

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 4.4.5

**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 th 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 <i>(Optional)</i> L/mg-m	TOC mg/L	SUVA <i>(Optional)</i> L/mg-m	Actual TOC %	Compliance Ratio
<i>1st Quarter</i>	January									
	February									
	March									
<i>2nd Quarter</i>	April									
	May									
	June									
<i>3rd Quarter</i>	July									
	August									
	September									
<i>4th Quarter</i>	October									
	November									
	December									

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 ₃)		
	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

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."
Use the failure to monitor (FTM) option, if the plant was running, but no approved samples were collected.
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.