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

THIS LICENCE IS ISSUED TO:

**IMPERIAL OIL LIMITED: “the Licencee”**

for the construction and operation of the Development being a bulk fertilizer storage and handling facility in the NW 1/4 Section 20-5-9 WPM in the Rural Municipality of Lorne subject to the following specifications, limits, terms and conditions:

**DEFINITIONS**

In this Licence,

“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;

“chemical” includes but is not limited to petroleum products, fertilizers and pesticides;

“dB” (decibel) means a dimensionless measure of sound level or sound pressure level, where,

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

“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;
"L" means the Leq for a one hour period; eq(1)

"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 a 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;

"sewage" means human body, toilet, liquid, waterborne culinary, sink or laundry waste.

**GENERAL SPECIFICATIONS**

1. The Licencee shall ensure that a high standard of equipment maintenance and good housekeeping and operational practices are carried out with respect to the Development, at all times.

2. The Licencee shall reduce the production and dissemination of wastes by initiating and maintaining waste reduction and waste recycling programs.

**LIMITS, TERMS AND CONDITIONS**

**I - AIR EMISSIONS**

3. The Licencee shall not emit particulate matter from the Development such that:
   i) particulate matter, measured by a method approved by the Director:
      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, measured by a method approved by the Director, 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.

4. The Licencee 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.

5. The Licencee shall not emit sound from any part or process of the Development, such that any emission, when measured by a method approved by the Director, at a point of reception within an area which is zoned as residential, exceeds the following $\text{Leq}(1)$ limits:
   i) subject to sub-Clause 5 (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.

6. The Licencee shall not emit sound from any part or process of the Development, such that any emission, when measured by a method approved by the Director, at a point of reception within an area which is zoned as commercial, exceeds the following $\text{Leq}(1)$ 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.

7. The Licencee shall not emit sound from any part or process of the Development, such that any emission, when measured by a method approved by the Director, at a point of reception, beyond the property line of the Development and within an area which is zoned as industrial, exceeds an $\text{Leq}(1)$ of 70 dBA at any time.

II - SPILLAGE

8. The Licencee shall not direct any spillage, contaminated run-off or pollutant, other than sewage, to a sewage disposal system.

9. The Licencee shall contain and clean up immediately any chemical spills to prevent soil, surface water or ground water contamination.
III - FERTILIZER AND PETROLEUM PRODUCTS

10. The Licencee, notwithstanding Clause 11 and 12 of this Licence, shall construct and operate all parts of the Development which handle petroleum products (excepting those used for fuel) in accordance with all applicable guidelines established by the product supplier(s).

11. The Licencee shall surface all areas of the Development where fertilizer and petroleum products (excepting those used for fuel) are stored, loaded, blended, transferred or otherwise handled in a manner and using materials approved by the Director. This surfacing shall: allow for reasonable and complete housekeeping and spill cleanup activities; and prevent spilled or leaked fertilizer or petroleum products from infiltrating into the underlying aquifer.

12. The Licencee shall grade and/or curb all areas where fertilizer or petroleum products (excepting those used for fuel) are stored, loaded, blended, transferred or otherwise handled, in a manner and using materials approved by the Director, such that all product spillage and contaminated run-off water from these areas is contained within the Development.

IV - SAMPLING AND ANALYSIS

13. The Licencee, at the request of the Director, shall conduct soil and/or ground water sampling at or adjacent to the Development.

14. The Licencee shall have each sample collected pursuant to Clause 13 analyzed by a laboratory approved by the Director and using methods approved by the Director for any of the following analytes as may be specified by the Director:
   i) \( \text{NH}_3 \)- N (Sol.);
   ii) \( \text{NO}_3 \)-\( \text{NO}_2 \)- N (Diss.);
   iii) Kjeldhal, Total - N;
   iv) P - Total;
   v) Pesticides;
   vi) Benzene;
   vii) Toluene;
   viii) Ethylbenzene; and
   ix) Xylene.

15. The Licencee shall submit a copy of the sampling report complete with analytical results as specified pursuant to Clauses 13 and 14, to the Director within 60 days of the completion of the sampling program.

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.

[Signature]
Larry Strachan, P. Eng.
Director
Environment Act

File No.: 3763.00
FAXED
CLIENT FILE NO.  3763.00

MAY 10, 1994

Mr. C.J. (Clem) MacVicar
Imperial Oil Limited
7 - 1661 Portage Avenue
Winnipeg MB R3J 3T7

Dear Mr. MacVicar:

Enclosed is Environment Act Licence No. 1818 dated May 10, 1994 issued in accordance with the Manitoba Environment Act to Imperial Oil Limited in connection with the construction and operation of a bulk fertilizer storage and handling facility in the NW 1/4 20-5-9 WPM in the Rural Municipality of Lorne.

In addition to the enclosed Licence requirements, please be informed that all other applicable federal, provincial and municipal regulations and by-laws must be complied with.

For further information on the administration and application of the Licence, please feel free to contact Mr. Mark Stephens at 325-2291.

Yours truly,

Larry Strachan, P. Eng.
Director
Environment Act

Enc.

c: L. MacCallum, Regional Director
  South Central Regional Library
  Rural Municipality of Lorne

NOTE: Confirmation of Receipt of this Licence is required by the Director of Approvals. Please acknowledge receipt by signing in the space provided below and faxing (945-5229) back to the Department by May 13, 1994.

On behalf of Imperial Oil Limited

Date