



**MEMBRANE TREATMENT TECHNOLOGY
LONG TERM 1 - ENHANCED SURFACE WATER TREATMENT RULE-SUMMARY**

North Dakota Department of Health
Division of Municipal Facilities
SFN 59082 (4/2009)

Public Water System (PWS) Name	PWS Number ND _____
Report for the Month of	Operator's Signature

Treatment Plant Performance (Section A)

Subsection 1 - Combined Effluent Turbidity Monitoring Data

1. Maximum allowable turbidity level: _____ NTU	Exceedance of Maximum Turbidity		
2. Total number of daily turbidity samples required during the month: _____			
3. Total number of daily turbidity samples taken during the month: _____			
4. Percentage of readings that met allowable turbidity level: _____ %			
5. Number of days with readings above 1.0 NTU: (Conventional and Direct Filtration Technology) _____ N/A Day(s)			
6. Number of days with readings above 5.0 NTU: (Slow sand and Diatomaceous Earth Filtration Technology) _____ N/A Day(s)			
7. Highest single turbidity reading recorded during the month: _____ NTU			
Write "NONE" in box if no exceedance			

Subsection 2 - Individual Unit Monitoring Data

	Check the appropriate box below	
1. Did system exceed the maximum trans membrane pressure during the month?	Yes	No
2. Did system exceed critical flux rate during the month?	Yes	No
3. Did any direct integrity test(s) fail during the month?	Yes	No
4. Did system use filter to waste capabilities during the month?	Yes	No

Subsection 3 - Total Organic Carbon (TOC) Removal Monitoring Data

1. Is system on reduced monitoring?	Yes	No
2. Required TOC removal: _____ %	(column D from "TOC Removal Worksheet")	
3. Actual TOC removed by the plant: _____ %	(column E from "TOC Removal Worksheet")	
4. Ratio of TOC removed to required TOC removal: _____	(column F from "TOC Removal Worksheet")	

Subsection 4 - Point-of-Entry (POE) Disinfectant Residual Monitoring Data

1. Type of final disinfectant used.	_____
2. Total number of daily POE disinfectant residual samples required for the month:	_____
3. Total number of POE disinfectant residual samples taken during the month:	_____
4. Total number of POE disinfectant residual samples under 0.2 mg/L measured during the month:	_____
5. Range of POE disinfectant residual entering the distribution system each month:	Low _____ mg/L High _____ mg/L
6. Average of the lowest POE disinfectant residual measurements entering the distribution system each month is:	_____ mg/L

Summary of Low Point-of-Entry Residual Events

Date	Duration of Low Residual Event (Hours)	Date/Time Division Contacted Regarding Low Residual Event	Date/Time Residual Restored	Date/Time Division Contacted Regarding Restoration of Residual

Distribution System (Section B)

Check appropriate response below

1. Minimum disinfectant residual required in the distribution system at each bacteriological site = Trace as: Free Chlorine Total Chlorine
2. Total number of distribution system disinfectant residual readings required during the month: _____
3. Total number of distribution system disinfectant residual readings taken during the month: _____
4. Total number of readings taken during the month that showed no detectable residual: _____
5. **Percentage of readings with no residual detected this month:** _____
6. **Percentage of readings with no residual detected last month:** _____

Public Notification (Section C)

Treatment Technique Violation	Yes/No	If yes, dates when notice was given to:	
		This Department*	Customers**
Were the percentages of readings that met allowable turbidity level less than 95.0% - Line 4 subsection 1 Treatment Plant Performance Summary Section A	Yes No		
Were there any days with turbidity readings above 1.0 NTU (conventional or direct filtration)? - Line 5 subsection 1 Treatment Plant Performance Summary Section A	Yes No		
Were there any days with turbidity readings above 5.0 NTU (diatomaceous earth or slow sand filtration)? - Line 6 subsection 1 Treatment Plant Performance Summary Section A	Yes No		
Were there any periods when the residuals leaving the plant fell below the acceptable level for more than 4 consecutive hours? - Line 4 subsection 4 Treatment Plant Performance Summary Section A	Yes No		
Were there more than 5.0% of the residuals in the distribution system below the acceptable level for any two consecutive months in a row? - lines 5 & 6 Distribution System Section B	Yes No		

*Due by the end of the next business day

**Copies of each public notice must accompany this report

NOTE: When issuing notice to the Department about the exceedance of maximum turbidity limits, or low point-of-entry residual events, systems must include: date(s), time(s), value(s), and duration(s) for **ALL MEASUREMENTS** (see [Instructions For Completing The Enhanced Surface Water Treatment Rule Data Recording Forms - Sections 1 and 4](#)).

Submit Membrane Treatment Technology Long Term 1- Enhanced Surface Water Treatment Rule-Summary along with [Combined Effluent Turbidity Monitoring Data](#), [Individual Unit Monitoring Data](#), [Point-of-Entry Disinfectant Residual Monitoring Data](#), and [Distribution System Disinfectant Residual Monitoring Data](#) by the 10th of the following month to:

Division of Municipal Facilities
 918 E Divide Ave., 3rd Floor
 Bismarck, ND 58501-1947
 Telephone number (701) 328-5211
 Fax number (701) 328-5200