

**Compliance Monitoring Plan - Short Form**  
**for the Stage 2 Disinfectants and Disinfection Byproducts Rule**

This “Short Form” can be used by systems meeting one of the following criteria:

- Purchase surface water or ground water under the direct influence of surface water and serve a population of less than 50,000
- Treat a ground water source and serve a population of less than 100,000
- Purchase treated ground water and serve a population of less than 100,000

Date Submitted: \_\_\_\_\_

**PART 1 - General System Information**

<b>Water System Name:</b>				<b>PWSID#:</b>	
<b>Mailing Address:</b>					
<b>Contact Person:</b>		<b>Phone:</b>		<b>Email:</b>	
<b>Source Water Type:</b>	<input type="checkbox"/> <b>Surface Water (SW)/GWUDI</b> <input type="checkbox"/> <b>Ground Water (GW) (wells)</b> <input type="checkbox"/> <b>Purchase (SW/GWUDI)</b> <input type="checkbox"/> <b>Purchase (GW)</b>			<b>Current Population Served:</b>	
	<small>*GWUDI – Ground water sources that have been determined to be under the direct influence of surface water.</small>				

**PART 2 - Sample Site Information – Total Trihalomethanes (TTHM) / Haloacetic Acids (HAA5)**

Sample Point ID	Site Location or Address	Sample Type	Justification <sup>1</sup>	Reduced Monitoring Location? <sup>2</sup>
B01		High TTHM <input type="checkbox"/> High HAA5 <input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No
B02		High TTHM <input type="checkbox"/> High HAA5 <input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No
B03		High TTHM <input type="checkbox"/> High HAA5 <input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No
B04		High TTHM <input type="checkbox"/> High HAA5 <input type="checkbox"/>		<input type="checkbox"/> Yes <input type="checkbox"/> No

<sup>1</sup> Provide the reason for the selection of a specific sample location. (*i.e.*, “High TTHM”: Highest TTHM levels expected at this location based on distribution system modeling and special sampling).

<sup>2</sup> Even if a system qualifies for reduced compliance monitoring, the monitoring plan must include the required number of routine monitoring sites (under the Stage 2 DBPR) and identify which locations will be used for reduced monitoring.

**PART 3 - Proposed Schedule & Compliance Calculations**

Parameters: **Total Trihalomethanes (TTHM) / Haloacetic Acids (HAA5)**

*Required:* if water contains any disinfectant or oxidant

*Report to State:* same as monitoring frequency

Monitoring Type	Monitoring Frequency	Total # of Monitoring Locations/Monitoring Period	Samples <sup>1</sup>	Schedule (e.g., 1 <sup>st</sup> Wk/Jul, 1 <sup>st</sup> Wk/Oct, etc.) <sup>2</sup>
Routine	Quarterly <input type="checkbox"/> Annually <input type="checkbox"/>		Individual Samples <input type="checkbox"/> Dual Sample Sets <input type="checkbox"/>	
Reduced <sup>3</sup>	Quarterly <input type="checkbox"/> Annually <input type="checkbox"/> Triennially <input type="checkbox"/>		Individual Samples <input type="checkbox"/> Dual Sample Sets <input type="checkbox"/>	
Increased <sup>4</sup>	Quarterly <input type="checkbox"/>		Dual Sample Sets <input type="checkbox"/>	

<sup>1</sup> Individual samples indicate that only one parameter, TTHM or HAA5, is being monitored at the monitoring locations. Dual sample sets indicate that both TTHM and HAA5 are being monitored at all monitoring locations.

<sup>2</sup> Schedules indicated for TTHM/HAA5 monitoring should be a specific week (*i.e.*, 1<sup>st</sup> Wk/Jul), ensuring that the compliance monitoring is scheduled during the peak historical month, as determined by historical DBP sampling results or as justified using other criteria such as the month of warmest water temperature. Systems on a quarterly schedule must monitor every 90 days.

<sup>3</sup> In addition to meeting the TTHM and HAA5 criteria for reduced monitoring, any system using surface water or GWUDI sources serving ≥ 500 people that want to reduce TTHM/HAA5 monitoring must also demonstrate a source water TOC running annual average is equal to or less than 4.0 mg/L (based on the most recent 4 quarters of monitoring), on a continuing basis, at each treatment plant treating surface water or GWUDI.

<sup>4</sup> Systems on increased monitoring are required to take dual sample sets at all locations.

Compliance Information:

Parameter	Compliance Location	Maximum Contaminant Level (MCL)
TTHM	Each Monitoring Site	MCL = 0.080 mg/L
HAA5	Each Monitoring Site	MCL = 0.060 mg/L
<p>Compliance Calculation:</p> <p><b>Quarterly Monitoring:</b> An MCL violation occurs if the Locational Running Annual Average (LRAA), computed quarterly for the most recent 4 quarters, at any monitoring location, exceeds the MCL, <u>or</u> if the LRAA calculated based on fewer than 4 quarters of data demonstrates that the MCL will be exceeded regardless of the monitoring results of subsequent quarters. If more than one sample is taken at a location in any given quarter, then those values are averaged to obtain that quarter's average for use in the LRAA calculation.</p> <p><b>Annual or Triennial Monitoring:</b> A system required to monitor annually or less frequently shall determine that each sample result is less than the MCL. If any single sample result exceeds the MCL, the system shall increase monitoring to dual sample sets once per quarter (taken every 90 days) at all locations. MCL compliance is then calculated as described for quarterly monitoring.</p>		

Operational Evaluation Level (OEL) Information:

Parameter	Compliance Location	Maximum OEL Level
TTHM	Each Monitoring Site	OEL = 0.080 mg/L
HAA5	Each Monitoring Site	OEL = 0.060 mg/L
<p>Compliance Calculation:</p> <p><b>Quarterly Monitoring:</b> Each quarter, public water systems shall calculate the TTHM and HAA5 Operational Evaluation Level (OEL) for each monitoring location to be aware of any pending follow-up activities as indicated below. The OEL for TTHM and HAA5 is the sum of the two previous quarters' results plus twice the current quarter's result, divided by 4.</p> $\text{OEL} = \frac{(2 \times \text{current quarter result}) + (\text{previous quarter result}) + (\text{quarter before previous quarter result})}{4}$ <p>If the TTHM OEL exceeds 0.080 mg/L, or the HAA5 OEL exceeds 0.060 mg/L at any monitoring location, the system shall conduct an operational evaluation to identify the cause of the exceedance and submit a written report of the evaluation to the North Carolina Public Water Supply Section no later than 90 days after being notified of the analytical result that causes the system to exceed the operational evaluation level. The written report must be made available to the public upon request.</p> <p><b>Annual or Triennial Monitoring:</b> OEL calculations are not required.</p>		

## **PART 4 - System Schematic and System Changes**

- A. Attach a map or drawing of your current distribution system. Include the location of any interconnections with other public water systems. Also, where applicable, designate on the map the locations of the following facilities and their 3-digit location code:
- Sources
  - Treatment Plants
  - Entry Points
  - Storage Facilities, including volume
  - Booster Stations
  - All compliance sample sites that are required under the Stage 2 DBPR
- B. Have there been any major changes to your distribution system since you last updated your Stage 2 DBP compliance monitoring plan?
- If Yes, explain (attach additional sheets if necessary).