

COMPOSTING AND LANDSPREADING



Commercial scale composting of garden and parkland waste at Langar

INTRODUCTION

- 7.1 It is not only through re-use and recycling that value can be recovered. There are various forms of recovery which produce value from waste without necessarily recovering materials. Composting and landspreading of organic waste are the main examples of such a process.
- 7.2 Composting and landspreading help to achieve a more sustainable waste management system by both reducing the need to take up land for disposal and by reducing demand for natural resources of peat. This is in line with the principles advocated in MPG13¹.

COMPOSTING

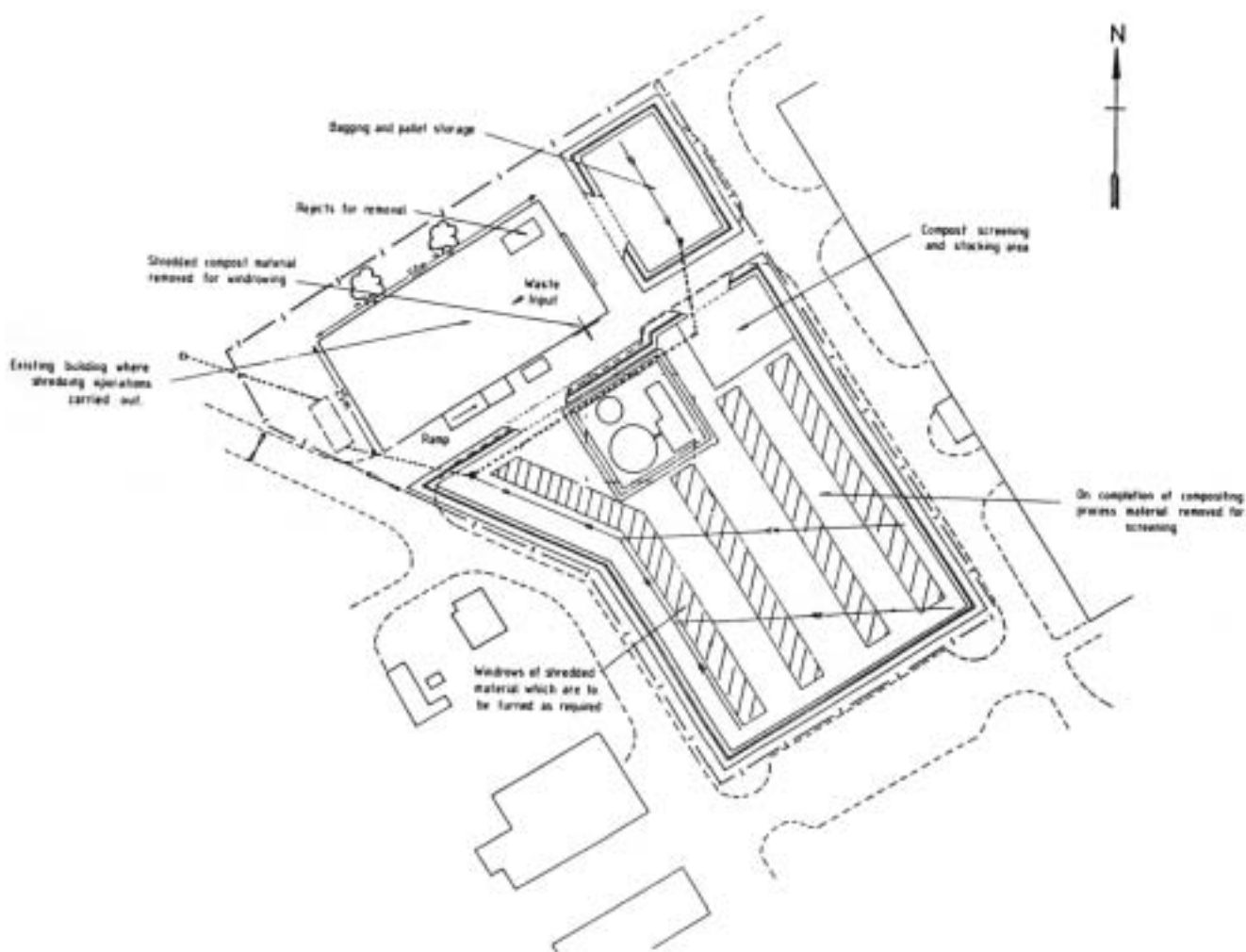
- 7.3 Composting involves the processing of organic waste to produce a material which can be used as a soil conditioner or a growing medium. Compost has traditionally been produced and used for these purposes by householders and this method of recovering value from waste requires no municipal collection. However, in recent years a number of large scale composting facilities which import green waste, have opened up around the country.
- 7.4 In Nottinghamshire, composting has, until recently, only been practised at an individual household level. However, in December 1994 planning permission was granted for the establishment of a recycling and composting facility, utilising industrial premises on the Langar Industrial Estate. The site is operated by Waste Recycling Group. Up to 15,000 tonnes per annum of green waste (garden and landscape/park waste) are received from Household Waste Recycling Centres (HWRC) and landscape contractors. This in turn generates some 6,500 tonnes of compost and 800 tonnes of mulch.

Planning Considerations

- 7.5 Only non-domestic composting schemes require planning permission. These facilities typically have an industrial/agricultural appearance with buildings, storage areas, water tanks and various mobile and fixed plant. Figure 7.1 shows the site layout of the commercial composting scheme at Langar. Schemes can, however, operate on a much smaller scale than this site.
- 7.6 Green waste, and in some cases other putrescible waste, is initially deposited in a storage area where reject material such as plastic bags is removed by hand. A loading shovel then feeds the waste into the shredding machine (often enclosed within a building) after which the material is laid out in the open on concrete rafts in long rows approximately 2-3m high. Mobile plant turns the waste material twice a week for the next 12 - 14 weeks to enable the composting process to take place. The processed material is then screened to provide a fine soil enhancer and a coarser mulch which prevents weed growth. These materials are then sold in bulk and/or bagged (on or off-site) and taken to HWRCs or other locations to be sold. Reject materials are taken to nearby waste disposal sites.

¹ *Minerals Planning Guidance Note No. 13 - Guidelines for Peat Provision in England including the Place of Alternative Materials, 1995.*

Figure 7.1 - Diagram of Langar Composting Scheme
 (Extract from Planning Application, Courtesy of Waste Recycling Group)



Scale 1:1250 (approx)

7.7 The main planning issues relate to visual impact, noise, smell, traffic and collection of leachate. Employment sites remote from residential areas are therefore the most suitable location for permanent facilities. Sites may also be located within waste disposal sites, provided that operations are limited to the life of the waste disposal scheme. Small scale schemes may also be suitably located within existing agricultural development provided that their form, bulk and general design are in keeping with their surroundings. Such a scheme would conform to advice given in PPG7² on the diversification of the rural economy.

² *Planning Policy Guidance Note No. 7, The Countryside - Environmental Quality and Economic and Social Development, 1997.*

Future Provision

- 7.8 The Government is keen to increase the volume of composting of putrescible waste by allocating "Supplementary Credit Approvals"³ to expand Local Authority involvement in composting schemes. Similarly, the payment of recycling credits to commercial composting companies who collect waste themselves should help to ensure the commercial viability of operations.
- 7.9 Attempts to operate large-scale composting plants do not yet account for significant amounts of waste, although there is estimated to be a large potential market for compost, and there is enough compostable waste to produce up to 9 million tonnes per annum nationally. The present level of production of compost in the UK is only 150,000 cubic metres per annum. Advances in technology may allow composting to become a more significant method of waste management.
- 7.10 The likelihood of further large scale commercial schemes coming forward in Nottinghamshire during the Plan period is uncertain. There is, however, estimated to be a large potential market for compost and there is sufficient compostable waste arising in Nottinghamshire to supply several such developments. Much will depend on the success of the composting scheme at Langar (see Para 7.4). If this site proves that composting is economically viable in Nottinghamshire, proposals for further schemes could come forward during the Plan period. Policy W7.1 identifies employment sites within which this type of development is considered to be appropriate. Proposals in other existing employment sites, or those designated in the City and District Councils' Local Plans, will be permitted where it can be demonstrated that there is no unacceptable environmental impact. Policy W7.2 promotes commercial composting in waste disposal sites linked to the life of disposal operations and Policy W7.3 promotes composting within agricultural built development.

POLICY W7.1

PROPOSALS FOR COMPOSTING SCHEMES WILL BE PERMITTED IN THE FOLLOWING EMPLOYMENT SITES:

- (a) BOUGHTON;
- (b) BRAILWOOD ROAD, BILSTHORPE;
- (c) OLD MILL LANE, MANSFIELD;
- (d) COLWICK SITE 1;
- (e) COLWICK SITE 2.

PROPOSALS OUTSIDE THESE AREAS OF SEARCH WILL ALSO BE PERMITTED IN EXISTING EMPLOYMENT SITES OR THOSE DESIGNATED IN THE CITY AND DISTRICT COUNCILS' LOCAL PLANS WHERE IT CAN BE DEMONSTRATED THAT THERE IS NO UNACCEPTABLE ENVIRONMENTAL IMPACT.

³ *Supplementary Credit Approvals are additional expenditure allowances issued by the Government.*

POLICY W7.2

PROPOSALS FOR COMPOSTING SCHEMES WILL BE PERMITTED IN WASTE DISPOSAL SITES PROVIDED THAT THEY ARE LINKED TO THE LIFE OF DISPOSAL OPERATIONS AND DO NOT CREATE ANY UNACCEPTABLE ENVIRONMENTAL IMPACT.

POLICY W7.3

PROPOSALS FOR SMALL SCALE COMPOSTING SCHEMES WILL BE PERMITTED WITHIN EXISTING AGRICULTURAL BUILT DEVELOPMENT PROVIDED THAT THEIR FORM, BULK, AND GENERAL DESIGN ARE IN KEEPING WITH THEIR SURROUNDINGS

THE LANDSPREADING OF ORGANIC WASTE

7.11 Landspreading represents an economical and, when properly controlled, an environmentally safe way of recovering value from a variety of organic wastes. These mainly comprise agricultural wastes, manure, slurry, silage, effluent and crop residues and sewage sludge. Landspreading is the normal waste management option for these materials. Landspreading is also used for a variety of wastes that arise off-farm. For example, paper manufacturing waste, food processing waste, non-food waste such as lime and slag and sewage sludge. These wastes can provide valuable nutrients and organic matter which allow farmers to reduce the amount of inorganic fertiliser applied.

Planning Considerations

7.12 Most landspreading falls outside planning control and is normally exempt from licensing under the Environmental Protection Act. The landspreading of organic farm wastes is covered by Codes of Good Agricultural Practice for the Protection of Water, Air and Soil, issued by the Ministry of Agriculture, Fisheries and Food⁴. These Codes provide practical guidance and advice to farmers on the storage, management and application of a wide range of farm wastes. Where pollution arises, farmers may be liable for prosecution under various Acts of Parliament.

7.13 The landspreading of sewage sludge on food crops is controlled by the Sewage Sludge (Use in Agriculture) Regulations 1989 (as amended) which are administered by the Department of Environment, Food and Rural Affairs (DEFRA) and enforced by the Environment Agency. These Regulations implement EC Directive 86/278/EC and are complemented by a Code of Practice. They contain a range of measures designed to protect soil and crop quality, human and animal health and the environment.

⁴ *Code of Good Agricultural Practice for the Protection of Water (1991), Air (1992), Soil (1993) MAFF.*

