



**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 (Rev 3)

For

CONSECUTIVE DRINKING WATER SYSTEMS

A. ADMINISTRATIVE				
PWS No.		Prepared Date		
PWS Name		Prepared By		
		Title		
B. OPERATION EVALUATION LEVEL (OEL)				
This report is submitted for the following monitoring period.				
Check One:	<input type="checkbox"/> 1 st Quarter	<input type="checkbox"/> 2 nd Quarter	<input type="checkbox"/> 3 rd Quarter	<input type="checkbox"/> 4 th Quarter
Year				
Is the Total Trihalomethanes (TTHM) OEL Exceeded 0.080 mg/L (or 80 ug/L)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Level		<input type="checkbox"/> mg/L <input type="checkbox"/> ug/L
• If yes, what was the last sample collection date?				
• If yes, what was the TTHM present in the sample result?		Level		<input type="checkbox"/> mg/L <input type="checkbox"/> ug/L
• If yes, what was the amount of chloroform present in the sample result?		Level		<input type="checkbox"/> mg/L <input type="checkbox"/> ug/L
Is the Haloacetic Acids (HAA5s) OEL Exceeded 0.060 mg/L (or 60 ug/L)?	<input type="checkbox"/> Yes <input type="checkbox"/> No	Level		<input type="checkbox"/> mg/L <input type="checkbox"/> ug/L
• If yes, what was the last sample collection date?				
• If yes, what was the HAA5 sample result for the current quarter		Level		<input type="checkbox"/> mg/L <input type="checkbox"/> ug/L
• If yes, what was the amount of monobromoacetic acid present in the sample result?		Level		<input type="checkbox"/> mg/L <input type="checkbox"/> ug/L
• If yes, what was the amount of dibromoacetic acid present in the sample result?		Level		<input type="checkbox"/> mg/L <input type="checkbox"/> ug/L
C. HISTORY				
1. In the previous quarter, was the OEL exceeded?				<input type="checkbox"/> Yes <input type="checkbox"/> No
• If yes, did your system submit an Operation Evaluation Report (OER)?				<input type="checkbox"/> Yes <input type="checkbox"/> No
• If your system did submit an OER in the previous quarter, please skip to Section H.				<input type="checkbox"/> N/A

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?						<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure	
<ul style="list-style-type: none"> If yes, you must provide the following information from the previous year to demonstrate that TTHMs normally remain in compliance. 							
Month 1		Year		TTHM Level		<input type="checkbox"/> mg/L	<input type="checkbox"/> ug/L
Month 2		Year		TTHM Level		<input type="checkbox"/> mg/L	<input type="checkbox"/> ug/L
<ul style="list-style-type: none"> 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. 							
3. In past years, do your HAA5s normally exceed 0.060 mg/L during the quarter indicated above, reduce in the next quarter, and maintain the calculated locational running annual average (LRAA) value below 0.060 mg/L?						<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unsure	
<ul style="list-style-type: none"> If yes, you must provide the following information from the previous year to demonstrate that TTHMs normally remain in compliance. 							
Month 1		Year		HAA5 Level		<input type="checkbox"/> mg/L	<input type="checkbox"/> ug/L
Month 2		Year		HAA5 Level		<input type="checkbox"/> mg/L	<input type="checkbox"/> ug/L
<ul style="list-style-type: none"> 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 <input type="checkbox"/> If this submittal is an update from prior reports, skip to Section H.							
1. Does the wholesaler provide treated groundwater or surface water to your system?						<input type="checkbox"/> SW <input type="checkbox"/> GW <input type="checkbox"/> Both	
2. Does your system purchase water from more than one wholesaler?						<input type="checkbox"/> Yes <input type="checkbox"/> No	
3. Do you have a copy of the purchase agreement with your wholesaler?						<input type="checkbox"/> Yes <input type="checkbox"/> No	
4. Does your purchase agreement require water quality parameters at the point of connection with your system?						<input type="checkbox"/> Yes <input type="checkbox"/> No	
<ul style="list-style-type: none"> If yes, does it require the wholesaler to deliver water only in compliance with EPA safe drinking water regulations? 						<input type="checkbox"/> Yes <input type="checkbox"/> No	
<ul style="list-style-type: none"> 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) 						<input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Have you informed your wholesaler of your elevated levels of DBPs?						<input type="checkbox"/> Yes <input type="checkbox"/> No	
<ul style="list-style-type: none"> If yes, is your wholesaler going to make some operational changes to improve the water quality delivered to your system? 						<input type="checkbox"/> Yes <input type="checkbox"/> No	
6. Have you seen changes in source water quality from your wholesaler?						<input type="checkbox"/> Yes <input type="checkbox"/> No	

7. If you answered “ YES ” to questions above (Sections D.1-D.6), please explain:							
8. Do you have TTHM or HAA5 data at the point of connection with your wholesaler ?							<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If yes, please provide the information here. 							
Month		Year		TTHM Level		<input type="checkbox"/> mg/L <input type="checkbox"/> ug/L	
Month		Year		TTHM Level		<input type="checkbox"/> mg/L <input type="checkbox"/> ug/L	
<ul style="list-style-type: none"> If yes, where was the TTHM and HAA5 sample collected? 				<input type="checkbox"/> At the connection point with the wholesaler. <input type="checkbox"/> Near the connection point, but on the wholesaler side. <input type="checkbox"/> Near the connection point, but on the purchaser side.			
9. Do you have chlorine residual data near the point of connection with the wholesaler?							<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If yes, what was the chlorine residual nearest to the sample collection date above? 					Date Measured		
<ul style="list-style-type: none"> If no, please measure the chlorine residual nearest to the point of connection. 					Date Measured		
10. Do you have water temperature data near the point of connection with the wholesaler?							<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If yes, what was the water temperature value nearest to the point of connection? 					Date Measured		
<ul style="list-style-type: none"> If no, please measure the water temperature value nearest to the point of connection. 					Date Measured		
11. Do you have pH data near the point of connection with the wholesaler?							<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If yes, what was the pH value nearest to the point of connection? 					Date Measured		
<ul style="list-style-type: none"> If no, please measure the pH value nearest to the point of connection. 					Date Measured		
12. Do you have Total Organic Carbon (TOC) near the point of connection with the wholesaler?							<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If yes, what was the TOC value nearest to the sample collection date above? 					Date Measured		
<ul style="list-style-type: none"> If no, please measure the TOC value nearest to the point of connection. 					Date Measured		

E. WATER TREATMENT <input type="checkbox"/> If this submittal is an update from prior reports, skip to Section H.				
1. Does your system provide any additional water treatment processes? If no, skip to Section F.				<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Does your system provide additional chlorine (e.g. booster chlorination) in the distribution system?				<input type="checkbox"/> Yes <input type="checkbox"/> No
• If yes, what is the chlorine residual at the nearest location before additional chlorine is added?		mg/L	Date Measured	
• If yes, what is the chlorine residual at the nearest location after 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				<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Have you changed or added locations of disinfectant application along the treatment process?				<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Does your system provide any treatment processes other than disinfection?				<input type="checkbox"/> Yes <input type="checkbox"/> No
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.				<input type="checkbox"/> Yes <input type="checkbox"/> No
7. If you answered “ YES ” to any of the questions above (Sections E.1-E.6), please explain:				
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 of the OEL exceedance?				<input type="checkbox"/> Yes <input type="checkbox"/> 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 following information:				
Water amount pumped on TTHM/HAA5 sample collection day			<input type="checkbox"/> gal <input type="checkbox"/> MG	
Amount of chlorine used on TTHM/HAA5 sample collection day			<input type="checkbox"/> lbs <input type="checkbox"/> gal	

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10. Do you have chlorine residual data at the point of entry (POE), which is located after your water treatment processes, during the month of the OEL exceedance?			<input type="checkbox"/> Yes <input type="checkbox"/> 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 chlorine) for secondary disinfection?			<input type="checkbox"/> Yes <input type="checkbox"/> 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 month of the OEL exceedance near the POE from your wholesaler?			<input type="checkbox"/> Yes <input type="checkbox"/> 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 Measured	
F. DISTRIBUTION SYSTEM <input type="checkbox"/> If this submittal is an update from prior reports, skip to Section H.			
1. Have you added additional service areas (industry or residential)? e.g., adding additional pipes or annexing additional areas of service which could change residence times			<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Have you experienced significant decreases or generally low water demand? e.g., drought restrictions, industry opening/closing, population change			<input type="checkbox"/> Yes <input type="checkbox"/> No
• If yes, what is the primary suspected cause of water demand changes?			
3. Does your system have storage tanks in the distribution system?			<input type="checkbox"/> Yes <input type="checkbox"/> No
• If yes, how many water storage tanks does your system have?			
• If yes, do any storage tank(s) fill and drain from one pipe into the storage tank?			<input type="checkbox"/> Yes <input type="checkbox"/> No
• Do any above ground metal storage tanks have condensation differences along the outer wall between upper and lower portions of the storage tank in the morning? <i>Note: This could indicate inadequate water turnover in the tank.</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Date Inspected	
• If yes, do you have tank management/operational procedures? e.g., cleaning schedule, set operational levels of your tank (high and low), etc?			<input type="checkbox"/> Yes <input type="checkbox"/> No
• If yes, has the residence time of your tank(s) increased or decreased? i.e., are tanks being filled/drained more or less often?			<input type="checkbox"/> Yes <input type="checkbox"/> No
• What is the longest approximate average residence time in the storage tanks?		<input type="checkbox"/> Hours <input type="checkbox"/> Days	

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4. Does your system have a regular distribution flushing program?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, when was the last date that flushing operations were performed?					
• If yes, have you been changing your distribution flushing procedures?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
5. Do you have the chlorine residual near the disinfection byproduct (DBP) sample location?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, what was the chlorine residual during or closest to the DBP sample collection date above?			Date Measured		
• If no, please measure the chlorine residual at the DBP sample location.			Date Measured		
6. Do you have water temperature data near the disinfection byproduct (DBP) sample location?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, what was the water temperature during or closest to the DBP sample collection date above?			Date Measured		
• 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 location?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, what was the pH during or closest to the DBP sample collection date above?			Date Measured		
• If no, please measure the pH at the DBP sample location.			Date Measured		
8. Does your system provide additional chlorine (e.g. booster chlorination) in the distribution system?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• What is the chlorine residual at the nearest location before additional chlorine is added?			mg/L	Date Measured	
• What is the chlorine residual at the nearest location after additional chlorine is added?			mg/L	Date Measured	
9. Did you have customer complaints about water quality during the OEL exceedance month?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, what was the general nature about water quality complaint?					
G. CONTROL PLAN <input type="checkbox"/> If this submittal is an update from prior reports, skip to Section H.					
1. Do you plan to work with your wholesaler to obtain improved quality of water?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, is the wholesaler modifying operational changes on their side?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, does this require your system to increase flushing amounts or frequency?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
2. Do you plan to make operational adjustments to improve the quality of your drinking water?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, are you planning to start up any existing process equipment not used during the sampling period indicated in Section A?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, are you planning to adjust your chlorine dosage?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, are you planning to increase your monitoring of chlorine residuals in the distribution system?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, are you adjusting any chemical feeds?				<input type="checkbox"/> Yes <input type="checkbox"/> No	
• If yes, are you planning to change any chemical products?				<input type="checkbox"/> Yes <input type="checkbox"/> No	

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<ul style="list-style-type: none"> • If yes, are you planning to adjust or replace any existing granular activated carbon (GAC) units? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, are you planning to adjust any existing aeration processes in the storage tank or other parts of the system? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, are you planning to make changes to your flushing program? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, are you planning to make other changes to your operations? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • 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?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, are you planning to replace or install new feed pumps? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, are you planning to add new chemicals to your system? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, are you planning to add aeration to any of your storage tanks? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, are you planning to install a new treatment process to address DBPs? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, are you planning to switch your disinfectant? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, are you planning to add new water mains to reduce dead-ends? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, are you planning to install aeration equipment to any of your storage tanks? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> • If yes, are you planning other upgrades to your public water system? 	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Please provide a short-written statement about the control plan that your system will implement to reduce disinfection byproducts (DBPs):	

H. CONTROL PLAN UPDATES

Only fill out this section, if you filled out an operational evaluation report (OER) in the previous quarter, or the data provided from Sections C.2 and C.3 instructed you to complete this section.

1. Does your plan only rely on natural decreasing water temperatures to bring your locational running annual average (LRAA) calculated value within compliance?	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Are you continuing with the exact same control plan in your previous report?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If yes, please provide an update on the status of accomplishing the items identified in the previous control plan: 	
3. Are you planning to use other methods not identified in your previous report to lower your disinfection byproducts (DBPs)?	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> If yes, are these new methods going to be implemented in the source watershed? (If yes, go back to Section D Source Water above) 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> 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) 	<input type="checkbox"/> Yes <input type="checkbox"/> No
<ul style="list-style-type: none"> 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) 	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Please provide a short-written statement about the control plan updates and status that your system is planning or implementing to reduce disinfection byproducts (DBPs):	

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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-SDR
 US EPA Region 8
 1595 Wynkoop Street
 Denver, CO 80202-1129

Fax: 1-(303) 312-7517 Attn: Stage 2 DBPR Rule Manager

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