

THIS POLICY DOES NOT HAVE THE FORCE OF LAW

Chlorine monitoring and compliance tracking for ground water systems

Division: DDAGW
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I. PURPOSE:

The purpose of this policy is to provide the Division of Drinking and Ground Waters' (DDAGW) interpretation of certain requirements of Ohio Administrative Code (OAC) rule 3745-83-01 regarding monitoring and reporting for chlorine residual. This policy is intended to assist community and major noncommunity public drinking water systems that use ground water as a source and DDAGW staff who monitor compliance of those systems.

II. BACKGROUND:

Community and major noncommunity public drinking water systems are required by paragraph (B) of OAC rule 3745-83-01 to maintain a minimum chlorine residual of 0.2 milligrams per liter free chlorine (or 1.0 mg/l combined chlorine) at representative points throughout the distribution system. They are also required under paragraph (E) of that rule to report daily water treatment information and information on chemical application to the Ohio EPA. These requirements reflect the critical importance that proper maintenance of a disinfection residual plays in ensuring delivery of safe drinking water to consumers.

Public water systems often raise questions about monitoring chlorine residuals on weekends and holidays. Other questions arise about locating "representative points" for monitoring chlorine residual and monitoring for satellite systems. Also, because the rule provides flexibility to the Director to specify the amount and detail of information that is reported to DDAGW on a monthly basis, the response by district office staff to reported low chlorine residuals or lack of chlorine residual monitoring has not always been uniform. Therefore, this policy has been issued to help public water systems maintain compliance by answering questions frequently raised and to provide direction to DDAGW staff on responding to reported low chlorine residuals or lack of chlorine residual monitoring to promote consistent application of the rule requirements.

II. POLICY:

The Director of Ohio EPA requires, for compliance with paragraph (E) of OAC rule 3745-83-01, that public water systems report results of free chlorine or combined chlorine residual monitoring on a daily basis including weekends and holidays. The Agency provides Form 5002 (Plant - Distribution Monthly Operation Report) with instructions for reporting operations information, including chlorine residual concentrations. The instructions for Form 5002 require "daily" monitoring based on a seven (7) day week, and require disinfection residuals in the distribution system to be monitored daily whenever water is

available to a consumer even though the system is not producing water. However, the instructions for Form 5002 do not address some other commonly asked questions so the following clarifications are provided to assist community and major noncommunity public drinking water systems that use ground water as a source.

1. Use of continuous chlorine recorders
Water systems may use continuous recorders with printout capabilities for monitoring chlorine residual on weekends and holidays for monitoring the plant tap and distribution. The installation of a continuous monitor will be evaluated on a case by case basis. If accepted, the monitor/recorder must be checked weekly against a field kit and both results noted in an operational log.
2. Satellite water systems
Satellite water systems that do not supplement chlorine do not have to collect a chlorine residual for a plant tap.
3. Chlorine monitoring when water is not being served
Systems that are not serving water do not have to monitor for residual chlorine, such as schools on holidays.
4. Representative points for chlorine residual monitoring
Chlorine residual is to be measured at representative points throughout the distribution system as required by OAC rule 3745-83-01. All service connections are considered to be representative points for the purpose of chlorine residual monitoring. A fire hydrant is not considered to be an appropriate monitoring location. A public water system is required to report the lowest chlorine residual on the monthly operating report.
5. Evaluation of reported chlorine residual monitoring
Ohio EPA staff who evaluate operations information reported by public water systems should call a water system whenever three days out of a month are below the minimum required chlorine residual or the water system failed to monitor. The water system should be informed of the need to correct their chlorine problem. Failure to correct this deficiency by the third month in a running 12 month period will result in the district issuing a violation letter to the water system for failure to maintain the minimum chlorine residual, failure to monitor for chlorine residual or failure to submit the required report, as appropriate. The violation letter will be sent every month thereafter until the problem is corrected.

IV. HISTORY:

The Division of Drinking and Ground Water initially issued this policy August 23, 2004.