US Environmental Protection Agency Region 8

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https://www.epa.gov/region8-waterops

<u>Quarterly Stage 2 Disinfection Byproducts Rule (DBPR) Reporting Form for</u> Total Trihalomethanes (TTHMs) and Haloacetic Acids (HAA5s) - *Manual Calculations*

PWSID No:			SYSTEM NAME:						
DATE:			PREPARED BY:						
POPULATION SERVED:			TITLE:						
WATER SOURCE TYPE:			Groundwater		Surface Water		Both		
Sample Point:			**Note: One form per sample location.						
Sample Point Description:									
Samples Required to be collected:			TTHMs		HAA5s Peak Month				
Current Year									
Check One: 1st Quarter				2nd Quarter		3rd Quarter	4 th Quarter		
Report Due: On the 10th day of the following month, after the sample was collected.									
Locational Running Annual Average (LRAA)									
			Column C		Column D		Column E		
			Date Collected		Monthly Data		Locational Running		
	Column A Column B							Annual Average	
	Column A	Column D			Total TTHMs	Total HAA5s	TTHMs	HAA5s	
December 2 Occasions	Mandh	Vann	TTHM-	11445-	μg/L	μg/L	μg/L	μg/L	
Reporting Quarters 1st Quarter	Month	Year	TTHMs	HAA5s	1.0 -	r-o –	1.9 -	r·8 –	
2nd Quarter		,							
3rd Quarter		,							
4th Quarter									
For lab reporting of "Non-Detect", enter zero in Column C Locational Running Annual Average (LRAA) =									
Were the	last TTHMs sample result gr	L? If yes, complete the Operational Evaluation Level (OEL) section below:			Yes	No			
			y/L? If yes, complete the Operational Evaluation Level (OEL) section below:				Yes	No	
Operational Evaluation Level (OEL) - If required from above									
	Column F	Column G	Column H	Column I	Column J	Column K	Column L	Column M	
Quarter	TTHM (ug/L)	Multiply by	Projected		HAA5 (ug/L)	Multiply by	Projected		
Current Quarter		x 2 =		Is TTHM OEL		x 2 =		Is HAA5 OEL	
Previous Quarter		x 1 =	, ,	> 80 ug/L? If yes, fill out an		x 1 =		> 60 ug/L? If yes, fill out an	
2nd Previous Quarter		x 1 =		OER.*		x 1 =		OER.*	
	TTHM OEL (Sum divided by 4) =			Y / N	HAA5 OEL (Sur	n divided by 4) =		Y / N	

^{*}For the Operational Evaluation Report (OER) form, go to www2.epa.gov/region8-waterops. Then go to reporting forms. QUESTIONS? Contact DBP RULE MANAGER: Seth Tourney - tourney.seth@epa.gov - (303) 312-6579

INSTRUCTIONS FOR COMPLETING

Locational running annual average for Total Trihalomethane (TTHM) And Haloacetic Acids (HAA5s)

- 1. PWSID #: Enter the PWSID assigned to your public water system.
- 2. System Name: Enter the System Name.
- 3. Date: Enter the date that the final report is prepared.
- 4. Prepared by: Enter the name of the person completing the form.
- 5. Title: Enter title/position of individual preparing the form.
- 6. Population Served: Enter the number of people directly served within the limits of the distribution system represented in the DBP monitoring plan.
- 7. Water Source Type: Check the box that describes the type(s) of your water source(s).
- 8. Sample Point: Enter the Sample site ID code as provided in your monitoring and reporting requirements from EPA. Please note a separate form is required for each monitoring location.
- 9. Sample Point Description: Provide an address or description of the sampling location.
- 10. Samples Required to be collected: Check the box to the left of the DBP chemical group collected for this sample point location.
- 11. Peak Month: Enter the US EPA approved peak month.
- 12. Current year: Enter the four digits of the current year (i.e. 2019).
- 13. Check One: Check the box to the left of the current quarter.
- 14. Report Due: Report is due on the 10th day in the next month, after you collect your DBP samples.
- 15. Column A: Enter in the required months of sampling, as reflected on your US EPA DBP Monitoring Approval Letter.

The 1st quarter will begin with either January, February, or March.

16. Column B: Enter in the appropriate years to reflect the proper preceding quarters.

To do this, start with the current guarter (Step 13). Enter the current year in this row.

In the spaces above this row, write the current year. In the spaces below this row, write the previous year.

- 17. Column C: Enter the date of the sample collection.
- 18. Column D: Enter TTHM and HAA5 results for each month that samples were collected. If no samples collected, please leave the month blank,

If multiple samples were taken in the same month, please enter the average of all samples taken during the month.

Please note: The units are in ug/L or ppb. To convert mg/L to ug/L, multiple the value by 1000.

- 19. Column E: Average the values for the four quarters (Column D) to determine the LRAA values for TTHM/HAA5.
- 20. Were the last TTHMs sample result greater than 80 ug/L?: If ves. complete Steps 22 thru 24.
- 21. Were the last HAA5s sample results greater than 60 ug/L?: If yes, complete Steps 25 thru 27.

The Following Steps are required, if you answered "Yes" to either Steps 20 or 21.

- 22. Column F: Enter the TTHM values for the current quarter, previous quarter, and the quarter approximately 6 months earlier.
- 23. Column H: Multiply the values in Column F by the multiplication factors in Column G.

On the last line, determine the TTHM OEL by adding the three (3) values above in Column H and divide by 4.

- 24. Column I: Indicate yes, if the value is over 80 ug/L. Indicate no, if the value is equal to or less than 80 ug/L.
- 25. Column J: Enter the HAA5 values for the current quarter, previous quarter, and the quarter approximately 6 months earlier.
- 26. Column L: Multiply the values in Column J by the multiplication factors in Column K.

On the last line, determine the HAA5 OEL by adding the three (3) values in Column L and divide by 4.

- 27. Column M: Indicate yes, if the value is over 60 ug/L. Indicate no, if the value is equal to or less than 60 ug/L.
- 28. For Refernce Only: The formulas for the OEL caluculations are:

$$OEL_{TTHM} = \frac{2*TTHM_{current\ quarter} + TTHM_{previous\ quarter} + TTHM_{2nd\ previous\ quarter}}{4}$$

$$OEL_{HAA5} = \frac{2*HAA5_{current\ quarter} + HAA5_{previous\ quarter} + HAA5_{2nd\ previous\ quarter}}{4}$$