

Conservation Climate Change and Environmental Protection Division Environmental Assessment and Licensing Branch 123 Main Street, Suite 160, Winnipeg, Manitoba R3C 1A5 T 204 945-7100 F 204 945-5229 www.gov.mb.ca/conservation/eal

April 8, 2011

Mr. Wayne Johnson General Manager YMCA-YWCA of Winnipeg Box 160 Woodlands MB R0C 3H0

Dear Mr. Johnson:

#### Re: YMCA-YWCA of Winnipeg Camp Y - Environment Act Licence No. 462 R, Client File: 964.00

This is in response to your letter of January 12, 2011, requesting an alteration to Environment Act Licence No. 462 to address the change in ownership of Camp Y.

Environment Act Licence No. 462 R is enclosed, incorporating the requested alteration, and updating licence conditions to current operating requirements. (The previous licence was issued in 1975.)

In addition to the enclosed Licence requirements, please be informed that all other applicable federal and provincial regulations must be complied with. A Notice of Alteration must be filed with the Director for approval prior to any alteration to the Development as licensed.

Bruce Webb of this office will be pleased to meet with you and your operator at the camp later this spring to review the conditions of the licence. You may contact him at (204) 945-7021 or bruce.webb@gov.mb.ca. For any other information on the administration and application of the Licence, please feel free to contact Mr. Mike Baert, Environment Officer at (204) 785-5349 or mike.baert@gov.mb.ca.

Pursuant to Section 27 of the Environment Act, this licensing decision may be appealed by any person who is affected by the issuance of this Licence to the Minister of Conservation within 30 days of the date of the Licence.

Yours truly,

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Tracey Braun, M.Sc. Director Environment Act

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- c. Don Labossiere, Environmental Operations Branch, Winnipeg Mike Baert, Environmental Operations Branch, Selkirk
- NOTE: Confirmation of Receipt of this Licence No. 462 R (by the Licencee only) is required by the Director of Environmental Assessment and Licensing. Please acknowledge receipt by signing in the space provided below and faxing a copy (letter only) to the Department at (204) 945-5229 by April 21, 2011.

On behalf of YMCA-YWCA of Winnipeg

Date

THE ENVIRONMENT ACT LOI SUR L'ENVIRONNEMENT





Licence No. / Licence n°	462 R
Issue Date / Date de délivrance	August 14, 1975
Revised :	April 8, 2011

# In accordance with The Environment Act (C.C.S.M. c. E125) / Conformément à la Loi sur l'environnement (C.P.L.M. c. E125)

Pursuant to Sections 11(1) and 14(2)

# THIS LICENCE IS ISSUED TO: / CETTE LICENCE EST DONNÉE À:

### YMCA-YWCA of Winnipeg; "the Licencee"

for the construction and operation of the Development being a wastewater collection system and a wastewater treatment lagoon located in SW 29-14-2W in the Rural Municipality of Woodlands serving Camp Y, with treated effluent to be discharged to a drains flowing to Sturgeon Creek, in accordance with the Proposal filed under The Clean Environment Act on September 10, 1974 and additional information dated January 12, 2011, and subject to the following specifications, limits, terms and conditions:

### **DEFINITIONS**

In this Licence,

"accredited laboratory" means an analytical facility accredited by the Standard Council of Canada (SCC), or accredited by another accrediting agency recognized by Manitoba Conservation to be equivalent to the SCC, or be able to demonstrate, upon request, that it has the quality assurance/quality control (QA/QC) procedures in place equivalent to accreditation based on the international standard ISO/IEC 17025, or otherwise approved by the Director;

"approved" means approved by the Director in writing;

"Director" means an employee so designated pursuant to The Environment Act;

"effluent" means treated wastewater flowing or pumped out of the wastewater treatment lagoon;

"Environment Officer" means an employee so designated pursuant to The Environment Act;

"fecal coliform" means aerobic and facultative, Gram-negative, nonspore-forming, rod-shaped bacteria capable of growth at 44.5°C, and associated with fecal matter of warm-blooded animals;

### \*\* ECOPY OR THIS EXCENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES\*

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"five-day biochemical oxygen demand" means that part of the oxygen demand usually associated with biochemical oxidation of organic matter within five days at a temperature of 20°C;

"five-day carbonaceous biochemical oxygen demand" means that part of the oxygen demand usually associated with biochemical oxidation of carbonaceous organic matter within five days at a temperature of 20°C, excluding the oxygen demand usually associated with the biochemical oxidation of nitrogenous organic matter;

"grab sample" means a quantity of wastewater taken at a given place and time;

"high water mark" means the line on the interior surface of the primary and secondary cells which is normally reached when the cell is at the maximum allowable liquid level;

"low water mark" means the line on the interior surface of the primary and secondary cells which is normally reached when the cell is discharged;

"MPN Index" means the most probable number of coliform organisms in a given volume of wastewater which, in accordance with statistical theory, would yield the observed test result with the greatest frequency;

"primary cell" means the first in a series of cells of the wastewater treatment lagoon system and which is the cell that receives the untreated wastewater;

"riprap" means small, broken stones or boulders placed compactly or irregularly on dykes or similar embankments for protection of earthen surfaces against wave action or current;

"secondary cell" means a cell of the wastewater treatment lagoon system which is the cell that receives partially treated wastewater from the primary cell;

"sewage" means household and commercial wastewater that contains human waste;

"Standard Methods for the Examination of Water and Wastewater" means the most recent edition of Standard Methods for the Examination of Water and Wastewater published jointly by the American Public Health Association, the American Waterworks Association and the Water Environment Federation;

"total coliform" means a group of aerobic and facultative anaerobic, Gram-negative, nonsporeforming, rod-shaped bacteria, that ferment lactose with gas and acid formation within 48 hours at 35°C, and inhabit predominantly the intestines of man or animals, but are occasionally found elsewhere and include the sub-group of fecal coliform bacteria;

"wastewater" means the spent or used water of a community or industry which contains dissolved and suspended matter; and

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"wastewater treatment lagoon" means the component of this development which consists of an impoundment into which wastewater is discharged for storage and treatment by natural oxidation.

### **GENERAL TERMS AND CONDITIONS**

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

- 1. In addition to any of the following specifications, limits, terms and conditions specified in this Licence, the Licencee shall, upon the request of the Director:
  - a) sample, monitor, analyze or investigate specific areas of concern regarding any segment, component or aspect of pollutant storage, containment, treatment, handling, disposal or emission systems, for such pollutants, ambient quality, aquatic toxicity, leachate characteristics and discharge or emission rates, and for such duration and at such frequencies as may be specified;
  - b) determine the environmental impact associated with the release of any pollutant from the Development; or
  - c) provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and analytical procedures being used, bioassay data, flow rate measurements and such other information as may from time to time be requested.
- 2. The Licencee shall submit all information required to be provided to the Director under this Licence, in writing, in such form (including number of copies) and of such content as may be required by the Director, and each submission shall be clearly labelled with the Licence Number and Client File Number associated with this Licence.
- 3. The Licencee shall direct all wastewater generated within Camp Y toward the wastewater treatment lagoon or other approved sewage treatment facilities.
- 4. The Licencee shall operate and maintain the wastewater treatment lagoon and wastewater collection system in such a manner that the release of offensive odours is minimized.
- 5. The Licencee shall actively participate in any future watershed-based management study, plan and/or nutrient reduction program, approved by the Director, for Sturgeon Creek and associated waterways and watersheds.

# SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

### **Respecting Operation**

- 6. The Licencee shall obtain and maintain classification of the Development pursuant to *Manitoba Regulation 77/2003* respecting *Water and Wastewater Facility Operators* or any future amendment thereof and maintain compliance with all requirements of the regulation including, but not limited to, the preparation and maintenance of a Table of Organization, Emergency Response Plan and Standard Operating Procedures.
- 7. The Licencee shall carry out the operation of the Development with individuals properly certified to do so pursuant to *Manitoba Regulation* 77/2003 respecting *Water and Wastewater Facility Operators* or any future amendment thereof.
- 8. The Licencee shall operate the wastewater treatment lagoon such that the wastewater load does not exceed the design capacities as follows:
  - a) the organic loading on the primary cell, as indicated by the five-day biochemical oxygen demand, is not in excess of 56 kilograms per hectare per day; and
  - b) the depth of liquid in all primary and secondary cells does not exceed 1.5 metres.
- 9. The Licencee shall not discharge effluent from the wastewater treatment lagoon:
  - a) where the organic content of the effluent, as indicated by the five-day biochemical oxygen demand, is in excess of 25 milligrams per litre;
  - b) where the total suspended solids content of the effluent is in excess of 25 milligrams per litre, unless the exceedance is caused by algae;
  - c) where the fecal coliform content of the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample;
  - d) where the total coliform content of the effluent, as indicated by the MPN index, is in excess of 1500 per 100 millilitres of sample;
  - e) between the 1st day of November of any year and the 15th day of June of the following year;
  - f) when flooding from any cause is occurring along the discharge route; and
  - g) when the discharge of effluent will cause or contribute to flooding in or along the discharge route.
- 10. The Licencee may, notwithstanding Clause 9 e) of this Licence, discharge effluent from the wastewater treatment lagoon between May 16, 2011 and June 15, 2011, provided that all other requirements of Clause 9 of this Licence are satisfied.
- 11. The Licencee shall, when chlorine is used as a disinfecting agent:
  - a) notify the Director in advance;
  - b) dechlorinate effluent prior to discharge;
  - c) obtain grab samples prior to and daily during the discharge period and have them analyzed for total residual chlorine; and

- d) not discharge effluent where the concentration of the total residual chlorine is in excess of 0.02 milligrams per litre.
- 12. The Licencee shall, when discharging effluent from the wastewater treatment lagoon, limit the rate of discharge so that an approximately uniform discharge over a two week period is achieved. A higher rate of discharge may be used if the depth of liquid in the primary cell of the wastewater treatment lagoon reaches 1.5 metres during the discharge period, or during a discharge after October 15 of any year.
- 13. The Licencee shall, in case of physical or mechanical breakdown of the wastewater collection and/or treatment system:
  - a) notify the Director immediately;
  - b) identify the repairs required to the wastewater collection and/or treatment system;
  - c) undertake all repairs to minimize unauthorized discharges of wastewater; and
  - d) complete the repairs in accordance with any written instructions of the Director.

### **Respecting Maintenance:**

- 14. The Licencee shall install and maintain a fence around the wastewater treatment lagoon to limit access. The fence shall be a minimum of 1.2 metres high and have a locking gate, which shall be locked at all times except to allow access to the wastewater treatment lagoon.
- 15. The Licencee shall, if in the opinion of the Director, significant erosion of the interior surfaces of the dykes occurs, repair the dykes and place riprap on the interior dyke surfaces from 0.6 metres above the high water mark to the bottom of the dykes to protect the dykes from wave action.
- 16. The Licencee shall provide and maintain a grass cover on the dykes of the wastewater treatment lagoon and shall regulate the growth of the vegetation so that the height of the vegetation does not exceed 0.3 metres on all dykes.
- 17. The Licencee shall annually remove by mechanical methods all reeds, rushes and trees located above the low water mark in every cell of the wastewater treatment lagoon.
- 18. The Licencee shall implement an ongoing program to ensure that burrowing animals are removed from the site of the wastewater treatment lagoon.

### MONITORING AND REPORTING SPECIFICATIONS

- 19. The Licencee shall, unless otherwise specified in this Licence:
  - a) carry out all preservations and analyses on liquid samples in accordance with the methods prescribed in the Standard Methods for the Examination of Water and

Wastewater, or in accordance with equivalent preservation and analytical methodologies approved by the Director;

- b) have all analytical determinations undertaken by an accredited laboratory; and
- c) report the results to the Director, in writing and in an electronic format acceptable to the Director, within 60 days of the samples being taken.
- 20. The Licencee shall prior to each effluent discharge campaign obtain grab samples of the treated wastewater and have them analyzed for:
  - a) the organic content as indicated by the five day biochemical oxygen demand and expressed as milligrams per litre;
  - b) the organic content as indicated by the five-day carbonaceous biochemical oxygen demand and expressed as milligrams per litre;
  - c) the total suspended solids content expressed as milligrams per litre;
  - d) the fecal coliform content as indicated by the MPN index and expressed as MPN per 100 millilitres per sample; and
  - e) the total coliform content as indicated by the MPN index and expressed as MPN per 100 millilitres per sample.
- 21. The Licencee shall:
  - a) during each year maintain records of:
    - i) wastewater sample dates;
    - ii) original copies of laboratory analytical results of the sampled wastewater; and
    - iii) effluent discharge dates;
  - b) make the records being maintained pursuant to sub-Clause 21 a) of this Licence available to an Environment Officer upon request; and
  - c) keep the maintained records of any one calendar year available for inspection for a period of three years following the respective calendar year in which they were recorded.
- 22. The Licencee shall, during the first year of operation of the Development following the date of this Licence, obtain two representative grab samples of the effluent during each effluent discharge campaign. The grab samples shall be obtained near the start of each discharge and near the end of each discharge, and shall be analysed and reported in accordance with Schedule "A" attached to this Licence.

### **REVIEW AND REVOCATION**

- A Environment Act Licence No. 462 is hereby rescinded.
- B. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.

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C. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Director may require the filing of a new proposal pursuant to Section 11 of The Environment Act.

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Tracey Braun, M. Sc. Director Environment Act

Client File No.: 964.00

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# Schedule "A" to Environment Act Licence No. 462 R

### Initial Characterization of Wastewater

Facility Size: Very small (less than 500 m<sup>3</sup>/day) Facility Type: Facultative wastewater treatment lagoon - intermittent discharge

#### Effluent Sampling:

During the first year of operation, for all discharge events:

- 1. Obtain a representative grab sample of the discharging effluent near the beginning of the discharge period and near the end of the discharge period (i.e. two samples for each discharge event).
- 2. Determine the temperature of each sample at the time of sampling.

## Effluent Analysis:

- 1. For each grab sample, have the grab sample analysed by an accredited laboratory for:
  - a) the organic content as indicated by the five-day biochemical oxygen demand and expressed as milligrams per litre;
  - b) the organic content as indicated by the five-day carbonaceous biochemical oxygen demand and expressed as milligrams per litre;
  - c) the total suspended solids content expressed as milligrams per litre;
  - d) the *Esherichia coli* (*E. Coli*) content as indicted by the MPN index and expressed as MPN per 100 millilitres per sample;
  - e) the fecal coliform content as indicated by the MPN index and expressed as MPN per 100 millilitres per sample;
  - f) the total coliform content as indicated by the MPN index and expressed as MPN per 100 millilitres per sample;
  - g) if chlorine was used as a disinfecting agent, total residual chlorine expressed as milligrams per litre;
  - h) total ammonia nitrogen expressed as milligrams per litre;
  - i) nitrate-nitrite nitrogen expressed as milligrams per litre;
  - j) total kjeldahl nitrogen (TKN) expressed as milligrams per litre;
  - k) dissolved phosphorus expressed as milligrams per litre;
  - 1) total phosphorus expressed as milligrams per litre; and
  - m) pH.

### Effluent Reporting:

1. For each grab sample, report the results to the Director, in writing or in an electronic format acceptable to the Director within 60 days of the sampling date. The report shall include the sampling date, sample temperature, the dates of the effluent discharge, and copies of the laboratory analytical results of the sampled effluent.