In accordance with the Manitoba Environment Act (C.C.S.M. c. E125)

THIS LICENCE IS ISSUED TO:

DUCKS UNLIMITED CANADA: APPLICANT
(Oak Hammock Wildlife Management Area)

The following limits, terms, and conditions shall be complied with in connection with the construction and operation of the proposed conservation/interpretive centre, office complex and wastewater treatment lagoon system located on portions of Section 4, and 9 in Township 14 Range 3 EPM, in the Oak Hammock Wildlife Management Area in the Rural Municipality of Rockwood with final disposal of effluent from the wastewater treatment lagoon into the Oak Hammock Marsh:

1. The Applicant shall submit, to the Director for approval, a detailed action plan to mitigate adverse effects on the water quality, flora and fauna, a detailed work plan and a detailed schedule for the construction of the proposed development.

2. The Applicant shall ensure that construction activities are carried out in a manner approved by the Director, in consultation with the Department of Natural Resources, that minimizes impacts to the water quality, flora and fauna of the Marsh.

3. The Applicant 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 30 milligrams per litre;

   (b) where the fecal coliform content of the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample;

   (c) where the total coliform content of the effluent, as indicated by the MPN index, is in excess of 1500 per 100 millilitres of sample;
(d) where the sodium content of the effluent is in excess of 300 milligrams per litre; and

(e) between the first day of November of any year and the fifteenth day of July of the following year without prior written approval of the Director.

4. The Applicant shall operate and maintain the wastewater treatment lagoon system in such a manner that:

(a) the release of offensive odours is minimized;

(b) the organic loading on the primary cell of the wastewater treatment lagoon, as indicated by the five day biochemical oxygen demand, is not in excess of 56 kilograms per hectare per day; and

(c) the depth of sewage in the lagoon cell does not exceed 1.5 metres.

5. The Applicant 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; and

(c) complete the repairs in accordance with the written instructions of the Director.

6. The Applicant shall prior to the construction of dykes for the wastewater treatment lagoon:

(a) remove all organic topsoil from the area where the dykes will be constructed; or

(b) remove all organic material for a depth of 0.3 metres and a width of 3.0 metres from the area where the dyke will be built, provided all the lagoon dykes are lined with clay or other suitable material as required by Clause 7 to a minimum thickness of one metre measured perpendicular to the face of the side wall.
7. The Applicant shall ensure that the wastewater treatment lagoon is constructed with clay or other suitable material such that all interior surfaces of the lagoon structure are underlain with a minimum of 1 metre of soil having a hydraulic conductivity of $1 \times 10^{-7}$ centimetres per second or less.

8. The Applicant shall arrange with the designated Environment Officer a mutually acceptable time and date, for any soil sampling required by Clause 9, between the 15th day of May and the 15th day of October of any year, unless prior approval, by the Director, is given.

9. The Applicant shall either:
   (a) subject undisturbed soil samples from the constructed cells of the wastewater treatment lagoon to hydraulic conductivity tests, the number and location of samples to be specified by the designated Environment Officer up to a maximum of twenty samples; or
   (b) where undisturbed soil samples cannot be taken, test the soil of 4 plane surfaces from the constructed cells of the wastewater treatment lagoon for hydraulic conductivity by an in situ field test method as prescribed by the designated Environment Officer.

10. The Applicant shall, not less than 2 weeks before the constructed cells of the wastewater treatment lagoon are placed in operation, submit to the Director the results of the tests carried out pursuant to Clause 9 of this Licence.

11. The Applicant shall limit public access to the wastewater treatment lagoon by a means other than by fencing and in a manner approved by the Director.

12. The Applicant shall ensure that only well water supplied to the domestic hot water system is softened.

13. The Applicant shall ensure that laboratory wastes are not directed to the wastewater treatment lagoon system, unless otherwise approved in writing by the Director.

14. The Applicant shall:
   (a) submit to the Director, for approval, not later than February 1, 1991 a program of flora and fauna inventory and water quality monitoring;
(b) commence the approved inventory and monitoring program not later than May 1, 1991; and

(c) conduct the approved inventory and monitoring program in a manner and at such a frequency as is satisfactory to the Director.

15. The Applicant shall submit, to the Director, a report of the results of the inventory and monitoring program, conducted pursuant to Clause 14, not later than December 31, of each year during which the program was conducted.

16. The Applicant shall:

(a) develop a contingency plan for the mitigation of any adverse impact to the flora and fauna as the result of the development and as indicated by the inventory and monitoring program conducted pursuant to Clause 14;

(b) submit the contingency plan to the Director, for approval, not later than September 30, 1991;

(c) review and update the contingency plan not less than once every five years; and

(d) implement the contingency plan in accordance with instructions of the Director.

17. The Applicant shall co-operate fully with a Citizen Advisory Committee to be established by the Director pursuant to the recommendation of the Manitoba Clean Environment Commission in its Report on Hearings of July, 1990.

18. The Applicant shall, where instructed by the Director, investigate any specific area of concern regarding any environmental aspect associated with the operation and provide the Director with such reports, data or other information, as may be requested by the Director.

19. The Applicant shall prepare and submit, by September 1, 1991, a chemical handling protocol and a contingency plan to provide emergency response to potential environmental accidents or chemicals spills for approval by the Director.

20. The Applicant shall implement and follow the chemical handling protocol and in the event of a chemical spill or environmental accident take all necessary steps as described in the contingency plan or as instructed by the Director.
21. The Applicant shall submit, by January 31 of each year, an inventory of all chemicals used at the site and shall submit any revisions to the inventory, protocol and emergency response contingency plan prior to any new chemicals being brought on site.

22. The Applicant shall ensure that all solid wastes and laboratory wastes are disposed of in a manner acceptable to the Director.

23. The Applicant shall:
   (a) submit, by December 31, 1991, a preliminary de-commissioning and site rehabilitation plan to Director for approval, revision or otherwise;
   (b) upon the imminent cessation of operations, expand in detail upon the preliminary de-commissioning and rehabilitation plan approved by the Director and shall submit to the Director a final de-commissioning and rehabilitation plan for the site of the operation, for approval, revision or otherwise by the Director;
   (c) upon termination of the operation, take all necessary steps to carry out the approved de-commissioning and rehabilitation plan within the time interval specified by the Director.
February 5, 1993

Mr. Larry Strachan
Environment & Workplace Safety & Health
Environmental Management
Building 2
139 Tuxedo Avenue
Winnipeg, Manitoba
R3N 0H6

Dear Larry:

As per Clause 21 in our Environmental License #1422E, enclosed is a list of all chemicals that currently are in use at the Oak Hammock Marsh Conservation Centre. As always, we are following the protocol and emergency response contingency plans as outlined in the Workplace Hazardous Material Inventory System, including the material safety data sheets and labels.

Yours truly,

R.B. Laidler
Manager, Administrative Services

Enclosure

cc: T.G. Neraasen
Deborah DesRivieres
Doug Peterson
CHEMICAL INVENTORY

Acetylene
Household Goop (adhesive)
Indo 9d Non Acid Toilet Bowl Cleaner
Indo 9 Non Acid Toilet Bowl Cleaner
Butane
Braze
CSG 4000 Industrial Cleaner
Velva Sheen Dust Control - Aerosol
CSG Furniture Polish
Indo 4 Neutral Floor Cleaner Concentrate
Vista Spray Spray Buff Concentrate
Gum Remover
Indo 2d Glass Cleaner - Ready to Use
Indo 2 Glass Cleaner Concentrate
Guardian Plus
M 500 Hand Lotion Soap
Hand Cleaner, H.D.3.5L
Lacquer Thinner
Weld-On 16 for Acrylic
Neutone (Waterless Wax)
Nickel Silver
Oxygen
Pneumatic Tool Oil
Petroleum
Latex Cement
Paint Thinner
Propane
Acrylic Primer Sealer Paint
Flat Latex Paint
Rinse Dry (Wetting Agent)
Stainless Steel Aerosol
Silicone Sealant
Satin Urethane
Solder Paste
WD-40 Aerosol
Zurn Poly-Zyme
Thermal Joint Compound