



Water and Waste Department • Service des eaux et des déchets

November 30, 2006

Our Files: 040-17-08-29-00
040-17-08-15-00
040-17-08-35-00

Mr. Mike Van Den Bosch, P.Eng.
Environmental Assessment and Licensing Branch
Manitoba Conservation
Suite 160 – 123 Main Street
Winnipeg, Manitoba
R3C 1A5

Dear Mr. Van Den Bosch:

RE: OCTOBER 2006 MONITORING REPORTS FOR THE WEST END WATER POLLUTION CONTROL CENTRE LICENCE NO. 2669 E R, THE NORTH END WATER POLLUTION CONTROL CENTRE LICENCE NO. 2684 R R AND THE SOUTH END WATER POLLUTION CONTROL CENTRE LICENCE NO. 2716

Attached please find the October 2006 Monitoring Reports for Licence No. 2669 E R issued for the City of Winnipeg West End Water Pollution Control Centre (WEWPCC), Licence No. 2684 R R issued for the City of Winnipeg North End Water Pollution Control Centre (NEWPCC) and Licence No. 2716 issued for the City of Winnipeg South End Water Pollution Control Centre (SEWPCC).

Please note the following respecting the report for Licence #2669 E R:

1. On October 6, there was no result for cBOD5 due to a laboratory quality control failure.
2. On October 18, there were no results for fecal coliform or E. coli because the contract laboratory did not analyze the samples provided.
3. The algae bloom in the WEWPCC polishing cells appears to have dissipated in October as the TSS results returned to a more normal level. In previous monitoring report covering letters for August and September 2006, exceedances were thought to occur when the TSS was in excess of 30 mg/L. Upon further review of the Licence, Clause #26 sets a limit of 45 mg/L for TSS until December 31, 2006. Upon comparison of the data to the 45 mg/L limit for TSS, there were 2 exceedances in August and 8 exceedances in September for WEWPCC due to the algae bloom. I apologize for this oversight on the submissions.

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Please note the following respecting the report for Licence #2684 R R:

1. On October 6, there was no result for BOD5 and cBOD5 due to a laboratory quality control failure.
2. On October 5, 9 and 10, there were no results for total phosphorus and total nitrogen due to sample/matrix interferences. The cause of the interferences is being investigated.
3. On October 11 and 14 for total nitrogen and October 14 for total phosphorus, there were no results due to instrument error.
4. On October 29, there were no results for total nitrogen and total phosphorus because there was inadequate sample volume for analysis.
5. On October 16, there was no sample because of sampler malfunction. The sampler was serviced and performed satisfactorily the next day.
6. On October 18, there were no results for fecal coliform or E. coli because the contract laboratory did not analyze the samples provided.
7. On October 27, the TSS result was in excess of the 30 mg/L limit in the licence. We do not know the reason for the exceedance on this one day.
8. The BOD5 results were in excess of the 30 mg/L limit in the license for all the days that samples were collected in October. As indicated in the last monitoring submission, since the cBOD5 and TOC results have been consistently low, it is thought that these high results may be due to nitrification occurring in the plant. We continue to investigate these high values.
9. The limits on geometric mean for fecal coliforms and E. coli were exceeded in October. As mentioned in earlier monitoring report submissions, we are investigating some issues that have arisen with the UV disinfection facility including foaming and possible short circuiting of the facility.

Please note the following respecting the report for Licence #2716:

1. On October 6, there was no result for BOD5 and cBOD5 due to a laboratory quality control failure.
2. On October 6 and 28, there were no results for total phosphorus and total nitrogen due to sample/matrix interferences. The cause of the interferences is being investigated.

3. On October 21, there was no result for temperature because it was not recorded.
4. On October 31, there was no result for pH because the grab sample was not provided to the laboratory.
5. On October 4, 19, 21, 22, 24 and 27, the BOD5 results were in excess of the 30 mg/L limit in the licence. These exceedances do not seem to be related to excessive flows. Since the TOC and cBOD5 results have been consistently low, it is thought that these high results may be due to nitrification occurring in the plant.
6. The limit on geometric mean for fecal coliforms was exceeded in October. On October 4, the instantaneous flow at the time that the grab sample was taken was recorded as 141 ML/d which would mean that bypassing was likely occurring. We are not aware of any problems, mechanical or otherwise, that occurred during the rest of the month that would have caused the other high values shown in the monitoring report.

As requested in earlier monitoring report submittal letters, I would like to discuss the taking of the grab samples for bacteriological analysis during "bypass" flow conditions with you. In this period, we had another instance of this happening at SEWPCC on October 4. We should also discuss the interpretation of the SEWPCC and NEWPCC licences with respect to compliance reporting of resulting data from samples taken at that time.

As recently discussed with you over the telephone, please provide a written interpretation of the following:

1. All three licences require the collection of grab samples for fecal coliform and E. coli analysis "once each day" under the Monitoring Requirements section. In this section, we are also required to determine and record the geometric mean for these parameters "from a minimum of 12 grab samples" collected during the month. In the Specifications, Limits, Terms and Conditions section of the licences, we are required to meet the geometric mean limits for fecal coliform and E. coli based on grab samples collected "a minimum of 3 consecutive days per week". To date, we have been using all data from the monthly grab samples to determine the geometric mean values. Please let me know if we may use only 12 of the sample results on a monthly basis to determine compliance.
2. We are considering various means of meeting the intent of Clause #27 of Licence #2669 E R respecting disinfection without installing a complete full time UV treatment system which at most times based on past data is not needed. If we draw down the elevation of the polishing ponds at WEWPCC and then hold flow and not discharge to the river for a period of time, can we use a value of 0 or <1 MPN/100mL for the days that flow is not discharged for determination of the monthly geometric means for fecal coliform and E. coli?

Please let me know of any concerns or questions respecting this submission. I may be reached at the above address, by telephone at 986-4807 or by email at kkjartanson@winnipeg.ca. Thanks for your ongoing cooperation and understanding in this matter.

Yours sincerely,

Original signed by:

K.J.T. Kjartanson, P.Eng.
Manager of Environmental Standards

KJTK:kk:pr
Attachments

c: Cliff Lee, P.Eng., Assistant Director of Red River Region
B.D. MacBride, P.Eng.
W.J. Borlase, P.Eng.
M.A. Shkolny, P.Eng.