



Water and Waste Department • Service des eaux et des déchets

Environmental Standards Division • Division des Normes Environnementales

August 4, 2017

Derek Clarke
Office of Drinking Water
Manitoba Sustainable Development
Box 6000
Gimli, Manitoba R0C 1B0

Our File: 040-18-18-55-00

Dear Mr. Clarke:

**RE: JULY 2017 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 July 2017. There are no corrective action reports to be submitted for July 2017.

The July on-line and grab sampling turbidity reports include results obtained for the Water Treatment Plant raw water and the eight filters. The turbidity results for the effluent from the filters met the licence requirements.

The July 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 July 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 may be reached by telephone at 204-986-8359 or by e-mail at rgrosselle@winnipeg.ca.

Yours sincerely,

Original signed by Courtney Diduck for:

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)
G. Patton, P.Eng. (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

July 2017 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
1/07/2017	3.61	0.01	0.06	0.01	0.05	0.06	0.12	0.02	0.07	0.01	0.04	0.03	0.05	0.02	0.03	0.06	0.09
2/07/2017	4.60	0.02	0.06	0.02	0.06	0.07	0.09	0.03	0.09	0.02	0.03	0.04	0.08	0.03	0.08	0.06	0.10
3/07/2017	4.56	0.02	0.08	0.03	0.05	0.08	0.14	0.03	0.07	0.02	0.05	0.04	0.09	0.03	0.05	0.09	0.10
4/07/2017	1.34	0.01	0.07	0.02	0.07	0.07	0.15	0.04	0.10	0.02	0.05	0.05	0.07	0.03	0.08	0.09	0.13
5/07/2017	1.41	0.02	0.07	0.02	0.07	0.08	0.09	0.03	0.09	0.02	0.03	0.05	0.09	0.03	0.09	0.09	0.15
6/07/2017	1.63	0.02	0.08	0.02	0.04	0.08	0.15	0.03	0.07	0.02	0.04	0.04	0.10	0.03	0.07	0.12	0.13
7/07/2017	1.73	0.01	0.13	0.02	0.06	0.07	0.15	0.03	0.04	0.01	0.04	0.04	0.06	0.03	0.05	0.12	0.16
8/07/2017	2.61	0.02	0.03	0.00	0.05	0.07	0.10	0.05	0.17	0.02	0.04	0.06	0.11	0.03	0.11	0.07	0.16
9/07/2017	2.80	0.02	0.07	0.00	0.02	0.09	0.15	0.06	0.14	0.02	0.04	0.06	0.13	0.03	0.08	0.01	0.01
10/07/2017	2.72	0.01	0.08	0.00	0.03	0.08	0.13	0.06	0.08	0.01	0.07	0.05	0.11	0.03	0.06	0.01	0.03
11/07/2017	3.02	0.02	0.08	0.01	0.08	0.08	0.23	0.07	0.14	0.02	0.05	0.08	0.14	0.04	0.12	0.01	0.07
12/07/2017	3.85	0.02	0.07	0.00	0.03	0.08	0.14	0.05	0.10	0.02	0.04	0.06	0.11	0.03	0.09	0.01	0.02
13/07/2017	1.97	0.02	0.07	0.00	0.02	0.09	0.14	0.05	0.10	0.02	0.04	0.06	0.13	0.03	0.09	0.01	0.01
14/07/2017	1.89	0.02	0.06	0.00	0.03	0.08	0.14	0.05	0.07	0.02	0.05	0.06	0.13	0.04	0.05	0.01	0.03
15/07/2017	2.04	0.02	0.04	0.00	0.03	0.07	0.14	0.06	0.09	0.02	0.05	0.09	0.10	0.04	0.10	0.01	0.04
16/07/2017	2.30	0.03	0.08	0.00	0.01	0.09	0.11	0.05	0.11	0.03	0.05	0.09	0.17	0.04	0.12	0.01	0.05
17/07/2017	2.01	0.02	0.05	0.02	0.28	0.08	0.15	0.08	0.18	0.04	0.08	0.07	0.13	0.04	0.20	0.01	0.01
18/07/2017	2.65	0.01	0.03	0.02	0.08	0.08	0.16	0.07	0.12	0.05	0.10	0.06	0.17	0.03	0.16	0.01	0.10
19/07/2017	2.01	0.01	0.07	0.03	0.21	0.09	0.11	0.07	0.14	0.05	0.07	0.04	0.10	0.02	0.12	0.01	0.01
20/07/2017	2.12	0.01	0.07	0.03	0.09	0.09	0.18	0.08	0.12	0.05	0.08	0.03	0.13	0.02	0.04	0.01	0.03
21/07/2017	1.84	0.01	0.03	0.03	0.08	0.09	0.18	0.08	0.17	0.05	0.07	0.05	0.06	0.03	0.11	0.01	0.04
22/07/2017	3.56	0.02	0.12	0.04	0.07	0.11	0.13	0.08	0.18	0.07	0.10	0.04	0.12	0.02	0.15	0.01	0.01
23/07/2017	1.82	0.01	0.08	0.03	0.09	0.09	0.18	0.09	0.11	0.06	0.10	0.04	0.06	0.04	0.05	0.01	0.04
24/07/2017	1.85	0.01	0.02	0.02	0.08	0.08	0.15	0.08	0.15	0.06	0.08	0.05	0.11	0.02	0.10	0.01	0.03
25/07/2017	2.18	0.01	0.07	0.02	0.04	0.10	0.12	0.08	0.15	0.06	0.14	0.04	0.10	0.02	0.10	0.01	0.01
26/07/2017	2.00	0.01	0.07	0.03	0.09	0.09	0.19	0.10	0.12	0.05	0.09	0.04	0.05	0.02	0.04	0.01	0.03
27/07/2017	2.19	0.02	0.04	0.05	0.18	0.05	0.12	0.08	0.17	0.07	0.10	0.04	0.08	0.03	0.12	0.01	0.03
28/07/2017	2.19	0.02	0.09	0.09	0.11	0.04	0.06	0.09	0.16	0.07	0.13	0.04	0.13	0.04	0.12	0.01	0.01
29/07/2017	2.42	0.04	0.09	0.09	0.16	0.05	0.16	0.11	0.16	0.07	0.13	0.05	0.11	0.05	0.11	0.01	0.03
30/07/2017	2.43	0.05	0.07	0.10	0.17	0.06	0.19	0.14	0.19	0.09	0.15	0.07	0.13	0.06	0.14	0.01	0.07
31/07/2017	2.61	0.06	0.15	0.11	0.21	0.07	0.10	0.13	0.21	0.11	0.16	0.06	0.11	0.05	0.12	0.01	0.06

Total Number of Measurements Taken, A:	16352	11269	16683	15080	17042	16286	15803	16524
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:	16352	11269	16683	15080	17042	16286	15803	16524
Compliance with Turbidity Standard, C = B/A X 100%:	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Turbidity\2017\07-July

Submitted By (Print): David Minor

Signature: Original signed by David Minor



CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENVIRONMENTAL STANDARDS DIVISION

WATER TREATMENT PLANT TURBIDITY GRAB MONITORING REPORT

Water System Code: 252.00 Licence No. PWS-09-412-01	Turbidity (NTU)																	
	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-Jul-2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
02-Jul-2017	0.88	NR	0.09	<0.02	0.07	<0.02	0.09	0.08	0.10	0.04	0.07	<0.02	0.08	0.05	OL	OL	0.06	0.09
03-Jul-2017	0.86	NR	0.10	0.03	0.07	0.02	0.09	0.08	0.07	0.03	0.08	0.02	OL	OL	0.07	0.02	0.07	0.10
04-Jul-2017	1.06	1.26	0.06	<0.02	0.10	0.03	OL	OL	0.09	0.04	0.07	<0.02	0.09	0.06	0.09	0.03	0.09	0.13
05-Jul-2017	1.03	1.37	0.07	<0.02	0.06	0.02	0.07	0.08	0.08	0.05	0.07	<0.02	0.08	0.06	0.10	0.04	OL	OL
06-Jul-2017	1.09	1.55	0.09	0.02	0.08	0.02	0.08	0.09	0.07	0.04	0.08	0.02	OL	OL	0.08	0.03	0.08	0.15
07-Jul-2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
08-Jul-2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
09-Jul-2017	1.51	1.74	0.09	0.03	0.08	<0.02	0.09	0.10	OL	OL	0.08	0.03	0.10	0.10	0.07	0.04	0.08	<0.02
10-Jul-2017	1.75	1.67	0.06	<0.02	0.07	<0.02	0.08	0.10	0.06	0.06	OL	OL	0.06	0.06	0.07	0.02	0.06	<0.02
11-Jul-2017	1.73	1.79	0.06	<0.02	0.07	<0.02	0.06	0.08	0.08	0.07	0.07	<0.02	0.08	0.07	0.09	0.03	0.11	0.03
12-Jul-2017	1.05	NR	0.07	<0.02	0.07	<0.02	0.07	0.09	0.08	0.07	0.07	<0.02	0.07	0.08	0.09	0.04	OL	OL
13-Jul-2017	1.36	1.75	0.07	0.02	0.06	<0.02	0.07	0.09	0.06	0.06	0.07	0.02	OL	OL	0.07	0.03	0.07	<0.02
14-Jul-2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
15-Jul-2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
16-Jul-2017	1.54	1.86	0.08	<0.02	0.07	0.02	0.08	0.09	OL	OL	0.07	0.03	0.10	0.12	0.08	0.04	0.07	<0.02
17-Jul-2017	1.54	1.80	0.07	0.02	0.08	<0.02	0.08	0.11	0.06	0.12	OL	OL	0.06	0.08	0.07	0.02	0.07	<0.02
18-Jul-2017	1.66	1.92	0.09	<0.02	0.09	0.03	0.10	0.09	0.10	0.10	0.08	0.07	0.11	0.10	0.13	0.08	OL	OL
19-Jul-2017	1.55	1.76	0.09	<0.02	0.07	0.02	0.09	0.09	0.07	0.08	0.07	0.04	OL	OL	0.06	<0.02	0.07	<0.02
20-Jul-2017	1.47	1.84	0.08	<0.02	0.09	0.04	0.14	0.17	0.08	0.10	0.06	0.04	0.06	0.05	0.07	<0.02	0.07	<0.02
21-Jul-2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
22-Jul-2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
23-Jul-2017	1.45	1.72	0.07	<0.02	0.10	0.04	0.17	0.18	0.09	0.10	0.07	0.06	0.08	0.05	0.09	0.03	0.09	<0.02
24-Jul-2017	1.59	1.88	0.09	<0.02	0.07	0.02	0.07	0.08	0.08	0.09	0.06	0.06	0.08	0.05	0.09	0.03	OL	OL
25-Jul-2017	1.62	1.90	0.10	<0.02	0.08	0.02	0.08	0.10	0.06	0.09	0.06	0.06	OL	OL	0.06	<0.02	0.06	<0.02
26-Jul-2017	1.71	1.88	0.07	<0.02	OL	OL	0.07	0.09	0.07	0.10	0.06	0.06	0.07	0.04	0.07	0.02	0.07	<0.02
27-Jul-2017	1.66	2.18	0.08	0.02	0.07	0.09	0.08	0.03	0.09	0.11	0.07	0.08	0.08	0.05	OL	OL	0.06	<0.02
28-Jul-2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
29-Jul-2017	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
30-Jul-2017	1.63	2.31	0.11	0.05	0.09	0.12	0.11	0.06	0.11	0.15	0.07	0.11	0.09	0.09	0.10	0.08	OL	OL
31-Jul-2017	2.02	2.50	0.11	0.04	0.09	0.11	0.10	0.06	0.14	0.18	0.07	0.10	0.09	0.07	OL	OL	0.07	<0.02
Total number of measurements taken, A:			22		21		21		20		20		17		19		17	
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:			22		21		21		20		20		17		19		17	
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

Comments:

There were no results for the raw online analyzer on July 2, 3, and 12 due to maintenance requirements.

Report Compiled By: H.Demchenko

Approved in LIMS By: C.Diduck

Date Approved: 4-Aug-17



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 August 2017

Report Period: July 2017

Date	BRANCH 1 [mg/L]		BRANCH 2 [mg/L]	
	Average	Minimum	Average	Minimum
01/07/2017	1.08	1.02	1.12	1.09
02/07/2017	1.08	1.02	1.13	1.09
03/07/2017	1.15	1.06	1.22	1.12
04/07/2017	1.15	1.08	1.18	1.08
05/07/2017	1.09	0.99	1.07	0.94
06/07/2017	1.00	0.91	0.95	0.91
07/07/2017	1.03	0.96	0.97	0.90
08/07/2017	1.06	0.94	1.11	0.98
09/07/2017	1.05	0.94	1.10	1.02
10/07/2017	1.19	1.03	1.19	1.06
11/07/2017	1.24	1.09	1.14	0.94
12/07/2017	1.24	1.07	1.15	0.91
13/07/2017	1.43	0.90	1.40	0.88
14/07/2017	1.27	1.15	1.27	1.21
15/07/2017	1.14	1.05	1.22	1.16
16/07/2017	1.16	1.09	1.24	1.17
17/07/2017	1.09	0.98	1.17	1.06
18/07/2017	1.14	0.82	1.19	1.01
19/07/2017	1.23	1.05	1.31	1.15
20/07/2017	1.07	1.02	1.17	1.13
21/07/2017	1.12	1.08	1.23	1.17
22/07/2017	1.12	1.01	1.18	1.02
23/07/2017	1.09	1.04	1.10	1.01
24/07/2017	1.08	1.01	1.13	1.07
25/07/2017	1.06	0.99	1.13	1.05
26/07/2017	1.12	0.95	1.19	0.95
27/07/2017	1.18	1.13	1.17	1.11
28/07/2017	1.18	1.11	1.21	1.07
29/07/2017	1.24	1.16	1.28	1.20
30/07/2017	1.26	1.16	1.26	1.18
31/07/2017	1.13	1.01	1.10	0.99

Total Number of Measurements, A:	21600	21600
Minimum Free Chlorine Standard:	0.5	0.5
Number of Measurements Meeting Standard, B:	21600	21600
COMPLIANCE, C = B/A X 100%:	100.00	100.00

File Path: N:\Water Treatment Branch\Administration\Reports\Regulatory Submissions\Chlorine\2017\07-July

Submitted By (Print): David Minor

Signature: Original signed by David Minor



CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENVIRONMENTAL STANDARDS DIVISION

WATER TREATMENT PLANT CHLORINE GRAB MONITORING REPORT

Water System Code: 252.00		Deacon Booster Pumping Station Branch 1			Deacon Booster Pumping Station Branch 2		
Licence No. PWS-09-412-01							
Date	Free Chlorine (mg/L)		Total Chlorine (mg/L)	Free Chlorine (mg/L)		Total Chlorine (mg/L)	
	Analyser	Grab	Grab	Analyser	Grab	Grab	
01-Jul-2017	NS	NS	NS	NS	NS	NS	
02-Jul-2017	1.07	1.17	1.35	1.12	1.18	1.38	
03-Jul-2017	1.16	1.21	1.37	1.23	1.24	1.45	
04-Jul-2017	1.15	1.19	1.42	1.17	1.21	1.42	
05-Jul-2017	1.14	1.14	1.30	1.12	1.20	1.38	
06-Jul-2017	0.93	1.03	1.22	0.92	1.11	1.28	
07-Jul-2017	NS	NS	NS	NS	NS	NS	
08-Jul-2017	NS	NS	NS	NS	NS	NS	
09-Jul-2017	1.05	1.08	1.23	1.10	1.08	1.30	
10-Jul-2017	1.06	1.12	1.28	1.12	1.14	1.36	
11-Jul-2017	1.25	1.26	1.43	1.13	1.19	1.36	
12-Jul-2017	1.26	1.24	1.47	1.20	1.20	1.33	
13-Jul-2017	1.28	1.31	1.48	1.27	1.19	1.36	
14-Jul-2017	NS	NS	NS	NS	NS	NS	
15-Jul-2017	NS	NS	NS	NS	NS	NS	
16-Jul-2017	1.19	1.25	1.39	1.26	1.23	1.46	
17-Jul-2017	1.12	1.17	1.38	1.14	1.18	1.31	
18-Jul-2017	1.18	1.11	1.33	1.14	1.18	1.39	
19-Jul-2017	1.29	1.24	1.42	1.34	1.37	1.52	
20-Jul-2017	1.05	1.03	1.27	1.15	1.18	1.36	
21-Jul-2017	NS	NS	NS	NS	NS	NS	
22-Jul-2017	NS	NS	NS	NS	NS	NS	
23-Jul-2017	1.08	1.06	1.29	1.11	1.09	1.31	
24-Jul-2017	1.05	1.07	1.27	1.09	1.19	1.35	
25-Jul-2017	1.09	1.12	1.31	1.15	1.15	1.36	
26-Jul-2017	1.04	1.12	1.28	1.13	1.17	1.37	
27-Jul-2017	1.19	1.26	1.46	1.17	1.23	1.43	
28-Jul-2017	NS	NS	NS	NS	NS	NS	
29-Jul-2017	NS	NS	NS	NS	NS	NS	
30-Jul-2017	1.27	1.32	1.50	1.26	1.32	1.50	
31-Jul-2017	1.08	1.14	1.36	1.04	1.15	1.31	
Total number of measurements taken, A:			22		22		
Chlorine Standard for Monitoring Location (mg/L):			0.50		0.50		
Number of measurements meeting standard, B:			22		22		
Compliance with Chlorine Standard, C= B/A X 100%:			100%		100%		

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

Comments:

Report Compiled By: H.Demchenko

Approved in LIMS By: C.Diduck

Date Approved: 4-Aug-17

