The monitoring forms for alternative compliance criteria #1 are:

- 1 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Source Water Total Organic Carbon (TOC).
- Quarterly Report to the Primacy Agency for Source Water Alkalinity and Total Organic Carbon (TOC) and Finished Water TOC for those Systems on an Alternative Compliance Criteria.
- Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Total Organic Carbon (TOC) for Reduced Monitoring</u> of Source Water Alkalinity and TOC and Finished Water TOC.

Alternative Compliance Criteria #1

Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Source Water Total Organic Carbon (TOC).

(The PWS must maintain a RAA of less than 2.0 mg/L for source water TOC to use this alternative compliance criteria for conventional systems in lieu of the TOC removal requirements for enhanced coagulation. The PWS must also report quarterly, the monthly levels of source water alkalinity and TOC and finished water TOC.)

Date: System	n/Treatment Plant		
	_ Filtration Technology		
Prepared By	(In	clude laboratory results	from the last quarter.)
Check one 1 st Quarter	Source Water Total Organic Carbon Monthly Data (mg/L)*	Source Water Total Organic Carbon Quarterly Average (mg/L)**	Source Water Total Organic Carbon Running Annual Average (mg/L)***
January of 20			
February of 20			
March of 20			
April of 20			
May of 20			
June of 20			
July of 20			
August of 20			
September of 20			
October of 20			
November of 20			
December of 20			
*C			

^{*}Sample must be taken at the source prior to any treatment including disinfectant application and must be taken on the same hour of the same day as the source water alkalinity and finished water TOC are taken.

^{**}Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, $(\underline{1.5 + 1.9 + 1.1}) = 1.5$ mg/L (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 mg/L, quarterly average for the 2^{nd} quarter was 1.2 mg/L, quarterly average for the 3^{rd} quarter was 1.1 mg/L and quarterly average for the 4^{th} quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)

Quarterly Report to the Primacy Agency for <u>Source Water Alkalinity and Total Organic Carbon (TOC) and Finished Water TOC</u> for those Systems on an Alternative Compliance Criteria.

(Conventional PWSs utilizing an alternative compliance criteria must also report source water alkalinity and TOC and finished water TOC. Systems on reduced monitoring from monthly to quarterly must also submit the report on the RAA of the finished water TOC.)

Requirements for Reduced	Monitoring have been met (y	/es/no)	
Date: System/T	reatment Plant		
PWSID #	Filtration Technology		
Prepared By		aboratory results	from the last quarter.)
	•	•	
	Alkalinity	TOC	TOC
Months of 20	Source	Source	Treated
	mg/L*	mg/L*	mg/L*
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

^{*}If the system is on reduced monitoring then only one sample of each is required per quarter. Samples for alkalinity and TOC at the source must be taken prior to any treatment including disinfectant application and finished water TOC sample must be taken at the combined filter effluent and prior to the addition of disinfectants (if possible). All three of these samples must be taken on the same hour of the same day.

Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Total Organic Carbon (TOC) for Reduced Monitoring</u> of Source Water Alkalinity and TOC and Finished Water TOC.

(Conventional PWSs may reduce their monitoring to once per quarter for source water alkalinity and TOC and finished water TOC if their RAA for finished water TOC is less than 2.0 mg/L for two years or less than 1.0 mg/L for one year.)

Date: System	n/Treatment Plant		
	_ Filtration Technology		
Prepared By	(In	clude laboratory results	from the last quarter.)
Check one 1st Quarter	Finished Water Total Organic Carbon Monthly Data (mg/L)*	Finished Water Total Organic Carbon Quarterly Average (mg/L)**	Finished Water Total Organic Carbon Running Annual Average (mg/L)***
January of 20			
February of 20			
March of 20			
April of 20			
May of 20			
June of 20			
July of 20			
August of 20			
September of 20			
October of 20			
November of 20			
December of 20			
	combined filter affluent and		

^{*}Sample must be taken at the combined filter effluent and prior to the addition of disinfectants (if possible) and must be taken on the same hour of the same day as the source water alkalinity and TOC are taken. Only one sample is required each quarter on reduced monitoring.

^{**}Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, (1.5 + 1.9 + 1.1) = 1.5 mg/L (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 mg/L, quarterly average for the 2^{nd} quarter was 1.2 mg/L, quarterly average for the 3^{rd} quarter was 1.1 mg/L and quarterly average for the 4^{th} quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)

The monitoring forms for alternative compliance criteria #2 are:

- 1 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Total Organic Carbon</u> (TOC).
- 2 Quarterly Report to the Primacy Agency for <u>Source Water Alkalinity and Total</u>
 <u>Organic Carbon (TOC) and Finished Water TOC</u> for those Systems on an
 Alternative Compliance Criteria.

Alternative Compliance Criteria #2

Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Total Organic Carbon</u> (TOC).

(The PWS must maintain a RAA of less than 2.0 mg/L for finished water TOC to use this alternative compliance criteria for conventional systems in lieu of the TOC removal requirements for enhanced coagulation. The PWS must also report quarterly, the monthly levels of source water alkalinity and TOC and finished water TOC.)

PWSID #	_ Filtration Technology	, 		
Prepared By	(Include laboratory results from the last quarter.)			
Check one 1 st Quarter	Finished Water Total Organic Carbon Monthly Data (mg/L)*	Finished Water Total Organic Carbon Quarterly Average (mg/L)**	Finished Water Total Organic Carbon Running Annual Average (mg/L)***	
January of 20				
February of 20				
March of 20				
April of 20				
May of 20				
June of 20				
July of 20				
August of 20				
September of 20				
October of 20				
November of 20				
December of 20				

Date: System/Treatment Plant

^{*}Sample must be taken at the combined filter effluent and prior to the addition of disinfectants (if possible) and must be taken on the same hour of the same day as the source water alkalinity and TOC are taken.

^{**}Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, $(\underline{1.5 + 1.9 + 1.1}) = 1.5$ mg/L (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 mg/L, quarterly average for the 2^{nd} quarter was 1.2 mg/L, quarterly average for the 3^{rd} quarter was 1.1 mg/L and quarterly average for the 4^{th} quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)

The monitoring forms for alternative compliance criteria #3 are:

- 1 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Source Water Total Organic Carbon (TOC).
- **Quarterly Report to the Primacy Agency for the Running Annual Average (RAA)** for Source Water Alkalinity.
- **3** Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Total Trihalomethanes (TTHMs).
- 4 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Haloacetic Acids Five</u> (HAA5).
- 5 Quarterly Report to the Primacy Agency for Source Water Alkalinity and Total Organic Carbon (TOC) and Finished Water TOC for those Systems on an Alternative Compliance Criteria.
- Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Total Organic Carbon (TOC) for Reduced Monitoring</u> of Source Water Alkalinity and TOC and Finished Water TOC.

Alternative Compliance Criteria #3 (1st of 4 pages) Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Source Water Total Organic Carbon (TOC).

(The PWS must maintain a RAA of less than 4.0 mg/L for source water TOC, meet the source water alkalinity RAA, meet the HAA5 RAA and meet the TTHM RAA to use this alternative compliance criteria for conventional systems in lieu of the TOC removal requirements for enhanced coagulation. The PWS must also report quarterly, the monthly levels of source water alkalinity and TOC and finished water TOC.)

Date: System	m/Treatment Plant		
	Filtration Technology		
Prepared By	(In	clude laboratory results	from the last quarter.)
Check one 1 st Quarter	Source Water Total Organic Carbon Monthly Data (mg/L)*	Source Water Total Organic Carbon Quarterly Average (mg/L)**	Source Water Total Organic Carbon Running Annual Average (mg/L)***
January of 20			
February of 20			
March of 20			
April of 20			
May of 20			
June of 20			
July of 20			
August of 20			
September of 20			
October of 20			
November of 20			
December of 20			

^{*}Sample must be taken at the source prior to any treatment including disinfectant application and must be taken on the same hour of the same day as the source water alkalinity and finished water TOC are taken.

^{**}Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, (1.5 + 1.9 + 1.1) = 1.5 mg/L (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1st quarter was 1.5 mg/L, quarterly average for the 2nd quarter was 1.2 mg/L, quarterly average for the 3rd quarter was 1.1 mg/L and quarterly average for the 4th quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)

Alternative Compliance Criteria #3 (2nd of 4 pages) Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Source Water Alkalinity.

(The PWS must maintain a RAA of greater than 60 mg/L for source water alkalinity, meet the source water TOC RAA, meet the HAA5 RAA and meet the TTHM RAA to use this alternative compliance criteria for conventional systems in lieu of the TOC removal requirements for enhanced coagulation.)

System/Treatment Plant

PWSID #	Filtration Techno	logy_		
	(Include laboratory results from the last quarter.)			
Check one 1 st Quarter	Source Water Alkalinity Monthly Data (mg/L)*	Source Water Alkalinity Quarterly Average (mg/L)**	Source Water Alkalinity Running Annual Average (mg/L)***	
January of 20				
February of 20				
March of 20				
April of 20				
May of 20				
June of 20				
July of 20				
August of 20				
September of 20				
October of 20				
November of 20				
December of 20				
		towant including disinfactant onn		

Date:

^{*}Sample must be taken at the source prior to any treatment including disinfectant application and must be taken on the same hour of the same day as the source and finished water TOCs are taken.

^{**}Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, (1.5 + 1.9 + 1.1) = 1.5 mg/L (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 mg/L, quarterly average for the 2^{nd} quarter was 1.2 mg/L, quarterly average for the 3^{rd} quarter was 1.1 mg/L and quarterly average for the 4^{th} quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)

Alternative Compliance Criteria #3 (3rd of 4 pages) Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Total Trihalomethanes (TTHMs).

(The PWS must maintain a RAA of less than 0.040 mg/L for TTHMs, meet the HAA5 RAA, meet the source water alkalinity RAA and meet the source water TOC RAA to use this alternative compliance criteria for conventional systems in lieu of the TOC removal requirements for enhanced coagulation.)

Date: System	n/Treatment Plant		
PWSID #			
Prepared By	(Include laboratory results	from the last quarter.)
Check one	Total	Total	Total
1 st Quarter(Report by April 10 th)	Trihalomethanes Monthly Data	Trihalomethanes Quarterly Average	Trihalomethanes Running Annual
2 nd Quarter(Report by July 10 th)	(mg/L)*	(mg/L)**	Average (mg/L)***
3 rd Quarter			
(Report by Oct 10 th) 4 th Quarter			
(Report by Jan 10 th)			
January of 20			
February of 20			
March of 20			
April of 20			
May of 20			
June of 20			
July of 20			
August of 20			
September of 20			
October of 20			
November of 20			
December of 20			

^{*}If more than one sample is taken in a particular month then those samples must be averaged, see TTHM worksheet. **Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, (1.5 + 1.9 + 1.1) = 1.5 mg/L (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 mg/L, quarterly average for the 2^{nd} quarter was 1.2 mg/L, quarterly average for the 3^{rd} quarter was 1.1 mg/L and quarterly average for the 4^{th} quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)

Alternative Compliance Criteria #3 (4th of 4 pages) Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Haloacetic Acids Five (HAA5).

(The PWS must maintain a RAA of less than 0.030 mg/L for HAA5, meet the TTHM RAA, meet the source water alkalinity RAA and meet the source water TOC RAA to use this alternative compliance criteria for conventional systems in lieu of the TOC removal requirements for enhanced coagulation.)

Date: System	m/Treatment Plant		
PWSID #	Filtration Technology		
Prepared By		(Include laboratory result	s from the last quarter.)
Check one 1 st Quarter	Haloacetic Acids Five Monthly Data (mg/L)*	Haloacetic Acids Five Quarterly Average (mg/L)**	Haloacetic Acids Five Running Annual Average (mg/L)***
January of 20			
February of 20			
March of 20			
April of 20			
May of 20			
June of 20			
July of 20			
August of 20			
September of 20			
October of 20			
November of 20			
December of 20			
ΨTC /1 1 '	. 1 ' .' 1 .1	.1 .1 1 .1	1 TT A A 7 1 1 4

^{*}If more than one sample is taken in a particular month then those samples must be averaged, see HAA5 worksheet. **Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, $(\underline{1.5 + 1.9 + 1.1}) = 1.5$ mg/L (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 mg/L, quarterly average for the 2^{nd} quarter was 1.2 mg/L, quarterly average for the 3^{rd} quarter was 1.1 mg/L and quarterly average for the 4^{th} quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)

The monitoring forms for alternative compliance criteria #4 are:

- 1 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Total Trihalomethanes (TTHMs).
- 2 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Haloacetic Acids Five</u> (HAA5).
- Quarterly Report to the Primacy Agency for Source Water Alkalinity and Total Organic Carbon (TOC) and Finished Water TOC for those Systems on an Alternative Compliance Criteria.
- 4 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Total Organic Carbon (TOC) for Reduced Monitoring</u> of Source Water Alkalinity and TOC and Finished Water TOC.

Alternative Compliance Criteria #4 (1st of 2 pages) Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Total Trihalomethanes (TTHMs).

(The PWS must maintain a RAA of less than 0.040 mg/L for TTHMs, meet the HAA5 RAA and use only chlorine for primary disinfection and for maintaining a residual in the distribution system to use this alternative compliance criteria for conventional systems in lieu of the TOC removal requirements for enhanced coagulation. The PWS must also report quarterly, the monthly levels of source water alkalinity and TOC and finished water TOC.)

Date: Syste	m/Treatment Plant		
PWSID #	Filtration Technology		
Prepared By		(Include laboratory result	s from the last quarter.)
Check one 1st Quarter	Total Trihalomethanes Monthly Data (mg/L)*	Total Trihalomethanes Quarterly Average (mg/L)**	Total Trihalomethanes Running Annual Average (mg/L)***
January of 20			
February of 20			
March of 20			
April of 20			
May of 20			
June of 20			
July of 20			
August of 20			
September of 20			
October of 20			
November of 20			
December of 20			
*If more than one cample is	takan in a particular month	than those complet must be a	varaged see TTHM workshoot

^{*}If more than one sample is taken in a particular month then those samples must be averaged, see TTHM worksheet. **Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, $(\underline{1.5 + 1.9 + 1.1}) = 1.5$ mg/L (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 mg/L, quarterly average for the 2^{nd} quarter was 1.2 mg/L, quarterly average for the 3^{rd} quarter was 1.1 mg/L and quarterly average for the 4^{th} quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)

Alternative Compliance Criteria #4 (2nd of 2 pages) Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Haloacetic Acids Five (HAA5).

(The PWS must maintain a RAA of less than 0.030 mg/L for HAA5, meet the TTHM RAA and use only chlorine for primary disinfection and for maintaining a residual in the distribution system to use this alternative compliance criteria for conventional systems in lieu of the TOC removal requirements for enhanced coagulation.)

Date: System	m/Treatment Plant		
PWSID #	Filtration Technology		
Prepared By		(Include laboratory result	s from the last quarter.)
Check one 1 st Quarter	Haloacetic Acids Five Monthly Data (mg/L)*	Haloacetic Acids Five Quarterly Average (mg/L)**	Haloacetic Acids Five Running Annual Average (mg/L)***
January of 20			
February of 20			
March of 20			
April of 20			
May of 20			
June of 20			
July of 20			
August of 20			
September of 20			
October of 20			
November of 20			
December of 20			
ΨTC /1 1 '	. 1 ' .' 1 .1	.1 .1 1 .1	1 TT A A 7 1 1 4

^{*}If more than one sample is taken in a particular month then those samples must be averaged, see HAA5 worksheet. **Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, $(\underline{1.5 + 1.9 + 1.1}) = 1.5$ mg/L (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 mg/L, quarterly average for the 2^{nd} quarter was 1.2 mg/L, quarterly average for the 3^{rd} quarter was 1.1 mg/L and quarterly average for the 4^{th} quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)

The monitoring forms for alternative compliance criteria #5 are:

- 1 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Source Water Specific Ultraviolet Absorption</u> (SUVA).
- 2 Quarterly Report to the Primacy Agency for <u>Source Water Alkalinity and Total</u>
 <u>Organic Carbon (TOC) and Finished Water TOC</u> for those Systems on an
 Alternative Compliance Criteria.
- Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Total Organic Carbon (TOC) for Reduced Monitoring</u> of Source Water Alkalinity and TOC and Finished Water TOC.

Alternative Compliance Criteria #5

Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Source Water Specific Ultraviolet Absorption (SUVA).

(The PWS must maintain a RAA of less than 2.0 L/mg-m for source water SUVA to use this alternative compliance criteria for conventional systems in lieu of the TOC removal requirements for enhanced coagulation. The PWS must also report quarterly, the monthly levels of source water alkalinity and TOC and finished water TOC.)

Date: System	n/Treatment Plant		
	Filtration Technology	у	
Prepared By(Include laboratory results from the last quarter.)			
Check one 1st Quarter	Source Water SUVA Monthly Data (L/mg-m)*	Source Water SUVA Quarterly Average (L/mg-m)**	Source Water SUVA Running Annual Average (L/mg-m)***
January of 20			
February of 20			
March of 20			
April of 20			
May of 20			
June of 20			
July of 20			
August of 20			
September of 20			
October of 20			
November of 20			
December of 20			
*CIIVA or IIV observation o	t 254 nm divided by the disc	alred organia carbon (DOC)	must be telson at the same

^{*}SUVA, or UV absorption at 254 nm divided by the dissolved organic carbon (DOC) must be taken at the same time and at the same location prior to the addition of disinfectants.

^{**}Calculation of Quarterly Average: If the number for Jan. was 1.5 L/mg-m, Feb. was 1.9 L/mg-m and March was 1.1 L/mg-m then, add all three numbers up and divide by 3. For example, (1.5 + 1.9 + 1.1) = 1.5 L/mg-m (this is your quarterly average.)

^{****}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 L/mg-m, quarterly average for the 2^{nd} quarter was 1.2 L/mg-m, quarterly average for the 3^{rd} quarter was 1.1 L/mg-m and quarterly average for the 4^{th} quarter was 1.8 L/mg-m then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 L/mg-m (this is your running annual average.)

The monitoring forms for alternative compliance criteria #6 are:

- 1 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Specific Ultraviolet Absorption</u> (SUVA).
- 2 Quarterly Report to the Primacy Agency for <u>Source Water Alkalinity and Total</u>
 <u>Organic Carbon (TOC) and Finished Water TOC</u> for those Systems on an
 Alternative Compliance Criteria.
- Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Total Organic Carbon (TOC) for Reduced Monitoring</u> of Source Water Alkalinity and TOC and Finished Water TOC.

Alternative Compliance Criteria #6

Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Finished Water Specific Ultraviolet Absorption (SUVA).

(The PWS must maintain a RAA of less than 2.0 L/mg-m for finished water SUVA to use this alternative compliance criteria for conventional systems in lieu of the TOC removal requirements for enhanced coagulation. The PWS must also report quarterly, the monthly levels of source water alkalinity and TOC and finished water TOC.)

Date: System	m/Treatment Plant				
PWSID #	Filtration Technology				
Prepared By(Include laboratory results from the last quarter.)					
Check one 1 st Quarter	Finished Water SUVA Monthly Data (L/mg-m)*	Finished Water SUVA Quarterly Average (L/mg-m)**	Finished Water SUVA Running Annual Average (L/mg-m)***		
January of 20					
February of 20					
March of 20					
April of 20					
May of 20					
June of 20					
July of 20					
August of 20					
September of 20					
October of 20					
November of 20					
December of 20					
*CINA III					

^{*}SUVA, or UV absorption at 254 nm divided by the dissolved organic carbon (DOC) must be taken at the combined filter effluent at the same time and at the same location prior to the addition of disinfectants. **Calculation of Quarterly Average: If the number for Jan. was 1.5 L/mg-m, Feb. was 1.9 L/mg-m and March was 1.1 L/mg-m then, add all three numbers up and divide by 3. For example, (1.5 + 1.9 + 1.1) = 1.5 L/mg-m (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1st quarter was 1.5 L/mg-m, quarterly average for the 2nd quarter was 1.2 L/mg-m, quarterly average for the 3rd quarter was 1.1 L/mg-m and quarterly average for the 4th quarter was 1.8 L/mg-m then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 L/mg-m (this is your running annual average.)

The monitoring forms for additional alternative compliance criteria #1 for systems that soften are:

- 1 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Finished Water Alkalinity.
- 2 Quarterly Report to the Primacy Agency for <u>Source Water Alkalinity and Total</u>
 <u>Organic Carbon (TOC) and Finished Water TOC</u> for those Systems on an
 Alternative Compliance Criteria.
- Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Total Organic Carbon (TOC) for Reduced Monitoring</u> of Source Water Alkalinity and TOC and Finished Water TOC.

Additional Alternative Compliance Criteria for Softening Systems #1 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Finished Water Alkalinity.

(For a PWS that practices softening that cannot meet the TOC removal requirements for enhanced coagulation and chooses this additional alternative compliance criteria must maintain a RAA of less than 60 mg/L for finished water alkalinity. The PWS must also report quarterly, the monthly levels of source water alkalinity and TOC and finished water TOC.)

Cystom/Tractment Dlant

PWSID # Filtration Technology (Include laboratory results from the last quarter (Include laboratory results from the last quarter (Report by April 10 th) 2 nd Quarter (Report by July 10 th) 2 nd Quarter (Report by July 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Report by Jan 10 th) 4 th Quarter (Include laboratory results from the last quarter (Include laboratory						
Check one 1st Quarter						
1st Quarter	Prepared By(Include laboratory results from the last quarter.)					
February of 20 March of 20 April of 20 May of 20 June of 20 July of 20 August of 20 September of 20 November of 20 November of 20 Movember of 20 November of 20 November of 20 November of 20 November of 20	1st Quarter	Alkalinity Monthly Data	Alkalinity Quarterly Average	Alkalinity		
March of 20 April of 20 May of 20 June of 20 July of 20 August of 20 September of 20 November of 20 November of 20	January of 20					
April of 20 May of 20 June of 20 July of 20 August of 20 September of 20 November of 20 November of 20	February of 20					
May of 20	March of 20					
June of 20	April of 20					
July of 20	May of 20					
August of 20 September of 20 October of 20 November of 20	June of 20					
September of 20 October of 20 November of 20	July of 20					
October of 20 November of 20	August of 20					
November of 20	September of 20					
	October of 20					
December of 20	November of 20					
	December of 20					

Doto

^{*}Sample must be taken after treatment

^{**}Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, (1.5 + 1.9 + 1.1) = 1.5 mg/L (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 mg/L, quarterly average for the 2^{nd} quarter was 1.2 mg/L, quarterly average for the 3^{rd} quarter was 1.1 mg/L and quarterly average for the 4^{th} quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)

The monitoring forms for additional alternative compliance criteria #2 for systems that soften are:

- 1 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Magnesium Removed</u> (1st of 2 pages).
- Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Magnesium Removed</u> (2nd of 2 pages).
- Quarterly Report to the Primacy Agency for Source Water Alkalinity and Total Organic Carbon (TOC) and Finished Water TOC for those Systems on an Alternative Compliance Criteria.
- 4 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Finished Water Total Organic Carbon (TOC) for Reduced Monitoring</u> of Source Water Alkalinity and TOC and Finished Water TOC.

Additional Alternative Compliance Criteria for Softening Systems #2 (1st of 2 pages) Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Finished Water Magnesium Removed.

(For a PWS that practices softening that cannot meet the TOC removal requirements for enhanced coagulation and chooses this additional alternative compliance criteria must calculate the amount of magnesium removed between the source water prior to any treatment and the finished water. The PWS must also report quarterly, the monthly levels of source water alkalinity and TOC and finished water TOC.)

Date: Sys	tem/Treatment Plant			
PWSID #	Filtration Techno	ology		
Prepared By(Include laboratory results from the last quarter.)				
Months of 20	A Source Water Magnesium (mg/L)*	B Finished Water Magnesium (mg/L)**	C Magnesium Removed (mg/L)*** (A-B)	
January				
February				
March				
April				
May				
June				
July				
August				
September				
October				
November				
December				

^{*}Sample must be taken at the source prior to treatment

^{**}Sample must be taken after treatment

^{***}Transfer this number to page two of this report to column 2 entitled "Magnesium Removed Monthly Data" for calculating the RAA of magnesium removed.

Additional Alternative Compliance Criteria for Softening Systems #2 (2nd of 2 pages) Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Finished Water Magnesium Removed.

(For a PWS that practices softening that cannot meet the TOC removal requirements for enhanced coagulation and chooses this additional alternative compliance criteria must maintain a RAA of greater than 10 mg/L for magnesium removed between the source water and treated water.)

Date: System	n/ i reatment Plant			
PWSID #	_ Filtration Technology			
Prepared By	(Include laboratory results from the last quarter.)			
Check one 1 st Quarter	Magnesium Removed Monthly Data (mg/L)* (from column C of page 1 of this report)	Magnesium Removed Quarterly Average (mg/L)**	Magnesium Removed Running Annual Average (mg/L)***	
January of 20				
February of 20				
March of 20				
April of 20				
May of 20				
June of 20				
July of 20				
August of 20				
September of 20				
October of 20				
November of 20				
December of 20				
*Samples must be taken at th	e source prior to treatment an	d after treatment to determine	e the amount of magnesium	

^{*}Samples must be taken at the source prior to treatment and after treatment to determine the amount of magnesium removed, see page 1 of this report.

^{**}Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, $(\underline{1.5 + 1.9 + 1.1}) = 1.5$ mg/L (this is your quarterly average.)

^{***}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 mg/L, quarterly average for the 2^{nd} quarter was 1.2 mg/L, quarterly average for the 3^{rd} quarter was 1.1 mg/L and quarterly average for the 4^{th} quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)

The monitoring forms for calculating TOC removed are:

- 1 Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Total Organic Carbon Removed</u> (1st of 2 pages).
- Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for <u>Total Organic Carbon Removed</u> (2nd of 2 pages).

Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Total Organic Carbon Removed (1st of 2 pages).

(PWSs utilizing conventional treatment must maintain a RAA of greater than 1.00 for the ratio of TOC removed to be in compliance.)

Has reduced monitoring been granted for source water alkalinity and TOC and finished water TOC (yes/no)?______

Alternative Minimum TOC Removal Step 2 (if applicable) (substitute this # in column

Alternative Min	imum TOC Removal Step 2	(if applicable) (substitute this # in column
C)		(custom) (custom)
Date:	System/Treatment Plant	
PWSID #	Filtration Techno	logy
Prepared By		_(Include laboratory results from the last quarter.)

Months of 20	A Alkalinit y Source mg/L*	B TOC Source mg/L*	C Percent TOC Removed (from table)	D TOC Finished (mg/L)*	E Actual TOC Removed (1-(D/B)) x 100	F Ratio of TOC Removed E/C**
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						

^{*}Samples for alkalinity and TOC at the source must be taken prior to any treatment including disinfectant application and finished water TOC sample must be taken at the combined filter effluent and prior to the addition of disinfectants (if possible). All three of these samples must be taken on the same hour of the same day.

**Transfer this data to the 2nd page of this report to column 2 entitled "Ratio of TOC Removed Monthly Data" and

calculate the RAA of the percent TOC removed. If it benefits the PWS, in any month that the system's source or treated water TOC is less than 2.0 mg/L, the source or treated water SUVA is less than or equal to 2.0 L/mg-m or a system that practicing softening removes at least 10 mg/L of magnesium hardness or lowers the alkalinity below 60 mg/L the system may assign a monthly value of 1.0 in lieu of the calculated value. A system able to meet any one of the six alternative compliance criteria is required to report the source water alkalinity and TOC and finished water TOC but not required to perform the TOC removal calculation.

Quarterly Report to the Primacy Agency for the Running Annual Average (RAA) for Total Organic Carbon Removed (2nd of 2 pages).

(PWSs utilizing conventional treatment must maintain a RAA of greater than 1.00 for the ratio of TOC removed to be in compliance.)

PWSID # Filtration Technolog	
PWSID # Filtration Technolog	<u></u>
Prepared By(I	nclude laboratory results from the last quarter.)

	1		
Check one 1st Quarter	Ratio of TOC Removed Monthly Data (from column F of the 1st page of this report)	Ratio of TOC Removed Quarterly Average (mg/L)*	Ratio of TOC Removed Running Annual Average (mg/L)**
January of 20			
February of 20			
March of 20			
April of 20			
May of 20			
June of 20			
July of 20			
August of 20			
September of 20			
October of 20			
November of 20			
December of 20			

^{*}Calculation of Quarterly Average: If the number for Jan. was 1.5 mg/L, Feb. was 1.9 mg/L and March was 1.1 mg/L then, add all three numbers up and divide by 3. For example, $(\underline{1.5 + 1.9 + 1.1}) = 1.5$ mg/L (this is your quarterly average.)

^{**}Calculation of Running Annual Average: If the number for quarterly average for the 1^{st} quarter was 1.5 mg/L, quarterly average for the 2^{nd} quarter was 1.2 mg/L, quarterly average for the 3^{rd} quarter was 1.1 mg/L and quarterly average for the 4^{th} quarter was 1.8 mg/L then, add all four quarterly average numbers up and divide this time by 4. For example, (1.5 + 1.2 + 1.1 + 1.8) = 1.4 mg/L (this is your running annual average.)