

Environment Act Licence

Manitoba
Environment



Licence No. 1860

Issue Date June 28, 1994

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

THIS LICENCE IS ISSUED TO:

CARGILL LIMITED: "the Licencee"

for the construction and operation of the Development being an anhydrous ammonia and bulk liquid and granular fertilizer storage and handling facility, at Lot 1, Plan 1510 MLTO in the NE 1/4 19-8-4 WPM in the Rural Municipality of Grey 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;

"ambient concentration" means the measurement of a substance contained in an air sample (corrected to a temperature of 25 ° C and to a pressure of 101.3 kilopascals) which has been collected from any point beyond the property line of the operation;

"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,

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

"chemicals" includes but is not limited to petroleum products 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;

"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;

"permanent anhydrous ammonia tank(s)" means any storage container certified for the storage of anhydrous ammonia which is attached to a fixed, non-moveable supporting structure;

"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 not handle or store any chemicals at this Development.
2. 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.
3. 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

4. The Licencee shall not emit ammonia from the Development such that the ambient concentration of ammonia, measured by a method approved by the Director, is in excess of:

- i) 10 parts per million at any time and at any point beyond the property line of the Development; or
 - ii) 2 parts per million on a 1-hour average at any point beyond the property line of the Development.
 5. 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.
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 residential, exceeds the following $L_{eq}(1)$ limits:
 - i) subject to sub-Clause 6 (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.
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 within an area which is zoned as commercial, exceeds the following $L_{eq}(1)$ 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.
8. 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 $L_{eq}(1)$ of 70 dBA at any time.

II - LIQUID EMISSIONS

9. The Licencee shall not direct any spillage, contaminated run-off or pollutant, other than sewage, to a sewage disposal system.
10. The Licencee shall contain spills within the property line of the Development such that soil, surface water and ground water contamination are prevented.

III - REMEDIAL ACTION

11. The Licencee, upon obtaining approval from an Environment Officer, shall immediately dispose of any contaminated material.
12. The Licencee shall remediate, within a time frame stipulated by the Director, all on and off-site environmental impacts as a result of any release of anhydrous ammonia.

IV - SETBACK DISTANCES

13. The Licencee shall locate any permanent anhydrous ammonia tank(s) used for the on-site storage of ammonia prior to redistribution, a minimum distance of:
 - i) 800 metres from residential areas, schools, hospitals and other institutions;
 - ii) 100 metres from a single isolated residence.

V - EMERGENCY CONTINGENCY PLAN

14. The Licencee shall submit, within ninety (90) days of the issuance of this Licence, an emergency response contingency plan to be approved by the Director. This plan must include, but is not limited to, items which will address: measures implemented for spill prevention and containment; security; personnel training; fire and other response arrangements.

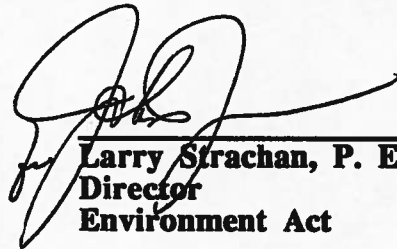
VI - FERTILIZER PRODUCTS

15. The Licencee shall surface all areas of the Development where fertilizer is stored, loaded, blended, transferred or otherwise handled in a manner and using materials approved by the Director.
16. The Licencee shall grade or curb all areas where granular fertilizer is 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.
17. The Licencee shall dyke or curb all areas where liquid fertilizer is stored, loaded, blended, transferred or otherwise handled in a manner and using materials approved by the Director, such that containment is provided for a volume of liquid equal to the sum of 110% of the volume of the largest storage tank plus the displacement volume, which is created by the height of the containment structure, of all other tanks and structures located within the dyked or curbed area.
18. The Licencee shall maintain the containment area volume capacity in Clause 17 by the immediate removal and proper disposal of all accumulated fluids.

19. The Licencee shall immediately clean up all spills.

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.



Larry Strachan, P. Eng.
Director
Environment Act

File No. 3817.00