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

THIS LICENCE IS ISSUED TO:

TOWN OF STONEWALL: "the Licencee"

for the construction and operation of the Development being the operation of a wastewater collection system and the expansion and operation of a wastewater treatment lagoon located in the southwest quarter of Section 35, Township 13, Range 1 EPM and with discharge of treated effluent into the Grassmere Drain and subject to the following specifications, limits, terms and conditions:

1. The Licencee shall ensure that all domestic sewage generated within the Town is directed toward the wastewater treatment lagoon.

2. 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 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; or
(d) between the first day of November of any year and the 15th day of May of the following year, unless prior approval, by the Director, is given.

3. The Licencee shall operate and maintain the wastewater treatment lagoon in such a manner that:
   (a) the release of offensive odours is minimized;
   (b) the organic loading, as indicated by the five day biochemical oxygen demand, on the cell of the wastewater treatment lagoon system designated as Cell 2 in Appendix "A" to this Licence, is not in excess of 56 kilograms per hectare per day; and
   (c) the depth of sewage in the cell of the wastewater treatment lagoon system designated as Cell 2 in Appendix "A" to this Licence, does not exceed 1.5 metres.

4. The Licencee shall, prior to the construction of the dikes for the expansion to the wastewater treatment lagoon:
   (a) remove all organic topsoil from the area where the dikes 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 dikes will be built, provided all the lagoon dikes are lined with clay or other suitable material as required by Clause 5, to a minimum thickness of one metre measured perpendicular to the face of the side wall.

5. The Licencee shall construct the wastewater treatment lagoon system 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.
6. The Licencee shall arrange with the designated Environment Officer a mutually acceptable time and date for any required pipeline leakage testing and soil sampling between the 15th day of May and the 15th day of October of any year, unless prior approval, by the Director, is given.

7. The Licencee shall either:

(a) subject undisturbed soil samples, from each cell of the completed expansion to 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 each cell of the completed expansion to the wastewater treatment lagoon, for hydraulic conductivity by an insitu field test method as prescribed by the designated Environment Officer.

8. The Licencee shall not less than 2 weeks before the wastewater treatment lagoon is placed in operation, submit to the Director the results of the tests carried out pursuant to Clause 7.

9. (a) The Licencee shall subject the interconnecting pipeline between Cell 2 and Cell 4 to a leakage test prior to commencement of operation of the wastewater treatment lagoon. The Licencee shall conduct the test in accordance with Appendix "B" to this Licence. The Licencee shall ensure that all defective or broken products are removed and replaced with sound products and shall repeat the leakage test after any repair is made.
9. (b) In addition to the requirements of Clause 9(a) the Licencee shall subject the interconnecting pipeline between Cell 2 and Cell 4 to additional leakage tests in accordance with Appendix "B" to this Licence as may be required from time to time by the Director.

10. 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 written instructions of the Director.

11. The Licencee shall install and maintain a fence around the wastewater treatment lagoon to limit access.

12. The Licencee shall, on or before the 31st day of May, 1993, provide to the Director "as constructed" drawings of the wastewater treatment lagoon and all appurtenances.
REVOCATION

If in the opinion of the Director the Licencee has exceeded or is exceeding the specifications, limits, terms, or conditions set out herein, the Director may revoke, temporarily or permanently, this Licence.

FILE: 204.40
Appendix "A"
(Environmetal Act Licence No. 1546)
Appendix "B"
(Environment Act Licence No. 1546)

Pipeline Leakage Test (for high density polyethylene pipe):

The Town of Stonewall shall perform a leakage test on all portions of the completed pipeline. Prior to testing the pipeline shall be filled with water and all air shall be expelled from the line. The test pressure shall be 700 kPa. The pipeline shall be pressurized until a minimum of 24 hours has passed since the line was filled with water. The pipeline shall be pressurized at the test pressure, and over a four hour period, at hourly intervals sufficient make up water shall be added to return the pipeline to the test pressure, in order to compensate for pipe expansion while under pressure. At the end of the four hour period, the pressure shall be brought up to the test pressure, and over a period not exceeding three hours, the amount of make up water required to bring the pipeline back up to the test pressure shall be measured. The amount of make up water must not exceed the allowable amount given in the following table. If the amount exceeds the allowable, a minimum of eight hours shall be allowed to pass before the procedure may recommence. Leakage shall be found and corrected, until the pipeline passes the test.

### ALLOWABLE LIMIT FOR MAKE UP WATER

<table>
<thead>
<tr>
<th>Nominal Pipe Size (mm)</th>
<th>1 hour test</th>
<th>2 hour test</th>
<th>3 hour test</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
<td>37.2</td>
<td>74.5</td>
<td>111.8</td>
</tr>
<tr>
<td>200</td>
<td>62.1</td>
<td>124.2</td>
<td>186.3</td>
</tr>
</tbody>
</table>

RESERVED