



Instructions Disinfection Byproduct Precursor Compliance Calculation Form

Results and Form Submission

This Form Does Not Need to be Submitted to the Department.

For Schedules, Additional Information, and Guidance Please Visit: <http://wqcdcompliance.com>.

General Information

- This is a Compliance Report for Disinfection Byproduct Precursors. Given the values, it will calculate the removal ratio including Alternative Compliance Criteria to help determine compliance for the system.
- This form applies to Systems that are Required to Monitor for Disinfection Byproduct Precursors.

Abbreviations/Acronyms

- N/A: Not Applicable.
- NaN: Not a Number.
- ACC: Alternative Compliance Criteria.
- mg/L: Milligrams per Liter.
- ug/L: Micrograms per Liter.
- CFE: Combined Filter Effluent.
- DOC: Dissolved Organic Carbon.
- TOC: Total Organic Carbon.
- SUVA: Specific Ultraviolet Absorption.
- RAA: Running Annual Average.
- LRAA: Locational Running Annual Average.

TABLE 11.24-I STEP 1 TOC PERCENT REMOVAL REQUIREMENTS

	Source water alkalinity, mg/L as CaCO ₃		
	0-60	>60-120	>120
Source water TOC, mg/L	Required step 1 TOC percent removal		
>2.0-4.0	35.0	25.0	15.0
>4.0-8.0	45.0	35.0	25.0
>8.0	50.0	40.0	30.0



DBP Precursor Compliance Calculation Form

Main Form Information

1. PWS ID: Enter the Public Water System (PWS) Identification assigned by the Colorado Department of Public Health and Environment (CDPHE). This may be found on your [monitoring schedule](#).
2. System Name: Enter system legal name provided to CDPHE when PWS ID assigned.
3. Facility ID: Enter the Treated Water TOC Facility Identification assigned by CDPHE. This may be found on your [monitoring schedule](#).
4. Contact Person: The person at the PWS able to answer questions about these samples.
5. Phone Number or Email #: The phone number or email of the contact person.
6. Compliance Quarter - Year: The calendar quarter and year of these results, e.g. 2nd Quarter (April - June) - 2014.
7. Year Column: The calendar year the data was collected.
8. Source Water Alkalinity Column: The paired values of the Source Water Alkalinity in mg/L.
9. Source Water TOC Column: The paired values of the Source Water TOC in mg/L.
10. Treated Water TOC Column: The paired values of the Treated/Finished Water TOC in mg/L.
11. Source Water SUVA Column: The paired values of the Source Water SUVA in L/mg-M.
12. Treated Water SUVA Column: The paired values of the Treated/Finished Water SUVA in L/mg-M.
13. TTHM Column: The Average of all Distribution System Sample Sites for TTHMs for the specified calendar quarter.
14. HAA5 Column: The Average of all Distribution System Sample Sites for HAA5s for the specified calendar quarter.

Tips, Tricks, and Tidbits

1. What is Alternative Compliance Criteria (ACC)?
 1. If the required LRAA minimum removal ratio of 1.00 is not met, but the System meets at least one of the ACC then the System would still be in compliance. The six most common alternatives are supplied on the form.
2. How do I calculate SUVA?
 1. The calculation for SUVA is: $SUVA (L/mg-M) = UV-254 (m^{-1}) / DOC (mg/L)$
3. My calculations don't seem to be working, what should I do?
 1. Save the file, close the file, and open. Sometimes the program gets "overloaded" and needs to be restarted.
4. I take more than one set of samples per month, now what?
 1. The form will not handle this scenario. You can make a copy of the form and use both forms to calculate the Compliance Removal Ratio Column (the final column in the form). Using a calculator, or separate program, calculate the average of the individual rows across the two forms. For example, if your system collects 2 paired samples per month use two forms to enter the data. This would result in 24 Compliance Removal Ratios. Then calculate the average using all 24 Compliance Removal Ratios. Alternative Compliance Calculations would also need to be done separately.
5. I only take one set of samples per quarter, what should I do?
 1. Enter the data into the month the samples were collected in and leave the other months blank. The form will correctly calculate.