the procedure  
with you. See contact information below.  
  
For more information about public water systems, contact the MDNR Public Drinking Water Branch at (573) 751-5331 or your MDNR  
Regional Office (counties within each region are listed at http://dnr.mo.gov/regions/index.html) or visit www.dnr.mo.gov/env/wpp/dw-  
  
index.html:  
  
Missouri Department of Natural Resources  
Division of Environmental Quality  
Water Protection Program  
Public Drinking Water Branch  
P.O. Box 176  
Jefferson City, Missouri 65102  
573-751-5331  
  
Kansas City Regional Office Northeast Regional Office Southeast Regional Office  
Department of Natural Resources Department of Natural Resources Department of Natural Resources  
300 NE Colbern Road 1709 Prospect Drive 2155 North Westwood Blvd.  
Lee’s Summit, MO 64086-4710 Macon, MO 63552-1930 Poplar Bluff. MO 63901-1420  
(816) 251-0700 (660) 385-6000 (573) 840-9750  
Southwest Regional Office St. Louis Regional Office  
Department of Natural Resources Department of Natural Resources  
2040 West Woodland 7545 South Lindbergh, Suite 210  
Springfield, MO 65807-5912 St. Louis, MO 63125  
(417) 891-4300 (314) 416-2960  
  
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