



Kale Black, Sr. Drinking Water Officer
Office of Drinking Water, Manitoba Conservation and Climate
309 – 25 Tupper Street North
Portage La Prairie, MB R1N 3K1

March 5, 2021

RE: FEBRUARY 2021 WATER QUALITY COMPLIANCE SUBMISSION FOR THE CITY OF WINNIPEG WATER SUPPLY SYSTEM

Please find attached on-line and grab turbidity summary reports, on-line and grab chlorine summary reports and the UV summary report for the Water Treatment Plant for February 2021.

The February on-line and grab sampling turbidity reports include results obtained for the Water Treatment Plant raw water and the eight filters. The daily maximum turbidity was greater than 0.30 NTU on four occasions; the elevated turbidities occurred for less than 12 consecutive hours. On February 20, the turbidity on Filter 6 exceeded 1.00 NTU; additional information is provided separately in a Corrective Action Report. With the exception of Filter 6 on February 20, the turbidity results for the filter effluent met the licence requirements.

The February on-line and grab sampling chlorine reports include results obtained for the Deacon Booster Pumping Station at the Water Treatment Plant. The free chlorine results at the Water Treatment Plant met the licence requirements.

The February UV summary report includes results obtained for the six UV reactors at the Water Treatment Plant. The UV disinfection results met the licence requirements.

Please let me know of any concerns or questions respecting this submission. I can be reached by telephone at 204-986-8359 or by e-mail at rgrosselle@winnipeg.ca.

Yours sincerely,

*Original signed by R. Grosselle
(Signed original available upon request)*

R. Grosselle
Manager of Environmental Standards

Enclosures

cc: Dr. L. Richards, Winnipeg Regional Health Authority (email)
Dr. H. Chang, Winnipeg Regional Health Authority (email)
Dr. S. Roberecki, Manitoba Health, Seniors and Active Living (email)
M. L. Geer, CPA, CA (email)
T. Shanks, P.Eng. (email)
M. Szmon, P.Eng. (email)
C. Diduck (email)



CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
WATER SERVICES

Water System Code: **252.00**
 Licence Number: **PWS-09-412-01**

WATER TREATMENT PLANT TURBIDITY ON-LINE MONITORING REPORT

February 2021 Turbidity (NTU)

Date	Raw	Filter #1		Filter #2		Filter #3		Filter #4		Filter #5		Filter #6		Filter #7		Filter #8	
	Avg	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max	Avg	Max
1/02/2021	0.48	0.05	0.09	0.03	0.06	0.01	0.03	0.03	0.06	0.03	0.07	0.05	0.07	0.03	0.07	0.06	0.10
2/02/2021	0.46	0.05	0.10	0.03	0.07	0.02	0.05	0.03	0.04	0.03	0.07	0.04	0.08	0.04	0.06	0.07	0.08
3/02/2021	0.46	0.06	0.07	0.02	0.07	0.02	0.05	0.03	0.06	0.04	0.05	0.04	0.08	0.03	0.07	0.06	0.10
4/02/2021	0.46	0.05	0.10	0.03	0.05	0.01	0.05	0.03	0.06	0.03	0.06	0.04	0.05	0.03	0.07	0.05	0.10
5/02/2021	0.46	0.06	0.10	0.03	0.07	0.02	0.04	0.03	0.06	0.04	0.08	0.04	0.08	0.03	0.05	0.06	0.08
6/02/2021	0.45	0.07	0.08	0.03	0.07	0.01	0.04	0.03	0.05	0.04	0.07	0.05	0.10	0.04	0.08	0.07	0.11
7/02/2021	0.44	0.06	0.10	0.04	0.05	0.01	0.05	0.03	0.06	0.07	0.09	0.05	0.07	0.04	0.08	0.07	0.11
8/02/2021	0.39	0.05	0.08	0.03	0.08	0.01	0.05	0.03	0.04	0.04	0.07	0.03	0.09	0.03	0.05	0.06	0.11
9/02/2021	0.38	0.02	0.04	0.03	0.07	0.01	0.04	0.02	0.08	0.02	0.05	0.01	0.06	0.03	0.07	0.07	0.09
10/02/2021	0.37	0.03	0.07	0.04	0.06	0.00	0.04	0.02	0.06	0.03	0.07	0.01	0.02	0.03	0.08	0.06	0.11
11/02/2021	0.41	0.03	0.07	0.04	0.08	0.01	0.03	0.02	0.05	0.03	0.08	0.02	0.05	0.03	0.08	0.06	0.11
12/02/2021	0.40	0.03	0.05	0.04	0.09	0.01	0.06	0.03	0.06	0.03	0.07	0.02	0.07	0.04	0.05	0.07	0.18
13/02/2021	0.39	0.03	0.08	0.03	0.06	0.01	0.07	0.02	0.07	0.04	0.07	0.01	0.09	0.03	0.08	0.06	0.22
14/02/2021	0.38	0.04	0.09	0.06	0.17	0.01	0.07	0.02	0.06	0.04	0.09	0.02	0.09	0.04	0.09	0.07	0.12
15/02/2021	0.37	0.03	0.08	0.05	0.10	0.01	0.09	0.02	0.04	0.03	0.08	0.02	0.07	0.04	0.09	0.06	0.12
16/02/2021	0.36	0.03	0.04	0.04	0.09	0.01	0.05	0.02	0.05	0.02	0.05	0.03	0.12	0.03	0.07	0.07	0.09
17/02/2021	0.35	0.03	0.08	0.06	0.08	0.01	0.04	0.02	0.06	0.02	0.05	0.00	0.04	0.03	0.13	0.05	0.11
18/02/2021	0.44	0.02	0.11	0.06	0.43	0.01	0.04	0.03	0.28	0.02	0.28	0.01	0.05	0.02	0.09	0.03	0.10
19/02/2021	0.35	0.03	0.05	0.05	0.11	0.01	0.06	0.03	0.19	0.01	0.05	0.01	0.05	0.03	0.08	0.06	0.08
20/02/2021	0.36	0.03	0.08	0.06	0.11	0.01	0.05	0.01	0.03	0.01	0.05	0.04	1.10	0.03	0.07	0.05	0.10
21/02/2021	0.36	0.03	0.08	0.08	0.10	0.01	0.04	0.02	0.07	0.02	0.05	0.01	0.06	0.05	0.33	0.06	0.19
22/02/2021	0.33	0.04	0.08	0.08	0.12	0.01	0.03	0.02	0.08	0.02	0.06	0.02	0.04	0.02	0.10	0.04	0.08
23/02/2021	0.32	0.06	0.12	0.04	0.15	0.02	0.09	OL	OL	0.02	0.06	0.02	0.11	0.05	0.09	0.03	0.07
24/02/2021	0.33	0.07	0.09	0.02	0.05	0.02	0.05	0.03	0.81	0.01	0.04	0.00	0.03	0.05	0.08	0.02	0.04
25/02/2021	0.33	0.08	0.11	0.01	0.05	0.01	0.05	0.06	0.08	0.01	0.03	0.00	0.04	0.05	0.10	0.02	0.07
26/02/2021	0.33	0.07	0.11	0.01	0.03	0.01	0.05	0.07	0.12	0.01	0.05	0.00	0.00	0.05	0.09	0.02	0.07
27/02/2021	0.32	0.07	0.11	0.02	0.05	0.01	0.03	0.06	0.12	0.01	0.04	0.00	0.03	0.04	0.06	0.02	0.07
28/02/2021	0.32	0.06	0.09	0.01	0.04	0.01	0.04	0.06	0.09	0.01	0.04	0.00	0.03	0.05	0.09	0.02	0.05

Total Number of Measurements Taken, A:	11873	12022	12119	11539	13759	11441	14126	15498
Turbidity Standard for Monitoring Location (NTU):	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Number of Measurements Meeting Standard, B:	11873	11999	12119	11536	13759	11433	14124	15498
Compliance with Turbidity Standard, C = B/A X 100%:	100.000%	99.809%	100.000%	99.974%	100.000%	99.930%	99.986%	100.000%

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Turbidity\2021\02-February

Submitted By (Print): D.Minor

Signature: Original signed by D.Minor

WATER TREATMENT PLANT TURBIDITY GRAB MONITORING REPORT																			
Water System Code: 252.00		Turbidity (NTU)																	
Licence No. PWS-09-412-01		Raw Water		Filter 1		Filter 2		Filter 3		Filter 4		Filter 5		Filter 6		Filter 7		Filter 8	
Date	Grab	Analyser	Grab	Analyser	Grab	Analyser	Grab	Analyser	Grab	Analyser	Grab	Analyser	Grab	Analyser	Grab	Analyser	Grab	Analyser	
01-Feb-2021	0.47	0.45	0.09	0.07	0.08	0.04	0.07	0.02	0.07	0.03	0.10	0.06	0.09	0.05	0.08	0.02	0.08	0.06	
02-Feb-2021	0.47	0.44	0.08	0.06	0.10	0.05	0.08	0.03	0.07	0.04	0.08	0.04	0.11	0.07	0.08	0.03	0.08	0.06	
03-Feb-2021	0.49	0.42	0.08	0.07	0.07	0.03	0.07	0.02	0.07	0.04	0.07	0.05	0.08	0.04	0.10	0.07	0.09	0.07	
04-Feb-2021	0.48	0.45	0.11	0.09	0.08	0.04	0.07	0.02	0.07	0.04	0.09	0.05	0.08	0.05	0.08	0.02	0.07	0.06	
05-Feb-2021	0.49	0.44	0.07	0.07	0.12	0.06	0.08	0.03	0.07	0.03	0.08	0.04	0.10	0.06	0.08	0.03	0.08	0.06	
06-Feb-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
07-Feb-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
08-Feb-2021	0.46	0.42	0.08	0.08	0.10	0.06	0.08	0.02	0.07	0.04	0.09	0.04	0.10	0.07	0.08	0.03	0.08	0.07	
09-Feb-2021	0.47	0.36	0.07	0.03	0.07	0.04	0.08	0.02	0.08	0.03	0.07	0.03	0.08	0.02	0.10	0.03	0.09	0.06	
10-Feb-2021	0.46	0.36	0.10	0.05	0.08	0.04	0.07	<0.02	0.06	0.02	0.09	0.04	0.09	<0.02	0.10	0.04	0.12	0.09	
11-Feb-2021	0.45	0.36	0.08	0.03	0.11	0.06	0.08	<0.02	0.08	0.03	OL	OL	0.10	0.03	0.08	0.02	0.08	0.05	
12-Feb-2021	0.52	0.41	0.10	0.04	0.09	0.04	OL	OL	0.10	0.04	0.09	0.05	0.09	0.02	0.10	0.03	0.09	0.07	
13-Feb-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
14-Feb-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
15-Feb-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
16-Feb-2021	0.47	0.35	0.09	0.04	0.09	0.06	0.10	0.02	0.10	0.04	0.08	0.03	0.16	0.06	0.10	0.03	0.10	0.06	
17-Feb-2021	0.49	0.34	0.09	0.04	0.08	0.06	0.08	<0.02	0.07	0.03	0.08	0.03	0.08	<0.02	0.12	0.03	0.10	0.07	
18-Feb-2021	0.47	0.35	0.11	0.05	0.10	0.08	0.09	<0.02	0.06	0.02	0.30	0.17	0.11	0.02	0.08	<0.02	0.08	0.05	
19-Feb-2021	0.43	0.33	0.08	0.03	0.07	0.06	0.11	0.03	0.08	0.03	0.07	0.02	0.08	<0.02	0.10	0.03	0.09	0.06	
20-Feb-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
21-Feb-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
22-Feb-2021	0.46	0.33	0.08	0.03	0.10	0.09	0.07	<0.02	0.06	0.02	0.11	0.04	0.09	<0.02	0.08	0.02	0.07	<0.02	
23-Feb-2021	0.50	0.30	0.13	0.05	0.11	0.04	0.13	0.02	OL	OL	0.11	0.03	0.18	0.05	0.14	0.04	0.11	0.03	
24-Feb-2021	0.45	0.31	0.08	0.08	0.08	<0.02	0.09	0.03	0.10	0.10	0.08	<0.02	0.11	<0.02	0.10	0.05	0.10	0.02	
25-Feb-2021	0.44	0.32	0.08	0.09	0.07	0.02	0.13	0.02	0.07	0.08	0.08	<0.02	0.09	<0.02	0.12	0.06	0.11	0.02	
26-Feb-2021	0.43	0.31	0.10	0.10	0.08	0.02	0.07	0.02	0.07	0.08	0.10	0.03	0.09	<0.02	0.08	0.04	0.08	<0.02	
27-Feb-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
28-Feb-2021	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
Total number of measurements taken, A:			19		19		18		18		18		19		19		19		
Turbidity Standard for Monitoring Location (NTU):			0.30		0.30		0.30		0.30		0.30		0.30		0.30		0.30		
Number of measurements meeting standard, B:			19		19		18		18		18		19		19		19		
Compliance with Turbidity Standard, C= B/A X 100%:			100%		100%		100%		100%		100%		100%		100%		100%		

NS: No Sample NA: Not Analyzed OL: Off-Line NR: No Result IM: Instrument Maintenance

Comments:

 Report Compiled By: H. Demchenko

 Authorized By: C. Diduck

 Report Date: 5-Mar-21



WATER TREATMENT PLANT FREE CHLORINE ON-LINE MONITORING REPORT
 Deacon Booster Pumping Station

Water System Code: **252.00**
 Licence Number: **PWS-09-412-01**
 Report Created: 01 March 2021

Report Period: February 2021

Date	BRANCH 1 [mg/L]		BRANCH 2 [mg/L]	
	Average	Minimum	Average	Minimum
01/02/2021	1.21	1.04	1.22	1.10
02/02/2021	1.17	1.04	1.20	1.13
03/02/2021	1.07	1.00	1.20	1.10
04/02/2021	OL	OL	1.23	1.03
05/02/2021	OL	OL	1.19	0.97
06/02/2021	OL	OL	1.26	1.21
07/02/2021	OL	OL	1.30	1.23
08/02/2021	OL	OL	1.32	1.24
09/02/2021	OL	OL	1.26	1.21
10/02/2021	OL	OL	1.30	1.25
11/02/2021	1.12	1.07	1.33	1.26
12/02/2021	1.34	1.13	1.36	1.25
13/02/2021	1.30	1.22	1.32	1.23
14/02/2021	1.22	1.15	1.25	1.18
15/02/2021	1.27	1.13	1.29	1.18
16/02/2021	1.16	1.11	1.23	1.18
17/02/2021	1.14	1.06	1.20	1.14
18/02/2021	1.33	1.09	1.37	1.19
19/02/2021	1.19	1.07	1.21	1.12
20/02/2021	1.18	1.07	1.19	1.06
21/02/2021	1.55	1.25	1.60	1.31
22/02/2021	1.26	1.15	1.28	1.23
23/02/2021	1.29	1.16	1.32	1.23
24/02/2021	1.35	1.28	1.39	1.35
25/02/2021	1.33	1.24	1.36	1.30
26/02/2021	1.23	1.06	1.23	1.07
27/02/2021	1.15	1.09	1.14	1.08
28/02/2021	1.12	1.04	1.14	1.09

Total Number of Measurements, A:	19438	19440
Minimum Free Chlorine Standard:	0.5	0.5
Number of Measurements Meeting Standard, B:	19438	19440
COMPLIANCE, C = B/A X 100%:	100.00	100.00

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Chlorine\2021\02-February

Notes: 1. OL - Offline

Submitted By (Print): D.Minor

Signature: Original Signed by D.Minor



WATER TREATMENT PLANT CHLORINE GRAB MONITORING REPORT

Water System Code: 252.00 Licence No. PWS-09-412-01	Deacon Booster Pumping Station Branch 1			Deacon Booster Pumping Station Branch 2		
	Free Chlorine (mg/L)		Total Chlorine (mg/L)	Free Chlorine (mg/L)		Total Chlorine (mg/L)
	Analysed	Grab	Grab	Analysed	Grab	Grab
Date						
01-Feb-2021	1.28	1.28	1.50	1.26	1.30	1.51
02-Feb-2021	1.16	1.18	1.40	1.20	1.18	1.41
03-Feb-2021	1.03	0.98	1.18	1.18	1.16	1.38
04-Feb-2021	OL	OL	OL	1.20	1.24	1.43
05-Feb-2021	OL	OL	OL	1.17	1.17	1.38
06-Feb-2021	OL	OL	OL	NS	NS	NS
07-Feb-2021	OL	OL	OL	NS	NS	NS
08-Feb-2021	OL	OL	OL	1.36	1.40	1.58
09-Feb-2021	OL	OL	OL	1.25	1.24	1.48
10-Feb-2021	OL	OL	OL	1.26	1.34	1.54
11-Feb-2021	1.25	1.25	1.55	1.36	1.38	1.61
12-Feb-2021	1.27	1.20	1.49	1.32	1.34	1.45
13-Feb-2021	1.27	1.26	1.54	NS	NS	NS
14-Feb-2021	NS	NS	NS	NS	NS	NS
15-Feb-2021	NS	NS	NS	NS	NS	NS
16-Feb-2021	1.17	1.19	1.37	1.24	1.23	1.47
17-Feb-2021	1.14	1.21	1.41	1.19	1.21	1.43
18-Feb-2021	1.33	1.33	1.53	1.46	1.50	1.76
19-Feb-2021	1.22	1.25	1.43	1.19	1.22	1.44
20-Feb-2021	NS	NS	NS	NS	NS	NS
21-Feb-2021	NS	NS	NS	NS	NS	NS
22-Feb-2021	1.25	1.25	1.46	1.27	1.23	1.47
23-Feb-2021	1.32	1.24	1.46	1.36	1.29	1.56
24-Feb-2021	1.33	1.32	1.59	1.37	1.34	1.57
25-Feb-2021	1.30	1.34	1.59	1.33	1.46	1.58
26-Feb-2021	1.32	1.33	1.59	1.34	1.39	1.59
27-Feb-2021	NS	NS	NS	NS	NS	NS
28-Feb-2021	NS	NS	NS	NS	NS	NS
Total number of measurements taken, A:		15			19	
Chlorine Standard for Monitoring Location (mg/L):		0.50			0.50	
Number of measurements meeting standard, B:		15			19	
Compliance with Chlorine Standard, C= B/A X 100%:		100%			100%	

NS: No Sample NA: Not Analyzed OL: Off-Line NR: No Result IM: Instrument Maintenance

Comments:
Branch I was offline from February 3, 2021 at 12:00 until February 11, 2021 at 17:20 for repairs to the pipeline.

Compiled By: H. Demchenko

Authorized By: C. Diduck

Report Date: 5-Mar-21

