

The New Federal Arsenic Rule

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On January 23, 2006 the new federal arsenic rule went into effect. The rule lowers the maximum contaminant level (MCL) for arsenic in drinking water from 0.050 milligrams per liter (mg/L) to 0.010 mg/L. New York State is currently in the process of adopting the rule into its regulations. Until the rule is adopted by the State and the State receives primary enforcement responsibility from the U.S. Environmental Protection Agency (USEPA), the New York State Department of Health (NYSDOH) will be enforcing the provisions of the rule through an agreement with the USEPA.

Previously, the arsenic rule applied only to community water systems. The new rule, however, applies to both community water systems (CWS) and non-transient, non-community (NTNC) water systems. In New York State, the 0.010mg/L MCL will likely be applied to also non-community (NC) systems when the State arsenic rule is completed.

Monitoring Requirements

The monitoring requirements for the new arsenic rule are different for ground water systems and surface water systems, and can be a bit complicated if you are considering using grandfathered data, which is allowed by the new rule.

All drinking water systems subject to the arsenic rule must collect monitoring samples at each entry point to the distribution system. Ground water systems must sample once every three years, and must collect their initial compliance sample(s) by December 31, 2007. Surface water systems must sample once per year, and must collect their initial compliance sample(s) by December 31, 2006. If results from a sampling point show an arsenic concentration greater than 0.010 milligrams per liter (mg/L) (rounded to the nearest 0.001 mg/L), the system must increase the monitoring frequency to quarterly at that sampling point until the system is reliably and consistently below the MCL.

Compliance Determination

An MCL violation occurs when one year of quarterly sampling shows a running annual average (RAA) greater than 0.010 mg/L. The exception here is if any sample result will cause the RAA to exceed 0.010 mg/L at any sampling point. In this case, the system would be out of compliance immediately. If a system does not collect the required samples, compliance will be based on the RAA of the samples collected.

Grandfathered Data

Systems may use grandfathered data for their initial compliance sample. For ground water systems, grandfathered data refers to monitoring samples collected between January 1, 2005 and January 22, 2006. For surface

water systems, grandfathered data refers to monitoring samples collected between the three-week period from January 1, 2006 to January 22, 2006. If grandfathered data are used and the analytical result is greater than 0.010 mg/L, that system will be in violation of the MCL on January 23, 2006. In addition, if using grandfathered data, the data must have been analyzed using one of the laboratory methods approved by the USEPA for determining compliance with the new arsenic MCL of 0.010 mg/L.

Laboratory Methods

In the new arsenic rule the USEPA has withdrawn approval of Method 200.7 and SM 3120B as analytical methods that can be used to determine compliance with the revised arsenic MCL. The reason for withdrawing these methods is that the detection limits are not low enough to determine compliance with a 0.010 mg/L MCL. For determining compliance with the revised MCL, samples must be analyzed using one of the following methods: EPA 200.8, EPA 200.9, SM 3113B, SM 3114B, ASTM D-2972-93C, and ASTM D-2972-93B.

Reporting and Notification Requirements

As a public water system (large or small) it is your responsibility to keep your customers and the State informed. If your system has a monitoring or reporting violation, you must notify the State within 48 hours of when the violation occurs. Your customers must be notified within a year.

If your system has an MCL violation, you must report the violation to the State within 48 hours, and your customers must be notified within 30 days.

If your system is in compliance, you must report results and the RAA to the State within 10 days after the end of the month in which the sample was taken.

If your system is required to complete an Annual Water Quality Report (AWQR), you must include a statement about arsenic if monitoring results exceed 0.005 mg/L.

Additional Information

For more information on the new arsenic rule, please contact your local health department or the NYSDOH. In addition, a useful tool for helping small systems understand and achieve compliance with the new arsenic rule is the USEPA guidance document, "Complying with the Revised Drinking Water Standard for Arsenic: Small Entity Compliance Guide". This guide provides sample worksheets to help systems organize data, and provides guidance for small systems on their selection of appropriate compliance options. The guide can be downloaded from the USEPA's website site at http://www.epa.gov/safewater/arsenic/pdfs/ars_final_app_f.pdf. ♠