

# Water & Wastewater Digest

**Winter 2015**

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**Preparing for the Revised Total Coliform Rule, Part 4 of 4: Violations, Consumer Confidence Reports and Seasonal Water Systems**

The Revised Total Coliform Rule (RTCR) becomes effective April 1, 2016. To help your system maintain compliance in the transition to the RTCR, it is important to understand the new requirements and become familiar with the conditions that would result in violations. There are four categories of violations water systems can incur under the new RTCR requirements.

- 1. E. coli Maximum Contaminant Level (MCL) violations.** The RTCR removes the maximum contaminant level (MCL) for total coliforms and replaces the acute total coliform MCL violation with an E. coli MCL violation. An E. coli MCL is an “acute” violation requiring an immediate public notice to be issued to customers within 24 hours of notification under the following conditions:

E. coli MCL occurs with the following combinations	
Routine Sample	Repeat Sample
E. coli +	E. coli +
E. coli +	Total coliform +
E. coli +	not all repeats collected
Total coliform +	E. coli +
Total coliform +	TC+ but not tested for E. coli

- 2. Treatment Technique violations.** There are three treatment technique violations under the RTCR:
  - Failure to complete and submit the Level 1 or Level 2 assessment within 30 days of being notified that the system exceeded the trigger for that assessment.
  - Failure to complete the corrective actions following an assessment.
  - For seasonal water systems: Failure to complete the state-approved start-up procedures before the start of each operating season.

Treatment technique violations require the system to issue a public notice to its customers within 30 days of being notified by the department of the violation.



**3. Monitoring violations.** There are two monitoring violations under the RTCR:

- Failure to collect the required number of routine total coliform samples each month.
- Failure to analyze a total coliform positive routine sample for E. coli.

**4. Reporting violations.** There are three reporting violations under the RTCR:

- Failure to submit a monitoring report or a completed assessment form on time, or submitting a report or an assessment that is incomplete or is incorrectly filled out.
- Failure to notify the department of an E. coli positive sample within 24 hours.
- For a seasonal water system: Failure to submit certification of completion of the state-approved start-up procedures to the department before the start of each operating season.

Monitoring and reporting violations require the water system to issue a public notice within 12 months of being notified of the violation. For community water systems, this can potentially be part of the annual Consumer Confidence Report.

### The Consumer Confidence Reports

Each year by July, 1, community water systems are required to publish a Consumer Confidence Report, containing monitoring and violation data from the previous calendar year. Since the RTCR becomes effective April 1, 2016, the compliance data for both the Total Coliform Rule and the RTCR will appear in the 2016 CCR due to customers by July 1, 2017. The department's Public Drinking Water Branch provides all community water systems with a Consumer Confidence Report template each year. The 2016 template provided to your water system will include all the new requirements for your convenience.

The RTCR will require that Consumer Confidence Reports contain additional information including: the number of Level 1 or Level 2 assessments required and completed each year, and the number of corrective actions required and completed. If assessments or corrective actions are not completed, that must also be included as well as the reason for failing to do so. The report will continue to list the number of E. coli-positive samples for the year, but the mandatory health effects language for E. coli has also been modified.

### Seasonal Water Systems

The RTCR defines a "seasonal water system" for the first time as: a non-community water system that is not operated as a public water system on a year-

round basis and starts up and shuts down at the beginning and end of each operating season. Some examples are state parks, campgrounds, resorts, and other recreational areas that are open fewer than 12 months each year and depressurize all or parts of the distribution system during the off-season period. For any system meeting this criteria and opening for the season on or after April 1, 2016, the water system must have and complete a department approved start-up procedure and submit certification of completion of the start-up procedures to the Department of Natural Resources' Public Drinking Water Branch or your local regional office before the start of the operating season every year. Approved start-up procedures consist of the following minimum elements: basic system assessment, activation of well(s) and any treatment, system flushing, check disinfectant residuals if applicable, and collect special samples. The department also recommends any water system that depressurizes any part of the distribution system to follow disinfection and flushing procedures and collect special samples prior to serving water to the public unless otherwise specified. Following these start-up procedures will help reduce the likelihood of unsafe samples that can occur at seasonal water systems during the first few months of operation because of depressurization.

The department will send seasonal water systems' administrative contact an information packet with the new requirements, procedures for start-up, and a "Seasonal Public Water System Start-Up Procedures Certification Form." If you own, manage, or operate a seasonal water system and have not received this packet of information, or are interested in obtaining a copy of the seasonal system start-up guidance, certification form, or anything related to the Revised Total Coliform Rule, please contact the department's Public Drinking Water Branch at 573-526-1124, your local regional office, or visit: [www.dnr.mo.gov/env/wpp/pdwb/rtrc.htm](http://www.dnr.mo.gov/env/wpp/pdwb/rtrc.htm)

For additional information regarding the federal RTCR and the EPA guidance documents, visit: [www.epa.gov/dwreginfo/revised-total-coliform-rule-and-total-coliform-rule](http://www.epa.gov/dwreginfo/revised-total-coliform-rule-and-total-coliform-rule)

For additional information regarding public drinking water monitoring requirements, please visit: [www.dnr.mo.gov/env/wpp/monitoring.htm](http://www.dnr.mo.gov/env/wpp/monitoring.htm)

For the address and phone number to your local department regional office, please visit: [www.dnr.mo.gov/regions/index.html](http://www.dnr.mo.gov/regions/index.html)

## Wastewater Electronic Reporting – The Benefits are a SNAP!!

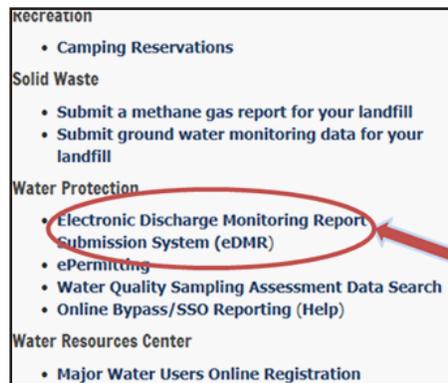
Does your wastewater operating permit require sending in discharge monitoring reports (DMRs)? Do you have a computer with internet access? Then let's get started! Send your DMRs using the department's online electronic DMR (eDMR) system.

What is eDMR? This online tool allows anyone with a Missouri State Operating Permit for wastewater to submit DMRs from the comfort of their home or office. The system is **free** and 100 percent web-based, it doesn't require any downloading to run the program. The eDMR system also allows for special condition reports to be submitted with applicable DMRs. It gives verification and confirmation of DMRs, stores submitted DMRs, has printer friendly documents, and is very easy to use.

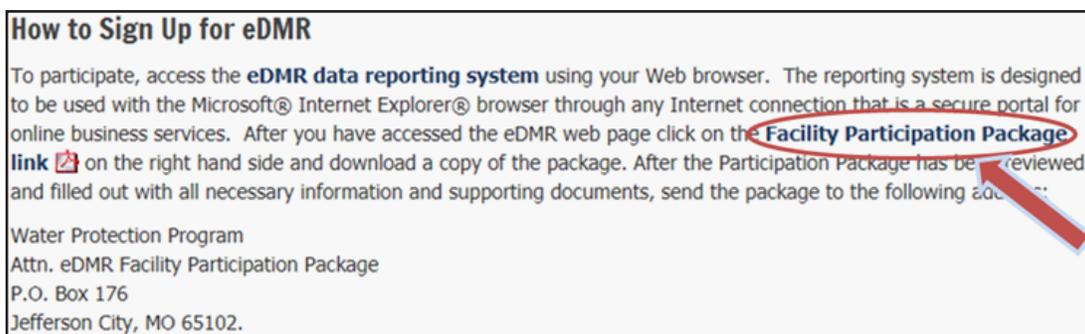
Find out more about eDMRs or obtain a Permit Holder Participation Package (eDMR application) and start using electronic reporting. Visit the department's website ([www.dnr.mo.gov](http://www.dnr.mo.gov)) and click the Online Services tab.



When you click the Online Services tab, you will be in the department's Online Services –Data Submission page. Scroll down until you see Water Protection in bold. Click the link, "Electronic Discharge Monitoring Report Submission System, or eDMR" link.



When you click the link shown above, you will then be taken to the eDMR Home page where you can read information specific to eDMRs, find training dates and locations, and obtain an eDMR application (shown below).



The benefits of electronic reporting are a SNAP!!

### SAVES:

- Money by:
  - reducing permit holder's compliance costs by offering a streamlined reporting method
  - reducing department implementation costs by better resource management
- Time by:
  - obtaining "real-time" reporting requirements
  - improving overall effectiveness of wastewater discharge program
  - faster response for data analyses
  - faster response for compliance assessment
  - faster response for decision-making

### NOTIFICATIONS:

- Obtain email notifications for:
  - Submission
  - Validation
  - Processing
  - password/PIN changes
  - other notifications
- Receive up-front validation of DMR report before submission
- User authentication
- Security controlled

### ACCESS TO:

- Online DMR requirements
- Online DMR processing status
- Track submission status
- See the history of all submission
- Multiple access levels:
  - Certifier
  - Preparer
  - Viewer

### PAPERLESS

- Web data entry form
- Copy and paste sampling data from Excel
- File to online entry form
- XML file submission
- Submit and certify reports
- Submit DMR revisions
- Upload supporting documentation along with DMR submissions
- Reports can be saved in progress and completed later

## January is Sludge Reporting Time

Annual Form S sludge reports for domestic wastewater treatment facilities are due Jan. 28, 2016. With the exception of lagoons, all domestic wastewater treatment facilities are required to submit this report to the Department of Natural Resources each year. "Major" or "Class I" sludge management facilities, which are defined as facilities that have a design flow greater than or equal to 1 million gallons per day, serve a pollution of 10,000 or more, or have an approved pretreatment program, are also required to submit annual reports to EPA, even if sludge removal did not occur. This requirement can be met by submitting a statement of no application and the required certification statement.

You can download copies of Form S sections 1 through 6 from the department's website [www.dnr.mo.gov/forms/index.html](http://www.dnr.mo.gov/forms/index.html). Scroll down the page to Water Pollution Program then scroll to "Sludge."



Mail a **signed** copy of your completed form to your Missouri Department of Natural Resources regional office. If your facility is classified as a "Major" or "Class I" sludge management facility, send an additional copy of the report to EPA Region 7 at U.S. Environmental Protection Agency, Region 7, ATTN: Biosolids Coordinator, 11201 Renner Boulevard, Lenexa, Kansas 66219.

Any minor facility that has a permitted pretreatment program must also submit a Form S sludge report to EPA Region 7. **Be sure to keep a copy for your files.**

You can view the department's regional office map at [www.dnr.mo.gov/regions/](http://www.dnr.mo.gov/regions/). Call the departments Water Protection Program at 573-751-1300 or toll-free at 1-800-361-4827 for answers to your biosolids questions. The EPA Region 7 503 Biosolids Program contact is John Dunn, 913-551-7003.

## **Proposed rule would prohibit some pharmaceuticals from sewers**

A proposed federal hazardous waste rule would prohibit disposal of pharmaceuticals to a sewer connected to a Publicly Owned Treatment Work (POTW) by health care facilities. Under current law, the disposal of wastes to a sanitary sewer connected to a POTW is excluded from hazardous waste rules, and Clean Water Act pretreatment rules are applied instead. The EPA is proposing to rescind this exclusion for pharmaceuticals and prohibit flushing of pharmaceuticals to a city's sewer by health care facilities. If this regulation passes in its current form, Missouri would need to adopt the federal requirement in its hazardous waste rules. Until that time, the EPA would have primary enforcement authority over this change when the federal rule is effective.

Studies have shown that many rivers and lakes contain traces of pharmaceuticals, indicating that standard wastewater treatment processes are not fully removing these contaminants from wastewater.

For more information on the status of this proposed change, visit [www.gpo.gov/fdsys/pkg/FR-2015-09-25/pdf/2015-23167.pdf](http://www.gpo.gov/fdsys/pkg/FR-2015-09-25/pdf/2015-23167.pdf)

The draft language affecting POTWs is:

§ 266.505 Prohibition of sewerage hazardous waste pharmaceuticals. All healthcare facilities and pharmaceutical reverse distributors are prohibited from discharging hazardous waste pharmaceuticals to a sewer system that passes through to a publicly-owned treatment works. The exclusion in § 261.4(a)(1)(ii) for mixtures of domestic sewage and other wastes that pass through a sewer system to a publicly-owned treatment works does not apply to a hazardous waste pharmaceutical.

## **Data Integrity - Do You Really Know If Your Water is Safe?**

Technologies for monitoring water and wastewater processes for control and compliance are constantly changing. Despite assurances from manufacturers, electrical monitoring equipment is not necessarily getting simpler or easier. Operators must be familiar enough with their equipment to trust the quality of the data being generated and collected. Recently, there has been increased discussion on the issue of data integrity. Data integrity refers to maintaining and ensuring the accuracy and consistency of data, and is a critical aspect to the design, implementation and usage of any system that stores, processes or retrieves information.



In other words, it means knowing whether you can trust the equipment that is gauging whether your water is meeting safety standards. It is the operator's responsibility to make sure the equipment in his or her facility is doing what it's supposed to, and doing it correctly. This applies to the analyzers and to data collection or Supervisory Control and Data Acquisition (SCADA) systems. It does not mean the operator has to be an electrical genius, but should have basic knowledge of what the equipment does and how it is set up and maintained properly.

To illustrate issues with data integrity, refer to continuous-flow turbidity monitoring equipment commonly used in water treatment plants. Process water being monitored streams continuously through the analyzer which, in turn, measures and generates a turbidity reading which can be captured on record. Operators familiar with this equipment know that regulations require periodic calibration be performed. Many utilities choose to contract this service with the manufacturer or instrument technician to ensure proper compliance. However, many mistakenly assume the technician checks and services all aspects of the devices each time. Never assume a contractor does more than you have paid him or her to do! If the contractor comes to calibrate, that's normally all they will do. Not clean the optics, change bulbs, adjust sample flows, and perform other necessary maintenance that also can have serious impact on data integrity. That's why it is important operators are familiar with the devices, installation, required maintenance schedules, and recommended settings. Be aware that monitoring equipment is not "set it and forget it!" Here are several useful suggestions

applicable to any type of monitoring equipment that can help ensure the integrity of the data generated:

- Read the manual and follow manufacturer's recommendations on installation, operation and maintenance –don't forget to budget for routine maintenance items.
- Choose a location for the sample tap that will result in a representative sample being analyzed. Minimize the distance between the analyzer and sample point; avoid pumping the sample if possible.
- Periodically check the accuracy of the instrument using standards or comparative sampling.
- Maintain a record for each individual device (write down dates of service, what was done, cleaned, etc.)
- Make sure electrical communication is compatible between monitoring equipment and SCADA.
- Accompany the technician when services are performed and observe what's done.
- Be aware of the selectable settings available on the device(s) and how they impact your data, and reference them to industry recommendations. Also, if multiple identical devices are used, make sure selected settings are the same for all of them.

Don't be afraid to touch these instruments – just like a pump, they're part of your treatment process!

## Water & Wastewater Digest Subscriptions

- New subscriber to the Digest? Complete section 2 below.
- 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 1 below.

### Mail or Fax to:

Missouri Department of Natural Resources  
Operator Certification Section  
P.O. Box 176, Jefferson City, MO 65102-0176  
Fax: 573-751-0678

### Section 1 - Previous Address

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

### Section 2 - New Address

Name \_\_\_\_\_  
Operator Certificate \_\_\_\_\_  
Street \_\_\_\_\_  
City/State/ZIP Code \_\_\_\_\_  
Daytime phone with area code \_\_\_\_\_

## Operator Certification Exam Schedule

Exam Date	Location	Filing Deadline
March 1	Lewis & Clark State Office Building 1101 Riverside Dr., Jefferson City	Jan. 31
March 8	Department of Conservation Powder Valley Nature Center, Kirkwood	Feb. 7
April 5	Lewis & Clark State Office Building 1101 Riverside Dr., Jefferson City	March 6
	Southeast Regional Office 2155 N. Westwood Blvd., Poplar Bluff	
	Southwest Regional Office 2040 W. Woodland, Springfield	
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	

### 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.

## **Training**

The mailed version of this publication included a two page list of approved training courses and exam schedule that was available at the time of printing.

For a current listing of training, please visit:

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