

# Environment Act Licence

Manitoba  
Environment



Licence No. 1790

Issue Date APRIL 19, 1994

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

THIS LICENCE IS ISSUED TO:

**N. M. PATERSON & SONS LIMITED; "the Licensee"**

for the construction and operation of the Development being a grain elevator located on North-east quarter of Section 10, Township 19, Range 28 WPM in the Rural Municipality of Russell and subject to the following specifications, limits, terms and conditions:

## **DEFINITIONS**

**"A-weighted sound level"** means the sound level measured in dBA units with a sound level meter set on the A-weighting network, being a filter designed to approximate the relative sensitivity of the normal human ear to different frequencies of sound;

**"appreciable impulsive or impact character"** means sound which has a significant amount of impulsive or impact nature, such as hammering, explosions and clanking or banging. Impulsive or impact sounds are sounds of short duration, usually less than one second, characterized by an abrupt onset followed by a rapid decay;

**"dB"** (decibel) means a dimensionless measure of sound level or sound pressure level, where,

$$\text{sound level} = 20 \log_{10} \frac{\text{sound pressure (actual)}}{\text{sound pressure (reference)}};$$

**"chemical product"** includes but is not limited to petroleum products, fertilizers, and pesticides;

**"4 minute period(s) in the aggregate"** means any 16 readings, not necessarily contiguous, taken at 15 second intervals within a 1 hour sampling period;

**"Leq (energy equivalent level)"** means the A-weighted sound level (as decibels {dBA}) of a constant or steady sound, for a stated period, which has an amount of acoustic energy equivalent to that contained in the sound being measured;

**"Leq(1)"** means the Leq for a one hour period;

**"material(s)"** means any substance which may create or alter in any manner emissions from the Development;

**"opacity"** means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background;

**"particulate matter"** means any finely divided liquid or solid matter other than water droplets;

**"particulate residue"** means that part or portion of an atmospheric emission which is deposited onto a surface.

**"point source"** means any point of emission from the Development where pollutants are ducted into the atmosphere;

**"predominant discrete tone"** means sound (for example a whine or hum) having a one-third octave band sound level which, when measured in a one-third octave band, exceeds the arithmetic average of the sound levels of the two adjacent one-third octave bands on either side of such one-third octave band by:

- i) 5 dB for such one-third octave band with a center frequency from 500 Hertz to 20,000 Hertz, inclusive, provided such one-third octave band sound level exceeds the sound level of each adjacent one-third octave band;
- ii) 8 dB for such one-third octave band with a center frequency from 160 Hertz to 400 Hertz, inclusive, provided such one-third octave band sound level exceeds the sound level of each adjacent one-third octave band; or
- iii) 15 dB for such one-third octave band with a center frequency from 25 Hertz to 125 Hertz, inclusive, provided such one-third octave band sound level exceeds the sound level of each adjacent one-third octave band.

### GENERAL SPECIFICATIONS

1. The Licensee shall not store any chemical products, other than those necessary for the maintenance of the equipment, in the Development.
2. The Licensee shall dispose of all domestic wastewater in a manner acceptable to the Director or in accordance with appropriate Regulations.
3. The Licensee shall develop and submit to the Director for approval, a contingency plan for the protection of any gas or oil pipelines and the mitigation of any adverse impact that may result from operations up-sets or fire.

### LIMITS, TERMS AND CONDITIONS

4. The Licensee shall not emit particulate matter from the Development such that:
  - i) particulate matter:
    - a) exceeds 0.23 grams per dry standard cubic metre calculated at 25 degrees Celsius and 760 millimetres of mercury, corrected to 12 percent carbon dioxide for processes involving combustion, from any point source of the Development;
    - b) exhibits a visible plume with an opacity of greater than 5 percent at any point beyond the property line of the Development; or
    - c) results in the deposition of visible particulate residue at any time beyond the property line of the Development;
  - or,
  - ii) opacity from any point source of the Development equals or exceeds:
    - a) 20 percent for a 4 minute period(s) in the aggregate in any one hour;  
or
    - b) 40 percent at any time.

5. The Licensee shall control roadway dust from the Development in accordance with a method and application approved by the Director.
6. The Licensee shall not emit odour from any part or process of the Development such that any emission is detectable when measured at a point of reception:
  - i) within an area which is zoned as residential or commercial when one volume of odorous air is diluted with one equal volume of odour-free air; or
  - ii) within an area which is zoned as industrial when one volume of odorous air is diluted with six equal volumes of odour-free air.
7. The Licensee shall not emit sound from any part or process of the Development, such that any emission when measured at a point of reception within an area which is zoned as residential, exceeds the following {Leq(1)} limits:
  - i) subject to sub-Clause 7 (ii):
    - a) 60 dBA during the daytime hours of 7:00 a.m. to 10:00 p.m., local time; or
    - b) 50 dBA during the nighttime hours of 10:00 p.m. to 7:00 a.m., local time;
  - or,
  - ii) when the sound has an appreciable impulsive or impact character or a predominant discrete tone:
    - a) 55 dBA during the daytime hours of 7:00 a.m. to 10:00 p.m., local time; or
    - b) 45 dBA during the nighttime hours of 10:00 p.m. to 7:00 a.m., local time.
8. The Licensee shall not emit sound from any part or process of the Development, such that any emission when measured at a point of reception within an area which is zoned as commercial, exceeds the following {Leq(1)} limits:
  - i) 70 dBA during the daytime hours of 7:00 a.m. to 10:00 p.m., local time;
  - or,
  - ii) 60 dBA during the nighttime hours of 10:00 p.m. to 7:00 a.m., local time.
9. The Licensee shall not emit sound from any part or process of the Development, such that any emission when measured at a point of reception, beyond the property line of the Development and within an area which is zoned as industrial, exceeds 70 dBA at any time.

#### REVIEW OR REVOCATION

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



Larry Strachan, P. Eng.  
Director, Environment Act