

Licence No.: 2175

Licence Issued: April 22, 1996

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

THIS LICENCE IS ISSUED TO:

TERRAFLEX AG SERVICES INC. - NIVERVILLE; "the Licencee"

for the construction and operation of the Development being a crop protection products warehouse, a grain storage, a bulk granular/liquid fertilizer blending/storage, an anhydrous ammonia storage tank, and distribution facilities to be located on the SW 1/4 18-7-4 EPM in the Rural Municipality of Hanover, and in accordance with the Proposal filed under The Environment Act on February 7, 1996, and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence,

"**affected area**" means a geographical area affected by an odour nuisance;

"**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 degrees Celsius and to a pressure of 101.3 kilopascals) which has been collected from any point beyond the property line of the Development;

"**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;

"**Director**" means an employee so designated pursuant to The Environment Act;

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

sound level = $20 \log_{10}$ of {sound pressure (actual)}/{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;

"**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;

"**odour nuisance**" means a continuous or repeated odour, smell or aroma, in an affected area, which is offensive, obnoxious, troublesome, annoying, unpleasant, or disagreeable to a person:

- a. residing in the affected area;
- b. working in the affected area; or
- c. present at a location in the affected area which is normally open to members of the public;

if the odour, smell or aroma

- d. is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director and within a 90 day period, from 5 different persons falling within clauses (a), (b), or (c), who do not live in the same household; or
- e. is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses (a), (b), or (c) and the Director is of the opinion that if the odour, smell or aroma had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90 day period from 5 different persons who do not live in the same household.

"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;

"pesticide storage structure(s)" means any building(s) where agricultural crop protection products are stored for either commercial or retail purposes;

"permanent anhydrous ammonia tank(s)" means any storage container certified for the storage of anhydrous ammonia which is attached to a fixed 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 TERMS AND CONDITIONS

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

1. The Licencee shall comply with the current edition of the Crop Protection Institute of Canada's warehousing standards regarding the handling and storage of crop protection chemicals, and with all applicable federal and provincial regulations.
2. The Licencee shall install and maintain, for all pesticide storage structure(s), an automatic system(s) for fire detection and security.
3. The Licencee shall, at all times during the operation of the Development, ensure that a high standard of equipment maintenance and operational practices are implemented.

4. The Licencee shall reduce the production and dissemination of wastes by initiating and maintaining waste reduction and waste recycling programs.
5. The Licencee shall not emit ammonia from the Development such that the ambient concentration of ammonia in air is in excess of:
 - i. 10 parts per million at any time when measured at any point beyond the property line of the Development; or
 - ii. 2 parts per million on an 1-hour average when measured at any point beyond the property line of the Development.
6. The Licencee 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 as the average of any 24 consecutive opacity observations taken at 15 second intervals;
 - b. 20 percent for more than 16 individual opacity observations within any 1 hour period; or
 - c. 40 percent for any individual opacity observation.
7. The Licencee shall not cause or permit an odour nuisance to be created as a result of the construction, operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate an odour nuisance.
8. The Licencee 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 8 (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.
9. The Licencee 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.
10. The Licencee 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 an Leq(1) of 70 dBA at any time.
11. The Licencee, at the request of the Director, shall conduct soil, air (stack and/or ambient), ground water, surface water or noise monitoring at or adjacent to the Development.
12. The Licencee shall have each soil, air, or water sample collected pursuant to Clause 11, of this Licence, 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. NH₃ - N (Sol.);
 - ii. NH₃ - (in Air);
 - iii. NO₃ -NO₂ - N (Diss.);
 - iv. Kjeldhal, Total - N;
 - v. P - Total; and
 - vi. Particulate Matter (in air).
13. The Licencee shall submit a copy of the sampling report complete with analytical results as specified pursuant to Clauses 11 and 12 , to the Director within 60 days of the completion of the sampling program.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

I - LIQUID EMISSIONS

14. The Licencee shall not direct any spillage, contaminated run-off or pollutant, other than sewage, to an approved sewage disposal system.
15. The Licencee shall contain and clean up immediately any chemical spills in order to prevent soil, surface water or ground water contamination.
16. The Licencee shall ensure that the warehouse site and the site retention area is protected with a minimum 45 cm of compacted clay material or other materials approved by the Director.
17. The Licencee shall ensure that the Development is adequately diked and that control culverts are installed at the low end of the diked area and those control culverts remain in the closed position. The Regional Office of Manitoba Environment in Steinbach shall be contacted for prior approval to open the control culverts to permit land drainage.
18. The Licencee shall ensure that the surface of the containment area is inspected semiannually for desiccation cracks, and that the containment area's continuity is maintained.

II - REMEDIAL ACTION

19. The Licencee, subject to obtaining approval from an Environment Officer, shall immediately dispose of any contaminated material in accordance with the approval.
20. 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.

III - EMERGENCY CONTINGENCY PLAN

21. 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 shall include, but not be limited to, items which will address: measures implemented for spill prevention and containment; security; personnel training; fire and other response arrangements.

IV - FERTILIZER PRODUCTS

22. 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.
23. The Licencee shall grade, dike or curb all areas where 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.
24. The Licencee shall provide containment within any diked or curbed liquid fertilizer storage area for a volume of

liquid equal to:

- i. 110% of the volume of the largest storage tank located therein; plus
 - ii. the effective displacement volume of all other tanks and structures located therein.
25. The Licencee shall maintain the containment area volume capacity in Clause 24 of this Licence by the immediate removal and disposal, in a manner approved by the Director, of all accumulated fluids.

V - ANHYDROUS AMMONIA SETBACK DISTANCES

26. The Licencee shall not locate any permanent anhydrous ammonia tank(s) used for the on-site storage of ammonia prior to redistribution, within:
- i. 800 metres from residential areas, schools, hospitals or other institutions;
 - ii. 100 metres from a single isolated residence; or
 - iii. 100 metres from the edge of the right of way of a highway.

VI - PESTICIDES

27. The Licencee shall construct and maintain the concrete floors and curbs of all pesticide storage structure(s) so as to prevent spilled liquids from leaking into the soil.
28. The Licencee shall create and maintain a current duplicate inventory of all pesticides stored at the Development, with one copy stored at the premises of the Development, and the other copy stored at a location off-site from the Development.
29. The Licencee shall store only pesticides registered under the Pest Control Products Act of Canada at the Development.
30. The Licencee shall contain on the Development:
- i. any on-site pesticide spill;
 - ii. wastewater generated from any response action due to an on-site release of pesticides; and
 - iii. contaminated water resulting from the extinguishing of any fire involving pesticides.
31. The Licencee shall locate the pesticide storage structure(s) a minimum distance of:
- i. 100 metres from any property zoned residential; and
 - ii. 100 metres from single residences
- unless a written consent form is obtained from the owner(s).

IX - SITE DECOMMISSIONING

32. The Licencee shall submit within one (1) year prior to closure of the facility, for the approval of the Director, a formal detailed Decommissioning Plan for the facility.
33. The Licencee shall implement, on closure of the facility, the approved Decommissioning Plan.

REVIEW AND REVOCATION

- A. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If construction of the development is not commenced within three years of the date of this Licence, the Licence is revoked.
- C. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms, or conditions of this Licence, the Director may require the filing of a new proposal pursuant to Section 10 of The

Environment Act.

"original signed by"

Larry Strachan, P. Eng.

Director

Environment Act

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