

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 8

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Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 DBPR)

State of Wyoming and Region 8 Tribal Lands

Operational Evaluation Report

For

CONSECUTIVE DRINKING WATER SYSTEMS

A. ADMINISTRATIVE								
PWS No.		Prepared Date						
PWS Name		Prepar		red By				
Title								
B. OPERATION EVAULATION LEVEL (OEL)								
This report is sul	bmitted for the	following mo	onitoring period.					
Check One:] 1 st Quarter	2 nd Quarter	3 rd Quarter	4 th Qu	uarter	Year		
Total Trihalomethanes Exceeded?				g/L u	g/L			
• If yes, w	hat was the san	nple collection	n date?					
• If yes, what was the amount of chloroform present in the sample result? Level mg/L					g/L u	g/L		
Haloacetic Acids	s (HAA5s) Exc	eeded? Y	es No	Level		☐ m	g/L u	g/L
• If yes, w	hat was the san	nple collection	n date?					
		at was the amount of monobromoacetic acid the sample result? Level mg/L			ng/L 🔲 u	ıg/L		
•	hat was the am n the sample re	nount of dibromoacetic acid			ng/L 🔲 u	ıg/L		
C. HISTORY								
1. In the previo	ous quarter, was	the OEL exc	eeded?					Yes No
 If yes, did your system submit an Operation Evaluation Report (OER)? If your system did submit an OER in the previous quarter, please skip to Section H. 					Н.	Yes No		

2. In past years, do your TTHMs normally exceed 0.080 mg/L during the quarter indicated above, reduce in the next quarter, and maintain the calculated locational running annual average (LRAA) value below 0.080 mg/L?					No Unsure		
• If yes, you must provide the following information from the previous year to demonstrate that TTHMs normally remain in compliance.							
Month 1							
Month 2	Year		TTHM Level	mg/L ug/L			
 Month 1 is the month of the sample collection date (from Section B) for the previous year. Month 2 is the following quarter during the previous year. If your data demonstrates a normal reduction of TTHMs to remain in compliance, then you may proceed directly to section H. 							
quarter indicated above, red	quarter indicated above, reduce in the next quarter, and maintain the calculated locational running annual average (LRAA) value below 0.060						
 If yes, you must provide normally remain in com 	_	nformation fr	om the previous ye	ar to demons	trate that TTHMs		
Month 1	Year		TTHM Level		\square mg/L \square ug/L		
Month 2	Year		TTHM Level				
 Month 1 is the month of the sample collection date (from Section B) for the previous year. Month 2 is the following quarter during the previous year. If your data demonstrates a normal reduction of HAA5s to remain in compliance, then you may proceed directly to section H. 							
D. SOURCE WATER	☐ If tl	his submittal	is an update from J	prior reports,	skip to Section H.		
1. Does the wholesaler provid system?	e treated groundy	water or surfa	ace water to your		GW Both		
2. Does your system purchase	water from more	than one wh	nolesaler?		☐ Yes ☐ No		
3. Do you have a copy of the p	ourchase agreeme	ent with your	wholesaler?		Yes No		
	1. Does your purchase agreement require water quality parameters at the point of connection with your system?						
*	• If yes, does it require the wholesaler to deliver water only in compliance with EPA safe drinking water regulations?						
at the point of connection	• If yes, does it require the wholesaler to meet more stringent water quality parameters at the point of connection, so your system can meet DBP requirements? (e.g. lower amounts of DBPs) Yes \(\subseteq \text{No} \)						
5. Have you informed your wl	nolesaler of your	elevated leve	els of DBPs?		☐ Yes ☐ No		
If yes, is your wholesald water quality delivered		some operati	ional changes to im	prove the	Yes No		
6. Have you seen changes in s	ource water qual	ity from you	r wholesaler?		Yes No		

7.	7. If you answered " <u>YES</u> " to questions above (Sections D.1-D.6), please explain:								
8.	Do you have TTHM or H	AA5 data at the p	oint c	of conne	ection with you	ır wh	olesaler?		☐ Yes ☐ No
	If yes, please provide the information here.								
	Month	Year TTHM Level mg/L					mg/L ug/L		
	Month	Year			TTHM Lev	el el			mg/L ug/L
	TC 1 41 77			At	the connection	n poii	nt with the	who	olesaler.
	• If yes, where was the T sample collected?	1HM and HAAS				_			e wholesaler side.
	sample conceted.			☐ Ne	ear the connect	ion p	oint, but or	ı the	e purchaser side.
9.	Do you have chlorine resi	dual data near the	e poin	t of con	nnection with t	he w	holesaler?		☐ Yes ☐ No
• If yes, what was the chlorine residual nearest to the sample collection date above? Date Measured									
If no, please measure the chlorine residual nearest to the point of connection. Date Measured									
10	. Do you have water tempe	rature data near	the po	oint of c	connection with	n the	wholesaler	?	☐ Yes ☐ No
	• If yes, what was the wan nearest to the point of o	_	alue			Date	e Measured	l	
	If no, please measure the water temperature value nearest to the point of connection. Date Measured				1				
11	. Do you have pH data near	the point of conn	ection	n with t	he wholesaler?	•			☐ Yes ☐ No
	• If yes, what was the pl of connection?	I value nearest to	the po	oint		Date	e Measured	1	
	• If no, please measure to point of connection.	he pH value neare	est to	the		Date	e Measured	l	
12	12. Do you have Total Organic Carbon (TOC) near the point of connection with the wholesaler?							Yes No	
	• If yes, what was the TO sample collection date		to the			Date	e Measured	1	
	• If no, please measure to point of connection.		irest t	o the		Date	e Measured	l	

E.	WATER TREATMENT If this subm	ittal is a	ın update fr	om prior reports,	skip to Section H.	
1.	Does your system provide any additional water treatm Section F.	☐ Yes ☐ No				
2.	Does your system provide additional chlorine (e.g. bo distribution system?	☐ Yes ☐ No				
	• If yes, what is the chlorine residual at the nearest location before additional chlorine is added? Date Measured					
	• If yes, what is the chlorine residual at the nearest location <u>after</u> additional chlorine is added?		mg/L	Date Measured		
3.	Have you changed the amount of chlorine dosage? e.g., trying to maintain higher chlorine residuals				☐ Yes ☐ No	
4.	Have you changed or added locations of disinfectant a process?	applicat	tion along the	ne treatment	Yes No	
5.	Does your system provide any treatment processes of	her thar	disinfection	on?	☐ Yes ☐ No	
6.	6. Have you made changes to any other chemical applications? e.g., change any chemicals (change coagulant type or filter aid), filter material, changes in application points, changing dosage of any chemical, etc.					
8.	For the chlorine product, please answer the following	:				
	• What is the name of manufacturer?					
	• What is the name of the product?					
9.	Do you have chlorine dosage data during the month o	of the O	EL exceeda	nce?	Yes No	
	 If yes, what was the average chlorine dosage nearest to the sample collection date above? 			Date Measured		
	• If no, please measure the chlorine dosage.			Date Measured		
	• If unable to calculate the dosage, please provide the	he follo	wing inform	nation:		
	Water amount pumped on TTHM/HAA5 sample collection day					
Amount of chlorine used on TTHM/HAA5 sample collection day					☐ lbs ☐ gal	

10. Do you have chlorine residual data at the point of entry (I your water treatment processes, during the month of the C		Yes No		
• If yes, what was the POE chlorine residual nearest to the sample collection date above?		Date Measured		
If no, please measure the POE chlorine residual. Indicate whether it is a total or free residual reading.		Date Measured		
11. Does your system adjust or boost chloramines (not free cldisinfection?	hlorine) for se	condary		Yes No
• If yes, what was the ammonium dosage nearest to the sample collection date above?		Date Measured		
• If yes and you don't know the ammonium dosage, please measure the ammonium dosage rate.		Date Measured		
• If yes, what was the POE chlorine residual to the sample collection date above?		Date Measured		
If no, please measure the POE total chlorine residual.		Date Measured		
12. Do you have Total Organic Carbon (TOC) data during the near the POE from your wholesaler?	e month of the	OEL exceeda	ance [Yes No
 If yes, what was the TOC during or closest to the sample collection date above? 		Date Measured		
• If no, please measure the POE finished water TOC.		Date		
if no, preuse measure the fold infished water foe.		Measured		
F. DISTRIBUTION SYSTEM	is an update f	<u> </u>	orts, ski	p to Section H.
F. DISTRIBUTION SYSTEM If this submittal 1. Have you added additional service areas (industry or residence.g., adding additional pipes or annexing additional areas of seresidence times	dential)? ervice which cou	rom prior repo	orts, ski	p to Section H. Yes No
F. DISTRIBUTION SYSTEM If this submittal 1. Have you added additional service areas (industry or residence, adding additional pipes or annexing additional areas of se	dential)? ervice which coulow water den	rom prior repo	orts, ski	
F. DISTRIBUTION SYSTEM If this submittal 1. Have you added additional service areas (industry or residence times 2. Have you experienced significant decreases or generally	dential)? ervice which coulow water den	rom prior repo	orts, ski	Yes No
F. DISTRIBUTION SYSTEM If this submittal 1. Have you added additional service areas (industry or residence, adding additional pipes or annexing additional areas of seresidence times 2. Have you experienced significant decreases or generally e.g., drought restrictions, industry opening/closing, population • If yes, what is the primary suspected cause of water demand changes? 3. Does your system have storage tanks in the distribution systems.	dential)? ervice which coulom water dential change ystem?	rom prior repo	orts, ski	Yes No
F. DISTRIBUTION SYSTEM If this submittal 1. Have you added additional service areas (industry or residence, adding additional pipes or annexing additional areas of seresidence times 2. Have you experienced significant decreases or generally e.g., drought restrictions, industry opening/closing, population • If yes, what is the primary suspected cause of water demand changes? 3. Does your system have storage tanks in the distribution system. • If yes, how many water storage tanks does your system.	dential)? ervice which con low water den change ystem? m have?	rom prior repo	orts, ski	Yes No Yes No
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F. DISTRIBUTION SYSTEM If this submittal 1. Have you added additional service areas (industry or residence, adding additional pipes or annexing additional areas of seresidence times 2. Have you experienced significant decreases or generally e.g., drought restrictions, industry opening/closing, population • If yes, what is the primary suspected cause of water demand changes? 3. Does your system have storage tanks in the distribution system. • If yes, how many water storage tanks does your system.	dential)? ervice which con low water den change ystem? m have?	rom prior repo		Yes No Yes No
F. DISTRIBUTION SYSTEM If this submittal 1. Have you added additional service areas (industry or residence, adding additional pipes or annexing additional areas of seresidence times 2. Have you experienced significant decreases or generally e.g., drought restrictions, industry opening/closing, population • If yes, what is the primary suspected cause of water demand changes? 3. Does your system have storage tanks in the distribution system in the distribution system in the distribution on the property of the primary suspected cause of water demand changes? • If yes, how many water storage tanks does your system in the distribution on the property of the primary suspected cause of water demand changes? • If yes, do any storage tanks in the distribution on the primary suspected cause of water demand changes? • If yes, do any storage tanks in the distribution on the primary suspected cause of water demand changes? • If yes, how many water storage tanks have condensation differences along the outer wall between upper and lower portions of the storage tank in the morning? Note: This could indicate	dential)? ervice which con low water den change ystem? m have? pipe into the st Yes \[\] No N/A cedures?	orage tank? Date Inspec		Yes No Yes No
F. DISTRIBUTION SYSTEM If this submittal 1. Have you added additional service areas (industry or residence times 2. Have you experienced significant decreases or generally e.g., drought restrictions, industry opening/closing, population • If yes, what is the primary suspected cause of water demand changes? 3. Does your system have storage tanks in the distribution system in the distribution	dential)? ervice which con low water den change ystem? m have? pipe into the st Yes \[\] No N/A cedures? (high and low).	orage tank? Date Inspect		Yes No Yes No Yes No Yes No

4.	Does your system have a regular distribution flushing pr	Yes No				
	• If yes, when was the last date that flushing operation					
	• If yes, have you been changing your distribution flus	Yes No				
5.	Do you have the chlorine residual near the disinfection b	☐ Yes ☐ No				
	location?					
	• If yes, what was the chlorine residual during or					
	closest to the DBP sample collection date above?	on date above? Date Measured				
	• If no, please measure the chlorine residual at the			Date Measured		
-	DBP sample location.	<u> </u>	4 (= =			
6.	Do you have water temperature data near the disinfection	n by	product (DI	3P) sample	☐ Yes ☐ No	
	location?					
	• If yes, what was the water temperature during or			Date Measured		
	closest to the DBP sample collection date above?					
	• If no, please measure the water temperature at the DBP sample location.			Date Measured		
7.	Do you have pH levels near the disinfection byproduct (DBP) sample lo	cation?	☐ Yes ☐ No	
	• If yes, what was the pH during or closest to the			Date Measured		
	DBP sample collection date above?			Date Wedsured		
	• If no, please measure the pH at the DBP sample			Date Measured		
	location.					
8.	Does your system provide additional chlorine (e.g. boos	ter cl	nlorination)	in the	☐ Yes ☐ No	
	distribution system?					
	• What is the chlorine residual at the nearest		mg/L	Date Measured		
	location before additional chlorine is added?					
	What is the chlorine residual at the nearest Application of the partial additional addition		mg/L	Date Measured		
0	location <u>after</u> additional chlorine is added?	1,,,,,,,,	a tha OEI	av a a dama a		
9.	Did you have customer complaints about water quality of month?	ıurın	g the OEL	exceedance	Yes No	
	If yes, what was the general nature					
	about water quality compliant?					
\mathbf{C}		lic o	n undata fr	om prior roports sl	zin to Section U	
	CONTROL PLAN If this submitta					
1.	Do you plan to work with your wholesaler to obtain imp		_ •		Yes No	
	• If yes, is the wholesaler modifying operational change				☐ Yes ☐ No	
	• If yes, does this require your system to increase flush			* *	Yes No	
2.	Do you plan to make operational adjustments to impro	ove tl	ne quality o	f your drinking	☐ Yes ☐ No	
water?						
	☐ Yes ☐ No					
	the sampling period indicated in Section A?					
	 If yes, are you planning to adjust your chlorine dosag 				☐ Yes ☐ No	
	• If yes, are you planning to increase your monitoring distribution system?	of cl	ilorine resid	duals in the	☐ Yes ☐ No	
	If yes, are you adjusting any chemical feeds?				Yes No	
	 If yes, are you planning to change any chemical prod 	lucts	?		Yes No	
	- 11 yes, are you plaining to change any elicinical proc	ucis	•			

Operational Evaluation Report – Consecutive Water Drinking Water System

 If yes, are you planning to adjust or replace any existing granular activated carbon (GAC) units? 	☐ Yes ☐ No
 If yes, are you planning to adjust any existing aeration processes in the storage tank or other parts of the system? 	☐ Yes ☐ No
If yes, are you planning to make changes to your flushing program?	Yes No
If yes, are you planning to make other changes to your operations?	Yes No
If you are planning other operational changes, please describe:	
3. Do you plan to make capital improvements or install upgrades to improve the quality of your drinking water?	☐ Yes ☐ No
 If yes, are you planning to replace or install new feed pumps? 	Yes No
 If yes, are you planning to add new chemicals to your system? 	Yes No
 If yes, are you planning to add aeration to any of your storage tanks? 	Yes No
• If yes, are you planning to install a new treatment process to address DBPs?	Yes No
 If yes, are you planning to switch your disinfectant? 	Yes No
 If yes, are you planning to add new water mains to reduce dead-ends? 	Yes No
• If yes, are you planning to install aeration equipment to any of your storage tanks?	Yes No
 If yes, are you planning other upgrades to your public water system? 	Yes No
4. Please provide a short-written statement about the control plan that your system will imple disinfection byproducts (DBPs):	ment to reduce

H. CONTROL PLAN UPDATES	
Only fill out this section, if you filled out an operational evaluation report (OER) in the previo data provided from Sections C.2 and C.3 instructed you to complete this section.	ous quarter, or the
1. Does your plan only rely on natural decreasing water temperatures to bring your locational running annual average (LRAA) calculated value within compliance?	☐ Yes ☐ No
2. Are you continuing with the exact same control plan in your previous report?	Yes No
 If yes, please provide an update on the status of accomplishing the items identified in t control plan: 	he previous
3. Are you planning to use other methods not identified in your previous report to lower your disinfection byproducts (DBPs)?	☐ Yes ☐ No
• If yes, are these new methods going to be implemented in the source watershed? (If yes, go back to Section D Source Water above)	☐ Yes ☐ No
• If yes, are these new methods going to be implemented in the water treatment process? (If yes, go back to fill out Section E Water Treatment above)	☐ Yes ☐ No
• If yes, are these new methods going to be implemented in the distribution system or the water storage tanks? (If yes, go back to fill out Section F Distribution System above)	☐ Yes ☐ No
4. Please provide a short-written statement about the control plan updates and status that you planning or implementing to reduce disinfection byproducts (DBPs):	r system is

Operational Evaluation Report – Consecutive Water Drinking Water System

I certify that the information in this entire report, including any attachments, is true and accurate to the best of my knowledge.

Signature: _______ Date: _______

Printed Name: _______ License #: _______

Contact Email address: _______ Contact Phone Number: _______

Send the completed report to EPA Region 8 no later than 90 days after being notified of the analytical results that caused you to exceed the operational evaluation level using one of the following:

Mail: Stage 2 DBPR Rule Manager Mail Code: 8WD-SDA US EPA Region 8 1595 Wynkoop Street Denver, CO 80202-1129

Fax: 1-(877) 876-9101 Attn: Stage 2 DBPR Rule Manager

R8DWU@epa.gov, and include your PWS ID# and DBP OEL in the subject line.

Email: