



THE CITY OF WINNIPEG - VILLE DE WINNIPEG

WATER AND WASTE DEPARTMENT • SERVICE DES EAUX ET DES DÉCHETS  
ENGINEERING DIVISION • DIVISION DE L'INGÉNIERIE

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FAX/TÉLÉC.: (204) 224-00

March 30, 1999

Manitoba Environment  
123 Main Street  
Suite 160  
Winnipeg, Manitoba  
R3C 1A5

Attention: Mr. Larry Strachan, P.Eng. Director

Dear Sir:

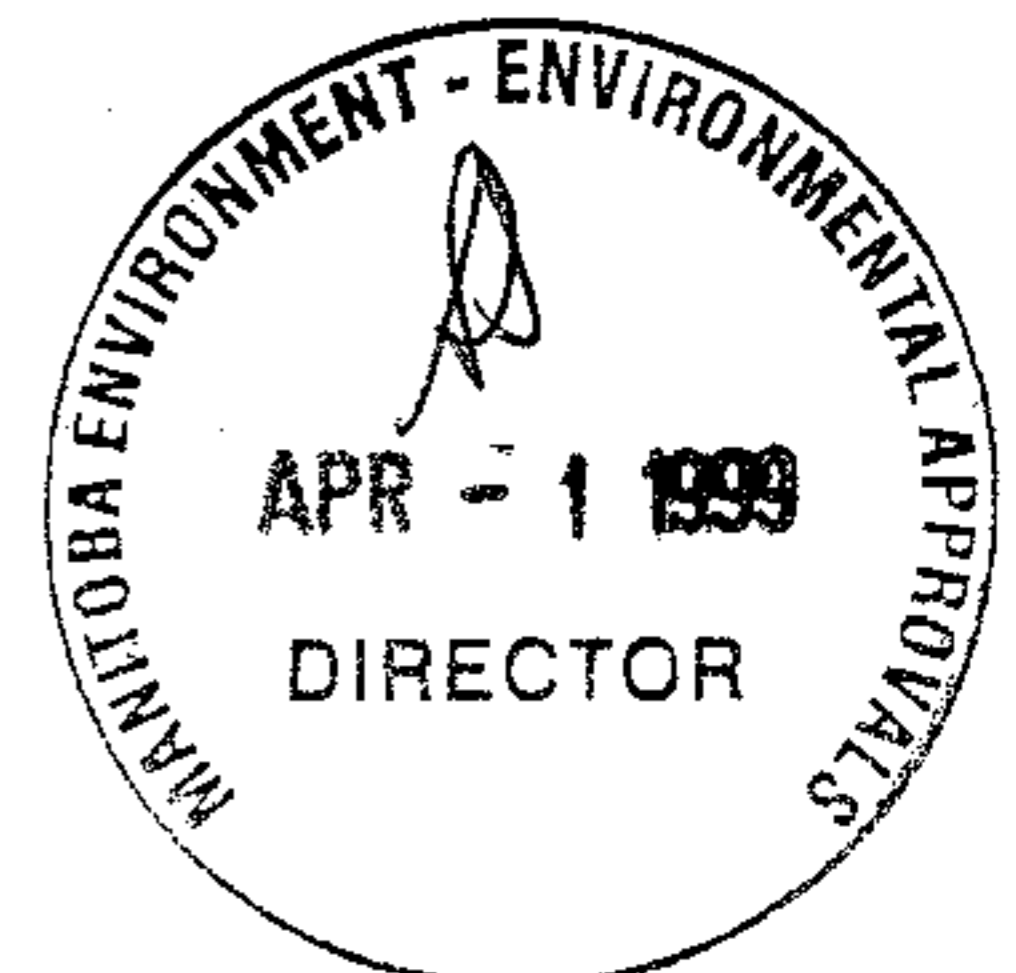
**RE: CITY OF WINNIPEG SOUTH END WATER POLLUTION CONTROL CENTRE  
EFFLUENT DISINFECTION FACILITY**  
**File Nos. RD 3-9(c), 020-17-06-04-00, 020-17-08-11-00**

As you are aware, construction of the SEWPCC disinfection facility is currently underway with operation scheduled to commence this summer. The facility is being constructed and will be operated in accordance with Manitoba Environment's written approval as an alteration, dated August 4, 1998.

As noted in our letter of November 20, 1998 and further to our previous discussions, there are a few issues related to the terms and conditions which require further consideration prior to commencement of operation. The following identifies the issues in accordance with the reference number identified in your letter of August 4, and proposes amendments for your consideration:

- 3) *All wastewater flow of 100 ML/d received at the SEWPCC, shall be disinfected. Where dry weather flows exceed 100 ML/d during the period May 1 to September 30 of the same year, the City shall be required to inform the Director, Environmental Approvals, by facsimile, of the excess flow within 24 hours of its occurrence.*

... 2



Proposed Amendment

We request that this clause be amended, or confirmation be provided, stating that disinfection may be totally discontinued for the duration that plant flow exceeds 100 ML/d. Full disinfection will take place for all wastewater flow up to and including 100 ML/d. Upon exceeding 100 ML/d, automatic gates will have the capability of closing, preventing flow from entering the disinfection facility, with no disinfection taking place during this period. By this method of operation secondary bypass flow, which could potentially foul or flood the ultraviolet light equipment, will be prevented from contacting the equipment. This matter was dealt with, agreed to and minuted in our meeting of December 18, 1997.

We further request that the requirement for notification within 24 hours of flows exceeding 100 ML/d be waived. The SEWPCC facility is only manned during normal weekday working hours which would mean that during off hours, special staffing arrangements would be required to comply. We propose that notification be based on the same frequency as water quality reporting.

- 6) *The City shall be required to inform the Director, Environmental Approvals of any river levels in excess of the geodetic elevation of 229.0 metres within 24 hours of their occurrence, and provide the Director, Environmental Approvals with a sewage treatment and contingency plan during this period.*

Proposed Amendment

For river levels in excess of 229.0 isolation gates will be closed, thereby completely isolating the disinfection facility from the treatment process. No disinfection will take place under these conditions for dry or wet weather flows and no contingency plan has been contemplated for disinfection during these occurrences. We will however provide the requested notification in all instances of these occurrences.

- 8) *Compliance with the fecal coliform limit shall be determined by the monthly geometric mean of a minimum of 3 consecutive 24-hour flow proportional composite samples collected per week during dry weather flows.*

Proposed Amendment

We request the monitoring requirement be revised from flow proportioned composite sampling to grab sampling. Concerns with composite sampling not meeting the Standard Method for the Examination of Water and Wastewater were discussed at our meeting of December 18, 1997. Revision to grab sampling was agreed to by Manitoba Environment at our meeting of February 23, 1998.



With respect to construction progress, the facility is well underway, with the Trojan UV 4000 system having been delivered to site. A number of issues have been identified which could potentially delay the originally intended startup date of May 31, 1999. These issues are under review. We will provide an update on the progress when more information becomes available.

We look forward to your favourable consideration of the foregoing.

Yours truly,



E.J. Sharp, P.Eng.  
Senior Project Engineer

EJS

c. M.A. Shkolny, P.Eng.  
P.E.A. Lagasse, P.Eng.  
E.J. Sharp, P.Eng.  
Bob Mann

**Conyette Charles (ENV)**

**From:** Ed Sharp [ESHARP@City.Winnipeg.MB.CA]  
**Sent:** 1999-Aug-12 10:49 AM  
**To:** cconyette@env.gov.mb.ca  
**Cc:** AZALESKI@City.Winnipeg.MB.CA; PLAGASSE@City.Winnipeg.MB.CA;  
RMANN@City.Winnipeg.MB.CA; dtaniguchi@reid-crowther.com  
**Subject:** SEWPCC UV - Environmental Licencing

Charles,

In our letter of March 30, 1999 we asked Manitoba Environment to make revisions to the terms of their notice of alteration approval dated August 4, 1998 for operation of the SEWPCC UV. Among other minor changes requested, was a revision from composite to grab sampling. These issues were discussed and agreed to at our meetings of December 18, 1997 and February 23, 1998.

The clause currently says:

"Compliance with the fecal coliform limit shall be determined by the monthly geometric mean of a minimum of 3 consecutive 24-hour flow proportional composite samples collected per week during dry weather flows"

The clause needs to be revised to replace "consecutive 24-hour flow proportional composite samples" with "grab samples".

We intend to initially take 4 grab samples per week, one on each day from Monday to Thursday during dry weather conditions. Because of the independent lab constraints we cannot accommodate a Friday sample. As we become more comfortable with the process we may want to reduce this to 3 grab samples per week during dry weather flows. We therefore request that "a minimum of 3" samples per week be retained.

The grab samples will be discrete samples, and not blended or composited in any way.

We agree with the monthly geometric mean approach for determining compliance.



August 25, 1999  
File 1069.00

Mr. E. J. Sharp, P. Eng.  
Senior Project Engineer  
Water and Wastewater Department  
Engineering Division  
1500 Plessis Road  
Winnipeg MB R2C 5G6

Dear Mr. Sharp:

**Re: City of Winnipeg - South End Water Pollution Control Centre (SEWPCC)  
Effluent Disinfection Facility**

I am responding to your letter of March 30, 1999, and your subsequent e-mail of August 12, 1999 to Mr. Conyette, requesting our consideration of your amendments to items 3, 6 and 8 of the terms and conditions contained in our letter dated August 4, 1998.

We have considered your amendments and provide the following response:

1. Item 3

This item has been amended to read "All wastewater flow up to and including 100 ML/day received at the SEWPCC, shall receive full disinfection. Dry weather Flows in excess of 100 ML/day during the period May 1 to September 30 of the same year will be prevented by automatic bypass mechanism from entering the disinfection facility. The City shall be required to inform the Director, Environmental Approvals by facsimile, of any malfunction of the automatic bypass mechanism, within 24 hours of such occurrence."

2. Item 6

This item has been amended to read "The City shall be required to inform the Director, Environmental Approvals by facsimile, of any river levels in excess of the geodetic elevation of 229.0 metres within 24 hours of their occurrence, and provide the Director, Environmental Approvals with a sewage treatment and contingency action plan during the period that the river level is in excess of the geodetic elevation of 229.0 metres."

3. Item 8

This clause has been amended to read "Compliance with the fecal coliform limit shall be determined by the monthly geometric mean of 1 grab sample collected at equal time intervals on each of a minimum of 3 consecutive days per week."

Yours truly,  
Original Signed by  
LARRY STRACHAN

Larry Strachan, P. Eng.  
Director  
Environmental Approval

c. Dave Ediger  
Dwight Williamson  
CC/bls