

# Water & Wastewater Digest

Spring 2016

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## **Annual Water Quality Report (Consumer Confidence Report)**

Please share this information with the person responsible for Consumer Confidence Report (CCR) distribution and certification for your drinking water system.

Last year, many water systems used the electronic delivery method to reduce printing and postage costs associated with distributing the 2014 CCR. This option allowed direct delivery of the CCR to customers electronically by providing a unique web address or URL to customers via a utility bill, newsletter, or other means.



A copy of the distributed CCR, the certification form and required supporting documentation must be returned to the department to receive credit for completing annual CCR requirements. To meet direct delivery requirements, the URL must go directly to the full and complete CCR for that year. The water system must also inform all customers in the same notification that the CCR is available upon request in a paper copy format to reach customers who do not have internet access.

To assist with these efforts, the Missouri Department of Natural Resources generates a “skeleton” CCR with system information and water quality results for all community water systems.

The CCRs are hosted, free of charge, on the department’s website providing a unique web address for systems to access the most recent water quality report. The web address, or URL, is unique to each water system and may be accessed by visiting

[www.dnr.mo.gov/ccr/MO0000001.pdf](http://www.dnr.mo.gov/ccr/MO0000001.pdf) by replacing “MO0000001” with the public water system’s identification number. CCRs are updated in April of each year to reflect the water quality report for the previous calendar year.

If a water system was supplied water by an out-of-state provider or additional testing was performed by an outside laboratory and not reported to the department, those results must also be added to the “skeleton” CCR before being distributed to customers.

The department, with assistance from the Missouri Rural Water Association, developed a video to help community water systems with CCR distribution and certification using electronic delivery. The video is available on the MissouriDNR channel of YouTube or may be accessed directly at [www.youtube.com/watch?v=eMvi4O5HoFs](http://www.youtube.com/watch?v=eMvi4O5HoFs). The video explains the CCR, where to find the online “skeleton” CCR generated for each water system by the department and what must be done in order to make the CCR available to customers.

The department encourages all water systems to take advantage of the tools and information provided on the CCR home page ([www.dnr.mo.gov/ccr/ccr.htm](http://www.dnr.mo.gov/ccr/ccr.htm)) to assist with CCR compliance.

The following table shows the actions required and deadlines for reporting.

Date	Action Required
April 1	Reseller report to consecutive systems (“Skeleton” CCR posted on DNR website)
July 1	CCR distributed to customers
Oct. 1	CCR certification form returned to DNR

Systems that fail to meet distribution requirements or reporting deadlines will receive violations according to CSR 60-8.030. If you have questions about this process, need to request changes to your CCR or prefer to use your own URL, please email the department at [CCR@dnr.mo.gov](mailto:CCR@dnr.mo.gov) or contact the CCR Coordinator, Sharon Wilbers, at 537-526-3832.



## **Bacteriological Sample Siting Plans and Completing Environmental Sample Collection Forms**

Public drinking water systems must have a bacteriological sample siting plan that lists all active sample sites used for monthly bacteriological samples. Samples should be collected each month from different sites in the plan to ensure adequate representation of the distribution system is occurring. For example, if your system is required to take one sample per month and you have five active sites in your plan (ie. Sample Collection Point IDs 01, 03, 07, 11, and 14), you may want to take January’s sample from sample collection point ID “01”, February’s from “03”, March’s from “07”, April’s from “11”, May’s from “14” and then start back again with “01” in June.

It is important to remember the sample collection point ID is character specific, meaning that “03”, “3” and “003” are NOT the same. So it is essential that the sample collection point ID field on the sample collection form is written EXACTLY as it is in the bacteriological sample siting plan. Failure to do so will lead to incomplete data, data entry issues and incorrect reporting of results.

If the sample collection point ID written on the sample collection form does not match what is listed in your bacteriological sample siting plan, the bacteriological sample result report will designate the sample collection point ID as “TCR.” If the sample collection point ID field is left blank on the sample collection form, the bacteriological sample result report will designate the sample collection point ID as “MISSING.” To help operators and sample collectors with this change, a copy of the bacteriological sample siting plan will be enclosed with bacteriological sample reports that contain a sample collection point ID designated as “TCR” or “MISSING.” The following image is an example of the sample collection form that would accompany each bacteriological sample along with an example of a bacteriological sample siting plan listing accepted sampling locations. The arrows indicate where to record critical sample site information on the sample collection form.



As part of a bacteriological sample siting plan, a “routine” sample must be collected from the distribution system, not wells. The Groundwater Rule however may require samples from all active sources (wells) prior to treatment. Department staff will advise you if and when source water samples are required. The sample collection point ID for each active well serving your water system is identified as “WL #####” at the end of the list.

Existing sampling sites can be reviewed online by visiting Drinking Water Watch at [www.dnr.mo.gov/DWW/indexSearchDNR.jsp](http://www.dnr.mo.gov/DWW/indexSearchDNR.jsp) Type in your water system name and hit “Enter.” Click on your Water System Number, MOXXXXXXX and then click on “Sample Points.” If you have questions regarding your sample siting plan or would like to make modifications, please contact your regional office, send a fax to 573-751-3110, call Cathy Stockman at 573-751-0972, or send an email to: [cathy.stockman@dnr.mo.gov](mailto:cathy.stockman@dnr.mo.gov). If you have additional questions, please contact Scott Weckenborg at 573-526-1124 or by email at [scott.weckenborg@dnr.mo.gov](mailto:scott.weckenborg@dnr.mo.gov).

## Small Community Engineering Assistance Program

The hardest part of completing upgrades is getting started. The Department of Natural Resources offers engineering report grant assistance to municipalities, counties, public sewer or water districts, political subdivisions, or

**Sample Collection Point ID Issues**

ENVIRONMENTAL SAMPLE COLLECTION FORM

PUBLIC DRINKING WATER BACTERIOLOGICAL TEST  
Total Coliform Bacteria and E. coli (Presence/Absence Test)  
FORM 18 (08/15) 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 573-751-3110 or your regional office. For laboratory test results or testing questions, contact the Missouri State Public Health Laboratory at 573-751-3334.

BACTERIOLOGICAL SAMPLE COLLECTION FORM

Collected Date: 2014-07-23	Collected Time: 04:30
PWS ID: MO1234567	Facility ID: 05 (For WLS) see instructions
Sample Type: Routine	Sample Collection Point ID: 03
Location: Example - 130 Main St	Collector: Mandy Harmon
Collector Phone: 555-555-1234	Sample Category: Bacterial
Repeat Location:	Bottle Number: J01445
Free Chlorine: 0.6	Total Chlorine: 0.6
Collector Signature: <i>Wanda Harmon</i>	County Date:

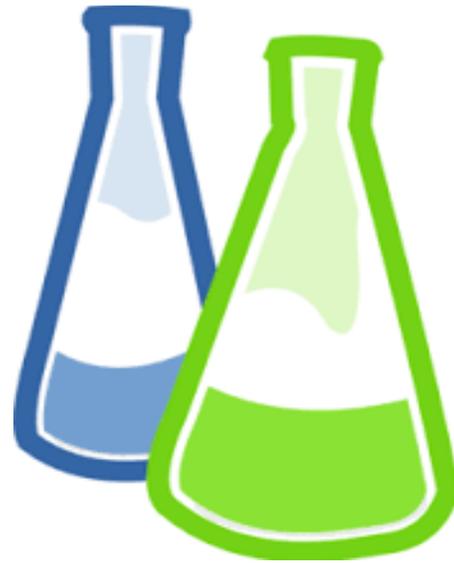
BACTERIOLOGICAL SAMPLE SITING PLAN

Sample Collection Point ID	Location	Address Description
01	Example - City Hall	
02	Example - Fire Dept	
03	Example - 130 Main St	
04	Example - 50 Oak St	
07	Example - High School	
14	Example - Elementary Campus	
TCR	TOTAL COLIFORM RULE	
WL #####	WELL # 1 - CITY PARK RD	

instrumentalities of the state with a population of less than 10,000. The program offers funding for wastewater engineering costs incurred in preparation of a facility plan.

The funding is only available for recipients yet to achieve a funding commitment and who plan to pursue funding. Communities may be eligible to receive an 80 percent grant with a 20 percent recipient match. Disadvantaged communities may be eligible to receive a 90 percent grant with a 10 percent recipient match. A disadvantaged community is defined as any community with a population of 3,300 or less with user rates at or above two percent of the median household income and the median household income at or below 75 percent of the state average.

The grant amount shall not exceed \$50,000. Applications are accepted at any time. In order to be eligible for grant assistance through the Small Community Engineering Assistance Program, it is important to file an application prior to hiring an engineer to complete an engineering report. For full details of eligible and ineligible cost, visit the department's web page at [www.dnr.mo.gov/env/wpp/srf/wastewater-grants.htm](http://www.dnr.mo.gov/env/wpp/srf/wastewater-grants.htm).



## Expanded Wastewater Effluent Testing

Wastewater treatment systems applying to renew their state operating permit may notice a change to the renewal form. The Missouri Department of Natural Resources updated “Part D – Expanded Effluent Testing Data” of Form B2 to include a new requirement per federal regulation 40 CFR 122.21(j)(4)(iv). Certain publicly owned treatment works (POTWs) must perform three expanded effluent tests to be submitted with their renewal applications 180 days prior to the expiration of the effective operating permit. POTWs meeting one or both of the following criteria must perform this additional effluent testing:

1. A design flow of one million gallons per day (MGD) or greater.
2. Required to have an approved pretreatment program.

The effluent tests must be conducted within 4 1/2 years prior to the submittal of the renewal application and are to take into account any seasonal variation of the discharge.

The list of parameters to sample for is extensive. The following example shows how a facility might spread the sampling and associated costs out over time, while taking into account any



possible seasonal variation of the discharge. It also allows the facility time to receive and organize sampling results to include with a completed renewal application for submittal to the Department's Water Protection Program. The following chart is an example for a facility that spaces out sampling over the life of its five year permit. Seasonal variation must be considered, so sampling occurs at varying times throughout the years.

<b>Year</b>	<b>Spring</b>	<b>Summer</b>	<b>Fall</b>	<b>Winter</b>
<b>1</b>				
<b>2</b>	✓			
<b>3</b>		✓		
<b>4</b>			✓	
<b>5</b>	Submit testing with renewal application			

The revised renewal form can be found online at [www.dnr.mo.gov/forms/780-1805-f.pdf](http://www.dnr.mo.gov/forms/780-1805-f.pdf). Operators are encouraged to plan ahead and review Part D (pages 9 through 12 of the form) for the full list of sample parameters to analyze for each outfall.

## **Operator Certification Exam Schedule**

<b>Exam Date</b>	<b>Location</b>	<b>Filing Deadline</b>
May 3	Kansas City Regional Office, 500 NE Colbern Road, Lee's Summit	April 3
	Lewis & Clark State Office Building, 1101 Riverside Dr., Jefferson City	
	Northeast Regional Office, 1709 Prospect Dr., Macon	
June 7	Department of Conservation, Powder Valley Nature Center, Kirkwood	May 8
	Lewis & Clark State Office Building, 1101 Riverside Dr., Jefferson City	
July 5	Lewis & Clark State Office Building, 1101 Riverside Dr., Jefferson City	June 5
	Southeast Regional Office, 2155 N. Westwood Blvd., Poplar Bluff	
	Southwest Regional Office, 2040 W. Woodland, Springfield	

## Just for Fun

The following are acronyms or formulas related to water and/or wastewater.

How many can you identify? A few hints are provided. *(answers are on the next page)*

1. RTCR	rules are made to be changed
2. BOD	air ultimatum
3. MGD	8,000,000 pints
4. MLSS	not a mixed drink
5. NTU	cloudy, partly cloudy, very cloudy
6. DBP	the lesser of 2 evils - related to chlorine
7. NH3	common pungent chemical compound, only a tiny amount is acceptable
8. SOC	not a noise that Batman makes - it's time to plan
9. RO	park, drive, neutral and...
10. EPA	no clue needed, right?
11. H2S	might smell like rotten eggs

12. UV	let there be light
13. SSO	rain, rain, flow away
14. MCL	gotta have a limit, this one is the greatest
15. TSS	complete dangling state of matter
16. DO	melted air
17. BMP	very good coach's rehearsals
18. GP	NPDES generally speaking
19. PN	inform everybody concerned
20. SOP	customary and expected way to do it
21. KMnO4	PP - pink or purple

## Need your Password to log in?

Certified operators are encouraged to access training reports by visiting the department's website at [www.dnr.mo.gov/operator](http://www.dnr.mo.gov/operator). To login, the password is the last four digits of your social security number.

In addition to checking training hours and renewing certificates online, this site provides a convenient place to view and update important contact information for public drinking water systems including the chief operator, sample collector and administrative contact.

For more information, contact the department's Operator Certification Section at 800-361-4827 or 573-751-1600.

## Visit us on the web

The list of approved training changes frequently and new courses are reviewed and approved by Department staff or trainers adjust schedules. By the time this newsletter reaches you, there may be new courses available in your area. visit us at [www.dnr.mo.gov/env/wpp/opcert/oprtrain.htm](http://www.dnr.mo.gov/env/wpp/opcert/oprtrain.htm) for an up-to-date list of approved operator certification courses.

## Answers to Just for Fun

1. Revised Total Coliform Rule
2. Biochemical (Biological) Oxygen Demand
3. Million Gallons per Day
4. Mixed Liquor Suspended Solids
5. Nephelometric Turbidity Units
6. Disinfection By-Products
7. Ammonia
8. Schedule of Compliance
9. Reverse Osmosis
10. Environmental Protection Agency
11. Hydrogen Sulfide
12. Ultraviolet (radiation)
13. Sanitary Sewer Overflow
14. Maximum Contaminant Limit
15. Total Suspended Solids
16. Dissolved Oxygen
17. Best Management Practices
18. General Permit
19. Public Notification
20. Standard Operating Procedure
21. Potassium Permanganate

## Water & Wastewater Digest Subscriptions

- New Subscriber: Complete section 2
- Change of Address: Complete sections 1 and 2 or certified operators can update information online at [www.dnr.mo.gov/operator](http://www.dnr.mo.gov/operator).
- Cancelling Subscription: Complete section

**Fax to:** 573-751-0678

**Mail to:** Missouri Department of Natural Resources  
Operator Certification Section  
PO Box 176, Jefferson City, MO 65102-0176

### Section 1 - Previous Address

Name \_\_\_\_\_  
Operator Certificate # \_\_\_\_\_  
Street Address \_\_\_\_\_  
City/State/ZIP Code \_\_\_\_\_

### Section 2 - New Address

Name \_\_\_\_\_  
Operator Certificate # \_\_\_\_\_  
Street Address \_\_\_\_\_  
City/State/ZIP Code \_\_\_\_\_  
Daytime Phone # with Area Code \_\_\_\_\_

## **Training**

For a current listing of training, please visit:

[dnr.mo.gov/env/wpp/opcert/oprtrain.htm](http://dnr.mo.gov/env/wpp/opcert/oprtrain.htm)