

**US Environmental Protection Agency Region 8**

Drinking Water Branch  
1595 Wynkoop Street  
Denver, CO 80202-1129

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

Disinfectants/Disinfection Byproducts Rule (DBP) Precursors - Form 4.4.1

**Stage 1 Total Organic Carbon Removal Ratios**  
**Enhanced Coagulation and Softening Treatment Plants**

PWS ID No.: _____				PLANT NAME: _____						
SYSTEM NAME: _____				PREPARED BY: _____						
PREPARED DATE: _____				TITLE: _____						
Check One (Use X):				<input type="checkbox"/> 1st Quarter	<input type="checkbox"/> 2nd Quarter	<input type="checkbox"/> 3rd Quarter	<input type="checkbox"/> 4 <sup>th</sup> Quarter			
Current Year _____				**Note: Four Digits (YYYY). No spaces. Numbers only.						
Report Due _____										

  

Reporting Quarters	Column A	Column B	Column C	Column D Source Water			Column E Treated Water		Column F Removal Performance	
	Month	Year	Plant Operating	Alkalinity mg/L	TOC mg/L	SUVA (Optional) L/mg-m	TOC mg/L	SUVA (Optional) L/mg-m	Actual TOC %	Compliance Ratio
	<i>1st Quarter</i>	January	Enter Year							
February		Enter Year								
March		Enter Year								
<i>2nd Quarter</i>	April	Enter Year								
	May	Enter Year								
	June	Enter Year								
<i>3rd Quarter</i>	July	Enter Year								
	August	Enter Year								
	September	Enter Year								
<i>4th Quarter</i>	October	Enter Year								
	November	Enter Year								
	December	Enter Year								
Running Annual Average (RAA) for your Compliance Removal Ratio										
Form Check:										
Preparer's Notes:										

  

**Resources:**

**Table 1: Actual TOC Removal Performance Requirements**

Source Water TOC, mg/L	Source Water Alkalinity, mg/L (as CaCO <sub>3</sub> )		
	0-60	>60-120	>120
>2.0 - 4.0	35%	25%	15%
>4.0 - 8.0	45%	35%	25%
>8.0	50%	40%	30%
APPROVED STEP 2 WAIVER	Not Applicable		

**Table 2: Specific Ultra Violet Absorbance (SUVA)**

SUVA Calculator		
UV254		cm-1
DOC		mg/L
SUVA		L/mg-m

$$SUVA(L/mg - m) = \left( \frac{UV_{254}(cm^{-1})}{DOC(mg/L)} \right) 100$$

## **INSTRUCTIONS FOR COMPLETING**

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

- 1. PWS ID No.:** Enter the Public Water System (PWS) Identification Number assigned by USEPA.
- 2. System Name:** Enter system legal name provided to USEPA when PWS ID assigned.
- 3. Prepared Date:** Enter the date that the final report is prepared.
- 4. Plant Name:** Enter the name of the treatment plant. If the plant has no name, please enter "Water Treatment Plant"
- 5. Prepared by:** Enter the name of the person completing the form.
- 6. Title:** Enter the Title/position of individual submitting the document.
- 7. Check One Quarter:** Place an X in the space to the left of the current quarter. Only X must be entered on this line.
- 8. Current Year:** Enter the current for the report. This should be in a four digit (YYYY) format.
- 9. Report Due:** This will automatically display the due date. The report must be submitted to R8DWU@epa.gov with the PWS ID # and "TOCA" in the subject line.
- 10. Column A:** This column displays the months of the year. This column will not change.
- 11. Column B:** This column will automatically populate depending on the submittal quarter (Step 7) and the year entered in Step 8. If problems occur, repeat Steps 7-8.
- 12. Column C:** If any water was delivered to the distribution system **during any part of the month**, this must indicate "Yes." Otherwise, please indicate "No."
- 13. Column D:** Enter the Alkalinity, TOC, or optional SUVA for the source water. Source water sampling must be conducted before any treatment or chemicals are added to the water.
- 14. Column E:** Enter the TOC or optional SUVA for the finished treated water. Finished water sampling is located at or before the combined filter effluent turbidity monitoring location.
- 15. Column F:** This will automatically display the removal performance for each month. The RAA compliance ratio will be displayed at the bottom.
- 16. Form Check:** In filling out the spreadsheet, the notes section will display automatic notes for the preparer to check before submitting the spreadsheet.
- 17. Preparer's Notes:** (Optional) The preparer may add notes here for documentation purposes.
- 18. Table 1:** For reference only.
- 19. Table 2:** This is a calculator for your own use. SUVA is Specific Ultra Violet Absorbance. DOC is dissolved organic carbon. UV254 is a measure of light absorbed by organic matter.