

## Information for Public Water Systems on Recent Updates to Disinfection Byproducts Monitoring

New changes to the Disinfectants/Disinfection Byproducts (D/DBP) Rule may affect your water system. **Please read the following guidance closely.** If you have any questions, refer to the contact information listed at the end of this document.

The D/DBP rule refers not only to required Total Trihalomethanes (TTHM) and Haloacetic Acids, five (HAA5) monitoring, but covers a wide range of monitoring for other disinfectant byproducts, disinfectants and DBP precursors.

### Why are updates to DBP monitoring necessary?

The D/DBP rule updates (Stage 2) are an extension of existing DBP monitoring (Stage 1). The rule updates further limit potential health effects from disinfectants and their byproducts. As many DBPs continue to form in the distribution system, levels in drinking water may vary significantly from one point to another. DBP levels are typically higher in surface water systems because surface waters usually contain higher DBP precursor levels and require stronger disinfection. Limiting the levels of DBPs in your water system may require you to adjust your current operations, such as making operational improvements at the plant or in the distribution system, modifying current treatment operations to remove more DBP precursors, or upgrading or installing treatment.

### What are my monitoring requirements?

Water systems will begin monitoring according to the following table:

Population	Compliance Monitoring Begins:
50,000 or greater	January 1, 2012
Less than 50,000*	January 1, 2013

\*if your water system has a population below 50,000 and buys or sells to a water system with a population greater than 50,000, you begin monitoring on 1/1/2012.

### Where do I sample and how often?

Stage 1 determined the number of sampling locations and frequency of monitoring on the number of treatment plants, the type of source water, and population.

Stage 2 determines the number of sampling locations from only source water type and population:

Population	Monitoring Frequency	Number of Samples to Collect
<b>SURFACE WATER</b>		
<500	once per year	2**
500-3,300	every 90 days	2**
3,301-9,999	every 90 days	2
10,000-49,999	every 90 days	4
50,000-249,999	every 90 days	8
250,000-999,999	every 90 days	12
1,000,000-4,999,999	every 90 days	16
<b>GROUND WATER</b>		
<500	once per year	2**
500-9,999	once per year	2
10,000-99,999	every 90 days	4
100,000-499,999	every 90 days	6
>500,000	every 90 days	8

\*\*Water systems serving the populations indicated may choose to monitor TTHMs at the location with the highest TTHM concentration and HAA5 at the location with highest HAA5 concentration, as determined by the Initial Distribution System Evaluation (IDSE), and satisfying the 2 location requirement. If your highest TTHM and HAA5 concentrations occur at the same location, sampling at one location for both TTHM and HAA5 satisfies the requirement for two locations.

If your water system was granted an IDSE waiver: continue to monitor at the location you always have for both TTHM and HAA5. This one location will satisfy the requirement.

**Sample Collection Note:** 'Quarterly' monitoring is now required **90 days** apart. Regular sample collection provides a more accurate representation of the water quality. Water systems must choose a month and week for sample collection. A +/- 5 day range of every 90 days is allowed, as long as samples are collected in each calendar quarter. 'Monthly' monitoring for total organic carbon (surface water systems only) is now required every **30 days**. A range of +/- 3 days is allowed by the rule as long as samples are collected in each calendar month.

Be advised: TTHM and HAA5 samples should be collected under *normal operating conditions*, meaning the conditions representative of the water typically delivered to consumers. Refer to OAC 3745-81-01 for a complete definition and examples.

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## **Am I required to develop a TTHM/HAA5 sample monitoring plan?**

Yes. If your water system submitted an IDSE report, you chose Stage 2 compliance monitoring locations as part of the IDSE reporting process.

If your water system did not submit an IDSE report, or if your system received an IDSE waiver (either a very small system waiver or a 40/30 certification), you may be able to continue monitoring for TTHM and HAA5 at the location(s) that you have always collected samples. However, some systems may need additional or different locations to comply with Stage 2 TTHM and HAA5 monitoring requirements. For help completing a TTHM/HAA5 sample monitoring plan, refer to additional guidance and templates at <http://epa.ohio.gov/ddagw/ddbp.aspx>.

All water systems shall maintain and make available a copy of the plan for review by Ohio EPA and the public. Surface water systems are required to submit a copy of their sample monitoring plan to Ohio EPA.

Minimum information required as part of the plan includes:

- **monitoring locations** (both a location address and a unique monitoring point code)
- **monitoring date(s):**
  - Monitoring *every 90 days*: choose a projected week and month, 90 days apart to sample.
  - Monitoring *once per year*: choose a projected sampling week and month between July and September to sample.

Any changes to a water system's distribution require updating the plan as soon as possible following completion of the changes. Surface water systems shall submit a new copy to Ohio EPA following any sample monitoring plan changes.

## **Are there changes to the TTHM and HAA5 MCLs?**

No. The MCLs for TTHM and HAA5 continue to be 0.080 mg/L and 0.060 mg/L, respectively.

However, the calculation that determines MCL compliance is changing. Stage 1 based compliance with TTHM and HAA5 MCLs on a running annual average of all samples collected during a four-quarter time period. Stage 2 modifies the concept, introducing a *locational running annual average*: each TTHM/HAA5 monitoring location in your water system will have a running annual average and will have to meet the MCLs.

## **Is there anything else?**

Yes. An early warning system to alert water systems to a potential MCL exceedance was included as part of the Stage 2 D/DBP Rule and is referred to as Operational Evaluation Levels (OELs). OELs are based on the results of three quarters of monitoring and will allow water systems to make operational adjustments before an MCL is exceeded. More information regarding OELs will be available soon on the Ohio EPA webpage.

## **If I have questions, who should I call?**

Your local Ohio EPA district office inspector is always a good resource for answers to your questions.

Compliance with TTHM and HAA5 monitoring and MCLs is determined by central office in Columbus and welcomes your questions:

**Compliance Assurance Section**  
(614) 644-2752