

Research Information Note 256

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USING WASTE MATERIALS IN THE FOREST - IMPLICATIONS OF RECENT LEGISLATION, by Andy Moffat

Abstract

Recent legislation, in particular the Waste Management Licensing Regulations 1994, will affect the way that waste products produced in forest operations are dealt with in Great Britain. They also have implications for operations which involve the disposal in the forest of wastes generated outside it. This note summarises the important issues raised by the legislation and discusses actions that need to be taken to comply with it.

Introduction

1. In recent years, there has been some important EU and UK legislation which affects the way that waste materials are dealt with or disposed of in Great Britain. Such legislation now controls the type and amount of waste materials that can be brought into the forest in order to fertilise or otherwise benefit it (e.g. sewage sludge). It may also affect forest practices which produce waste (e.g. whole-tree harvesting, use of chemical pesticides). This Note summarises the legislation involved, and shows where forest managers need to be aware of its implications.

Legislation

- 2. The principal control regime for regulating the recovery and disposal of waste is the waste management licensing system set up under Part II of the Environmental Protection Act 1990. Commencement Order No. 15 brought this system into force on 1st May 1994. The Waste Management Licensing Regulations 1994 also came into force on 1st May 1994, and contain details of how the licensing system will work. The Regulations have been strongly influenced by some important European Union legislation, namely Council Directive 75/442/EEC as amended by Directive 91/156/EEC, commonly referred to as the Framework Directive on Waste.
- 3. The Waste Management Licensing Regulations 1994 are the principal source of information pertinent to the forest manager. They are expanded further in DoE Circular 11/94 (Environmental Protection Act 1990: Part II. Waste Management Licensing. The Framework Directive on Waste). The Regulations are applicable to all parts of Great Britain.
- 4. A main objective of the new regulations is stated as 'to ensure that waste is recovered or disposed of without endangering human health and without using processes or methods which could harm the environment and in particular without: (a) risk to water, air, soil, plants or animals; or (b) causing nuisance through noise or odours; or (c) adversely affecting the countryside or places of special interest'.

What is waste?

5. Circular 11/94 contains a detailed discussion on the definition of waste. In general waste must fit into the concept of discarding, disposing or getting rid of. A key question to ask is, 'Has the substance or object been discarded so that it is no longer part of the normal commercial cycle or chain of utility?' For example, brash discarded in brash mats on a restock site is expected to break down and provide nutrients to the following crop. It is not a waste material. However, brash left at roadside after delimbing operations may be considered a waste by-product, and could fall under the regulations. It is the responsibility of the holders to decide whether the substances or objects in their possession are waste, and, if they are, to take the necessary action in relation to that waste. Table 1 gives some examples of waste products that may be produced during forestry operations; it also lists some other waste materials that have been disposed of in UK forests. Further advice on the definition of waste is contained in Circular 11/94.

Table 1. Types of waste encountered in forest operations*

(a) Materials produced by forest operations

Brash piles at roadside

Waste pesticide containers

Excess pesticides (dilute or concentrated)

Peelings and bark from roadside conversion

Windrowed brash for burning

Contractor's waste

Cut vegetation and mowings from weed control, and fire and edge management operations

Animal waste

Excess seedlings in nursery production

Seed extraction wastes

(b) Materials which may be considered to improve forest sites

Sewage sludge

Animal slurries/farmyard manure

Paper mill sludge

Sugar mill sludge

Landfill leachate

Waste lime

Waste gypsum

Waste licensing, and exemptions from waste licensing

- 6. The Regulations provide a system of licensing for waste disposal. However, many of the wastes encountered during forestry operations may be exempt from the need for disposal licensing if they are deposited on land 'for ecological improvement'. Disposal of wastes that are not exempt will require the granting of a site license. Application for a site license requires demanding and costly input on behalf of the waste disposer. Sites granted license for waste disposal must be subject to close and continual scrutiny, and are costly to monitor. It will probably not be in forest managers' interests to consider waste licensing. Instead, non-exempt wastes produced during forestry operations should be disposed to a licensed waste disposal contractor. Wastes currently introduced into the forest (Table 1(b)) must be reconsidered for their eligibility as exempt wastes; if they are not exempt, it is likely that the best course of action is to stop this route for their disposal.
- 7. The principal forms of waste which may be exempt are listed in Table 2. There is an important distinction between those wastes which can be disposed of on land which is a forest or woodland, and those which can be disposed of on agricultural land. The latter includes 'the use of land for woodlands where that use is ancillary to the farming of land for other agricultural purposes' and 'osier land'.
- Animal wastes are also excluded from the scope of the new Regulations as they have been covered
 by the Animal By-products Order 1992. This allows for the incineration or burial of animal wastes,
 without the need for registration or licensing. However, wastes buried must be 'at a depth beyond the
 reach of carnivorous animals'.

Waste disposal into the forest

9. There are limits to the amount of exempt wastes that can be deposited in any one year, namely 250 tonnes or, in the case of dredgings, no more than 5 000 tonnes per hectare. For land used in farm forestry (i.e. woodland ancillary to other agricultural activities), the local Waste Regulation Authority (WRA) must be informed of:

^{*} This list is not meant to be exhaustive. If in doubt whether a material is waste, consult DoE Circular11/94 and the local Waste Regulation Authority.

Table 2. Exempted wastes (from the Waste Management Licensing Regulations 1994)

(a) Wastes exempt from disposal licensing if spread on forest, woodland and agricultural land

Waste soil or compost
Waste wood, bark or other plant matter

(b) Wastes exempt from disposal licensing if spread on agricultural land

Waste food, drink or materials used in or resulting from the preparation of food or drink Blood and gut contents from abattoirs

Waste lime

Lime sludge from cement manufacture or gas processing

Waste gypsum

Paper waste sludge, waste paper and de-inked paper pulp

Dredgings from any inland waters

Textile waste

Septic tank sludge

Sludge from biological treatment plants

Waste hair and effluent treatment sludge from a tannery

- a) the establishment's or undertaking's name, address and telephone/fax number;
- b) a description of the waste, including the process from which it arises;
- c) where the waste will be stored pending spreading;
- d) an estimate of the quantity of the waste to be spread; and
- e) the location and intended date or frequency of the spreading of the waste.

There are less stringent requirements for registration for forest or woodland (see para. 17).

- 10. Sewage sludge may also be disposed of in forests, woodlands or farm forestry as an exempt waste, with the proviso that 'the spreading must result in ecological improvement'. As set out in A manual of good practice for the use of sewage sludge in forestry (Forestry Commission Bulletin 107), limits for maximum concentrations of heavy metals in the sludge, and the soil to which it is applied, must be followed. These are given in the Sludge (Use in Agriculture) Regulations 1989, and Bulletin 107.
- 11. Exempt wastes can be held temporarily in secure containers or lagoons prior to spreading on the land. All reasonable precautions must be taken to ensure that waste kept in containers or lagoons cannot escape, and that members of the public cannot have access to that waste. For wastes listed in Table 2, no more than 500 tonnes may be stored in any one container or lagoon.
- 12. In the reclamation of land to woodland or forest, other wastes may be exempt from disposal licensing. However, exemption is only possible if the land is 'incapable of beneficial use without treatment', and the spreading is in accordance with a planning permission for the reclamation or improvement of the land. Exempt wastes include soil, rock, ash, sludge, dredgings and wastes from construction or demolition works. No more than 20 000 m³ may be spread per hectare. Wastes can be stored only at the place where it is intended that they be spread.

Wastes from the forest and their disposal

13. Many of the exempt wastes discussed above may be considered for introduction into the forest for ecological improvement from outside sources. However, wastes produced by forestry operations must also be considered. Fortunately, the regulations allow for exemption from licensing for most of the common wastes and their treatment or disposal. All waste plant material may be treated by chipping, shredding, cutting, pulverising or burning. However, for mechanical disposal, no more than 1 000 tonnes per site may be processed in a seven day period. Burning of plant waste must not exceed 10 tonnes per site in any 24 hour period. Exempted burning in the open may be further controlled under the statutory nuisance provisions in Part III of the Environmental Protection Act 1990, or in Scotland smoke nuisance provisions in the Clean Air Act 1993.

- 14. Incineration of waste is also permitted if it takes place at the place of waste production, but only if the incinerator is designed to incinerate at a rate of not more than 50 kg per hour. Authorisation is required to operate larger plant.
- 15. Composting of forest wastes is also an exempted treatment, though limits of 1 000 m³ a year are set in the Regulations. There is considerable flexibility allowed for the location of the composting plant.
- 16. Unwanted concentrated pesticides are defined as 'special waste'; appropriate arrangements will be necessary for disposal. They cannot be disposed of to a conventional landfill site; nor, now, in the forest. Further guidance is given in the *Provisional code of practice for the use of pesticides in forestry* (Forestry Commission Occasional Paper 21).

Registration of exempt waste disposal

- 17. All exempt disposal activities must be registered with the local Waste Regulation Authority from 1st January 1995. The information required for disposal on forest or woodland is less than that required for farm forestry. It includes:
 - a) the name of the undertaking or establishment;
 - b) the activity;
 - c) the waste (quantity, type, type of container); and
 - d) the place of disposal.

Implications of the new regulations for the forest industry

- 18. Forest managers should review all operations which result in waste, and consider whether disposal is exempt from licensing. Exempt disposals should be registered with the WRA, who can give free advice on this subject.
- 19. Some waste disposal operations which are currently permitted or advocated in Forestry Commission guidance may need modification if they are to avoid the need for licensing. These include the disposal of pesticide residues and their containers. Disposal in the forest is not be allowed under the new Regulations. Similarly, the dumping of plant material such as brash, waste seedlings or seed waste, may contravene the Regulations – composting, burning or spreading on land may be necessary.
- Disposal of non-exempt wastes in the forest, such as landfill leachates, should cease unless a licence for their disposal is obtained.

References

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