



Appendix EC.10

Safe Applications to Land

Guidance on application of manures, sludge or composts

Applications of organic manures, sludges or compost can provide a valuable source of nutrients or soil conditioning. But they might also cause pollution of the local environment, or contamination of crops and livestock. Some applications are restricted by law and there is additional advice on good practice. These are summarised here.

MANURES

Use of manures on grazing land (pasture)

Using manures on grazing land can lead to significant problems. Avoid doing this where possible.

Spreading manures onto pasture can play a role in transferring disease to healthy stock. The main risk is from spreading fresh, unstored slurry. Risks are reduced by storage, using low application rates and leaving pasture for as long as possible before grazing.

Aerobic composting of solid manures by turning of manure heaps or forced aeration, will significantly reduce the risk of disease transmission. Store slurries and solid manures for at least one month before spreading. Pasture should not be grazed for one month, or preferably eight weeks afterwards, or until all visible signs of the slurry solids have disappeared, to minimise the risk of transferring disease. Young stock are more susceptible to infection and the interval between application and grazing should be six months.

Key Management Actions

- Know the nutrient content of applied manures
- Apply manures evenly and at known rates
- Rapidly incorporate manures (where appropriate) or use an application technique that will minimise ammonia losses
- Apply manures in Spring (where possible) to reduce nitrate leaching losses
- Take the nutrient supply from manures into account when calculating inorganic fertiliser additions.

By following these steps manures will be used efficiently, without compromising crop yields and quality, and you will greatly reduce the risk of environmental pollution.

Poultry Manure

It is recommended that producers should avoid, where possible, spreading poultry manure onto grazing land. If poultry manure is spread on grazing land producers should be aware of the disease risks associated with cattle contracting botulism and take precautions by enforcing an appropriate grazing interval.

For more information see the ADAS Managing Livestock Manures Series – Booklet 2, Making better use of livestock manures on grassland.

Available free of charge from ADAS 01623 844 331



Appendix EC.10 (continued)

Safe Applications to Land

Sewage Sludge

The application of untreated sewage sludge is **not** allowed. Treated sludges can only be used under strictly controlled conditions. Use of sludges must be registered and the soil must be tested by the sludge producer. Application must follow the 'Safe Sludge Matrix' and the way the sludge has been treated may affect where and when the sludge can be applied. The local Sewerage Operator will be able to provide more information.

Sludge	Untreated Sludge	Conventionally Treated Sludge	Enhanced Treated Sludge
Fruit	X	X	✓ 10 month harvest interval
Salads	X	X 30 month harvest interval	✓ 10 month harvest interval
Vegetables	X	X 12 month harvest interval	✓ 10 month harvest interval
Horticulture	X	X	✓ 10 month harvest interval
Combinable & Animal Feed Crops	X	✓	✓
Grass & Forage - grazed	X	X But deep injected or ploughed down only. 3 week no-grazing / no-harvesting interval	✓ 3 week no-grazing / no-harvesting interval
Grass & Forage - harvested	X	✓ No grazing in season of application	✓ 3 week no-grazing / no-harvesting interval

Untreated Sludge: Has not been permitted on any agricultural land since the start of 2006.

Conventionally Treated Sludge: There is a range of different treatment processes used to reduce the fermentability and possible health hazards associated with sewage sludge. These rely on biological, chemical or heat treatment. The most common form of treatment is anaerobic digestion. Conventionally treated sludge has been subjected to defined treatment processes and standards that ensure at least 99% of pathogens have been destroyed.

Enhanced Treated Sludge: Enhanced treatment, originally referred to as "Advanced Treatment", is a term used to describe treatment processes which are capable of virtually eliminating any pathogens which may be present in the original sludge. Enhanced treated sludge will be free from Salmonella and will have been treated so as to ensure that 99.9999% pathogens have been destroyed (a 6-log reduction).



Appendix EC.10 (continued)

Safe Applications to Land

Composts

Composts produced from organic materials originating **off farm** are becoming increasingly available for application to land. These may be beneficial but the application must be appropriate to the source of the compost, how it has been treated and the land to which it is applied. Regulations apply.

Green Waste Compost

Compost produced from source-segregated 'Green' waste only can be applied to land provided:

- The composting facility is certified to the standard 'PAS100'
- and (in England & Wales) its use follows the 'Quality Protocol'

OR:

- Use of the material is subject to specific exemptions or permissions from the Environment Agency

Material from source-segregated green waste originating outside the holding that does not meet one of these conditions must not be applied.

Compost from Mixed Green Waste & Food Waste

Compost produced from source-segregated 'Mixed Food & Green' waste originating off the farm may include meat waste from catering and domestic premises and may include additional hazards. This should only be applied to land to be used for Combinable Crops:

Again it cannot be used unless:

- The composting facility is certified to the standard 'PAS100'
- and (in England & Wales) its use follows the 'Quality Protocol'

OR:

- The use of the material is subject to specific exemptions or permissions from the Environment Agency

Until the completion of risk assessments by government agencies during 2009/10 it is not recommended that this material is applied to grazing land and in fact minimum grazing intervals are specified in the legislation for this type of compost. These are:

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|-------------------|----------|
| ■ PIGS | 2 months |
| ■ OTHER LIVESTOCK | 3 weeks |

Similarly it is **not** recommended that this material is applied to land used to grow fresh produce and in particular land used for Fruit and Salad (ready to eat) crops identified in columns 1 and 2 of the 'Matrix of Cropping Categories'.

Assessment

Assessors will examine records of compost applications whether following the Quality Protocol or in accordance with permits from the Environment Agency or regional equivalents.

Note: Even where applications of sludge and compost are permitted by law and comply with codes of practice producers should also check with buyers to ensure their acceptance to particular customers.

There is more information at <http://www.wrap.org.uk/composting/>