Appendix 3.

Duty of care: waste utilisation

Introduction

Aged manure, compost and liquid effluent from beef feedlots are good sources of nutrients for plant growth and organic matter for building soil structure. However, like inorganic fertilisers, these wastes need to be spread on suitable areas and applied at sustainable rates to ensure the environment is protected and maximum benefit obtained.

Those utilising feedlot wastes must take reasonable and practical steps to prevent harm to the environment.

Potential impacts

In particular, spreading of feedlot wastes needs to be managed to avoid

- land degradation (e.g. soil erosion, decline in soil structure, nutrient overloading)
- odour and dust nuisance
- surface water and groundwater pollution with nutrients and sediment
- increased weeds
- noise nuisance.

Minimising impacts

To minimise the likelihood of impacts

- Prevent manure or compost spillage during transportation by not overfilling trucks and by covering loads.
- Avoid transport routes with many houses or public use areas close to the road.
- Do not spread manure, compost or liquid effluent on areas that are flood-prone or where there is a significant risk of nutrient transfer to watercourses (e.g. sloping land immediately abutting a watercourse).
- Advise neighbours of the proposed activity and ensure there are no social events planned

- Before spreading waste, check the weather forecast and delay spreading if rain is expected or the soil is still very wet following rain. Check the wind speed and direction to ensure the prevailing wind is not blowing directly towards nearby residences.
- Plan to spread waste from mid-morning to early-afternoon when good odour dispersion is likely. Avoid spreading from midafternoon to evening and also just before weekends or public holidays, particularly if close to a public area.
- Determine a suitable spreading rate based on the N, P and K content of the waste, soil properties and the intended land use of the utilisation area. The rate should be consistent with the ability of soils and plants grown on the area to sustainably use the applied nutrients, salts and carbon in the manure, compost or liquid effluent.
- Advise staff to take appropriate precautions to protect against risks, including using personal protection equipment. This may include high-quality (P2) dust masks, overalls and disposable gloves.
- Calibrate the manure spreader/irrigator to spread at the target rate.
- Incorporate waste into the soil as soon as practical to minimise nitrogen loss, GHG emissions and odour.
- Although the manure aging and composting processes can destroy most weed seeds, some seeds may remain viable. Monitor the utilisation area and control weeds if necessary.
- Avoid spreading waste close to sensitive neighbours at night when noise may create nuisance.

NOTE: A recent 'typical analysis' sheet for the waste should also be provided to the recipient.