



MONTHLY COMPLIANCE MONITORING REPORT FOR GROUNDWATER SYSTEMS

PUBLIC WATER SYSTEM NAME				PUBLIC WATER SYSTEM ID NUMBER MO			COUNTY		
Month/Year /	Minimum Residual _____ mg/L 4-log Sample Location: _____			Minimum Residual _____ mg/L 4-log Sample Location: _____			Minimum Residual _____ mg/L 4-log Sample Location: _____		
Date	pH	Temp °C	Lowest Free Chlorine (mg/L)	pH	Temp °C	Lowest Free Chlorine (mg/L)	pH	Temp °C	Lowest Free Chlorine (mg/L)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									

1) Was the disinfectant residual at the distribution entry point ever less than 0.5 mg/L free available chlorine (or 1.0 mg/L chloramines if applicable)?

Yes No If yes, attach the results of grab samples (including dates and times) collected every 4 hours to this form and include duration of time below 0.5 mg/L (or 1.0 mg/L). Failure to restore residual to 0.5 mg/L (or 1.0 mg/L) within 4 hours is a violation of **10 CSR 60-4.055(3)**.

2) Was the disinfectant residual at the 4-log sample location ever less than the Department-determined minimum residual for 4-log virus inactivation?

Yes No If yes, notify the department as soon as possible but no later than by the end of the next business day.

A) If you answered yes on #2, were grab samples collected every four hours until the disinfectant residual was above the 4-log minimum residual?

Yes No If yes, attach the results of the grab samples (including dates and times) collected every 4 hours to this form and include the duration of time below the 4-log minimum residual.

B) If you answered yes on #2, was the department-determined minimum residual for 4-log virus inactivation restored within 4 hours?

Yes No Failure to restore at least 4-log inactivation of viruses within four hours is a violation of **10 CSR 4.025(5)(C)**.

3) (For systems serving more than 3,300) Did continuous monitoring equipment fail or go offline at any time during this reporting period?

Yes No N/A

A) If you answered yes on #3, were grab samples collected every four hours until the continuous monitoring equipment returned to service?

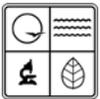
Yes No If you answer yes, attach results of grab samples (including dates and times) to this form and the date returned to service.

NAME OF PERSON PREPARING REPORT

SIGNATURE OF RESPONSIBLE PARTY

DATE

Mail/Fax completed form to: Missouri Department of Natural Resources
Public Drinking Water Branch - Monitoring
P.O. Box 176; Jefferson City, MO 65102-0176
Phone: 800-361-4827 or 573-751-5331 Fax: 573-751-3110



MISSOURI DEPARTMENT OF NATURAL RESOURCES
MONTHLY COMPLIANCE MONITORING REPORT FOR GROUNDWATER SYSTEMS
Instruction for Monitoring Report form 780-2094

Please fill out information completely and legibly.

Systems providing 4-log treatment (99.99 percent virus and bacteria inactivation) **have to monitor daily for chlorine residual, pH and temperature** at a point after the contact time, to determine if they meet the disinfectant residual concentration (C) and contact time (T) or CT requirements and achieved the required 4-log treatment. Daily means every day, 365 days a year, that water from the groundwater source is served to the public. **This includes weekends and holidays.**

- Minimum Residual: This is the minimum disinfectant residual concentration level determined by the state in the approved CT evaluation application to provide at least 4-log inactivation of viruses for each entry point.
- 4-log Sample Location: All groundwater supplies conducting compliance monitoring that provide 4-log treatment of viruses using inactivation, removal, or a state-approved combination of 4-log inactivation and removal must monitor at a department approved location before or at the first customer for all its groundwater sources. You may abbreviate such as: Well 1 (W-1) entry to distribution system (EDS) or prior to first customer (PFC).
- pH: This is either the daily pH reading or the highest pH for the day.
- Temp: The daily finished water temperature or the lowest temperature for the day.
- Lowest Free Chlorine (mg/L): This is the lowest disinfectant residual concentration measured each day water is served to the public. As long as the lowest residual concentration remains at or above the 4-log minimum residual level, adequate treatment is ensured. If the lowest residual concentration is below the 4-log minimum residual level, notify the Department as soon as possible but no later than by the end of the next business day after dropping below this level and attach the results of the grab samples (including dates and times) collected every 4 hours to this form and include the duration of time below this minimum level. Please note that any measured disinfectant residual below 0.2 mg/L is highly questionable and generally considered by the Department as non-detectable or zero.
- **Unless the system can sufficiently prove to the Department that the system was effectively and reliably achieving at least 4-log virus inactivation, the Ground Water Rule treatment technique requirement in 10 CSR 60-4.025(5)(C) will be violated if the disinfectant residual drops below the 4-log minimum residual for four hours or more.**
- **NOTE:** The minimum disinfectant residual required for 4-log virus inactivation at the entrance to distribution may be less than 0.5 mg/L free available chlorine or 1.0 mg/L chloramines required by 10 CSR 60-4.055(3), but does not authorize distribution of water with a free chlorine level less than 0.5 mg/L or a chloramine level less than 1.0 mg/L. **If the measured disinfectant residual at the entrance to distribution drops below 0.5 mg/l free available chlorine (or 1.0 mg/L chloramines measured as total chlorine residual if applicable) for four hours or more, the disinfection requirement in 10 CSR 60 4.055(3) will be violated.**

Systems serving more than 3,300 persons

Systems serving more than 3,300 persons must continuously monitor disinfection residual at an approved location and record the lowest disinfectant concentration each day. This applies to each day water from the source is served to the public. Grab sampling every four hours is required when continuous monitoring equipment fails or is taken offline. Monitoring equipment must be repaired and returned to service within 14 days.

Systems serving 3,300 persons or less

Systems serving less than 3,300 persons must monitor the disinfectant residual concentration daily at an approved location and record the disinfectant concentration for each day water from that source is served to the public. The disinfectant residual concentration shall be measured in a daily grab sample taken during the hour of peak flow, or at another time approved by the department. If the residual concentration measured in any grab sample measurement is less than the minimum required by the department, the system operator must collect grab samples taken at four-hour intervals until the residual disinfectant concentration is restored to the required level. Systems in this category have the option of installing and using continuous monitoring equipment. If systems monitor continuously, they must also meet the same monitoring requirements specified for systems serving more than 3,300 people.

Operational Monitoring

10 CSR 60-4.080 sets minimum operational monitoring requirements. In some cases the monitoring may be more frequent than the four-hour intervals cited above. The requirements cited here do not supersede any other regulation that may require more frequent monitoring. Note: The report must be submitted by the tenth day of the following month. For example, the report for January must be submitted by Feb. 10. Retain copies of completed reports for your records.