STAGE 2 DISINFECTION BYPRODUCTS SAMPLE SITE PLAN INSTRUCTIONS

Determining Month of Peak Disinfection Byproduct (DBP) Formation: Many factors should be considered when determining your peak DBP formation month. The main driver of the formation of DBPs, total trihalomethanes (TTHMs) and haloacetic Acids (HAA5), is water temperature. August is typically the warmest month of the year, and therefore most water systems choose August as their peak DBP formation month. If your water system is a school, September is a typical peak DBP formation month, since it is the warmest month when school is in session. In some cases, other factors beyond water temperature should be considered such as if water age is dramatically higher in a certain month of the year due to low use or snow runoff in April or May contributes to a large spike in total organic material in the raw water.

Number of samples required and routine monitoring frequency: See table below.

Source Water Type	Population Size	Routine Monitoring Frequency	Monitoring Locations	TTHM Samples required *	HAA5 Samples required *	Reduced Monitoring Eligible?
Surface or GWUDI	< 500	Annual	1 **	1	1	No
	500 – 3,300	Quarterly	1 **	1	1	Yes
	3,301 – 9,999	Quarterly	2	2	2	Yes
	10,000 – 49,999	Quarterly	4	4	4	Yes
	50,000 – 249,999	Quarterly	8	8	8	Yes
	250,000 – 999,999	Quarterly	12	12	12	Yes
Ground Water	< 500	Annual	1 **	1	1	Yes
	500 – 9,999	Annual	2	2	2	Yes
	10,000 – 99,999	Quarterly	4	4	4	Yes

*** Systems collect both TTHM and HAA5 samples from each monitoring location, unless single analyte samples at two separate locations is allowed.**

**** System has option to collect TTHM and HAA5 from one location or single analyte samples from two separate locations**

Choosing Sample Sites**:** Alternate choosing between high TTHM and high HAA5 sample sites within the distribution system until the required number of monitoring locations has been met. High TTHM sites typically are where the water is oldest and chlorine residual is lowest. High HAA5 sites are typically near the ends of the distribution system too where the chlorine residual is low but above 0.2 mg/L or at mixing zones. Most systems with the option to sample both TTHM and HAA5 at one location or separately at two locations will probably find sampling at one location is justified since high TTHM and high HAA5 levels are at the same location based on the size and configuration of their water system**.**

Q: Can I continue to sample at my Maximum Residence Site from Stage 1?

A: In most cases, your Maximum Residence Site from Stage 1 is an appropriate Stage 2 sample site and may qualify you for immediate reduced monitoring under Stage 2.

Q: When do I sample?

A: All systems must sample in their peak DBP formation month. Quarterly must also sample at least every third month. Please sample according to your monitoring schedule on wqcdcompliance.com/schedules.

Send completed Sample Plan with a map to cdphe.drinkingwater@state.co.us or fax to 303-758-1398

STAGE 2 DISINFECTION BYPRODUCTS SAMPLE SITE PLAN

PWSID#: _____ System Name: _____

I, _____ have reviewed this Disinfectants and Disinfection Byproducts Rule sampling plan, and that the provided information is true and correct to the best of my knowledge.

Signature _____ Date _____ Revision? ☐

If the system was required to complete an Initial Distribution System Evaluation (IDSE) Report, monitoring must be conducted per the recommendations of the IDSE Report, unless changes have been approved by the Division.

Month of Peak Disinfection Byproduct Formation: _____

Number of Samples Required: _____ TTHM and _____ HAA5

Routine Monitoring Frequency: ☐ Quarterly ☐ Annual

STAGE 2 TTHM and HAA5 Sampling Site(s)		
State Sample Point ID (assigned by WQCD)	**Sample Site Name or Address**	**Analyte (single or both)**
(e.g. DBP004)	*------(e.g. 1500 Mesa Ridge Trail)------*	☒ TTHM ☒ HAA5
DBP____		☐ TTHM ☐ HAA5
DBP____		☐ TTHM ☐ HAA5
DBP____		☐ TTHM ☐ HAA5
DBP____		☐ TTHM ☐ HAA5
DBP____		☐ TTHM ☐ HAA5
DBP____		☐ TTHM ☐ HAA5
DBP____		☐ TTHM ☐ HAA5
DBP____		☐ TTHM ☐ HAA5

☐ Check box if all chosen sample sites have been monitored under the Stage 1 D/DBP Rule and represent the highest TTHM and HAA5 levels in the system.

Map of Stage 2 DBP Sample Sites:

Attach a map of the distribution system showing locations of all Stage 2 DBP sample sites as well as treatment plants and distribution storage tanks. Hand drawn schematics or aerial maps (Google Maps) are acceptable.