

# Guidance on the disposal options for common ragwort



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# Guidance on the disposal options for common ragwort

This guidance has been prepared to supplement the advice given in the Code of Practice on how to prevent the spread of Ragwort<sup>1</sup> and should be read in conjunction with the Code.

## The need to control ragwort

Common Ragwort (*Senecio jacobaea*) is a specified weed under the Weeds Act 1959. It contains toxins, which can have debilitating or fatal consequences if eaten by horses and other grazing animals<sup>2</sup>.

Ragwort may need to be controlled when its presence and the likelihood of it spreading to neighbouring land poses a risk to horses and other grazing animals or land used for the production of forage.

The Code of Practice provides practical advice on identifying the risk and the most appropriate means of control.

The safe and effective disposal of ragwort is an important part of ragwort control. Disposing of ragwort responsibly reduces the risk of further spread by seed dispersal and regrowth from root sections.

**Early and effective control of ragwort will minimise the problems of disposal – please refer to the Code of Practice on how to prevent the spread of ragwort.**

## Disposal options

The options for disposal will depend on the amount of ragwort to be disposed of, the type of site and local resources available. Whenever practicable, ragwort should be disposed of on site. This will reduce the inadvertent spreading of seeds during transport.

Options for disposal include:

rotting down

composting

incineration

controlled burning

landfill

<sup>1</sup> Code of Practice on how to prevent the spread of Ragwort (2004) (Defra PB 9840)

<sup>2</sup> Poisonous Plants in Britain and their effects on animals and man (MAFF RB 161)

This pamphlet provides guidance for selecting the best option for disposal, minimising the risk of the spread of ragwort from seeds and root sections, and avoiding the pollution of soil, water and air during disposal.

## Legal framework

Regulations for agricultural waste<sup>3</sup> mean that unwanted agricultural waste (i.e. this includes ragwort from all farmland, or from land used for keeping horses and ponies) now comes within the definition of industrial waste. This means that it must comply with Waste Management Regulations<sup>4</sup>.

Waste Management Regulations can require waste disposal sites to apply for a Waste Management Licence (WML). With on-site disposal of ragwort plant matter, it is likely that an exemption to having a WML can be gained. Advice should be sought from the Environment Agency on the requirement for Licensing and registering an exemption from Licensing. On site disposal facilities for large quantities of plant matter may require planning permission, check with your Local Authority.

With incineration the plant may fall within the terms of the Pollution Prevention and Control (PPC) Regulations<sup>5</sup> and require a permit to operate. You should contact the regulators for advice and permitting. This will be the Environment Agency for a plant with a capacity of greater than 1 tonne per hour and the local authority if it is less than 1 tonne per hour. A plant that has a PPC permit may not require a WML.

**Note:** Waste Management Regulations do not apply to waste from domestic properties.

<sup>3</sup> Agricultural Waste Regulations 2005

<sup>4</sup> Waste Management Licensing Regulations 1994

<sup>5</sup> Pollution Prevention & Control (England and Wales) Regulations 2000 (as amended)

## Handling ragwort

Ragwort is a toxic plant and suitable precautions must be taken when handling both live and dead plants. Hands must be protected by wearing sturdy waterproof gardening type gloves. Arms and legs should also be covered. A facemask<sup>6</sup> should be used to avoid the inhalation of ragwort pollen or other airborne particles.

If ragwort comes into contact with bare skin, the area should be thoroughly washed in warm soapy water, rinsed and dried.

## Transporting ragwort

Ragwort is able to set seed even after being pulled, dug or cut and therefore there is a high risk of seed dispersal to neighbouring land during transportation. To avoid seed dispersal ragwort **should only** be transported in sealed bags or enclosed containers. Where the plants are bulky, they can be cut up to assist packing. To avoid unnecessary seed dispersal, seed heads should be cut off first and packed.

### Ragwort

- remains toxic when sprayed, cut, dug or pulled
- once cut, the flower can set seed
- seeds remain viable and can be easily dispersed
- in its fresh state (un-wilted) is difficult to burn
- is bulky to transport
- can only be composted in controlled conditions
- should only be transported in sealed bags/containers

<sup>6</sup> The Health & Safety Executive recommends using a half face mask particle respirator conforming to BS EN 149:2001

## Key Pointers

### Do

- read the Code of Practice on how to prevent the spread of Ragwort.
- think through the options for disposal at the same time as planning the control system.
- select on-site disposal where possible.
- select the most appropriate disposal option.
- always use gloves and clothing that covers exposed skin e.g. arms and legs.
- minimise the risks of exposure to pollen and other airborne particles by wearing a suitable facemask.
- wash exposed skin thoroughly after handling material and before eating.
- ensure that any contractors hired for the disposal are properly registered and or licensed. (Check with the Environment Agency).

### Don't

- bury in manure heaps.
- use as animal bedding.
- dig, bury or plough into the ground.
- attempt to dry ragwort where animals may gain access to it.
- allow the liquid from decomposing ragwort to drain directly to any ditch, drain or watercourse.
- cause dark smoke by attempting to burn wet ragwort, or by using other flammable materials that may directly cause dark smoke, e.g. (rubber or plastics)<sup>7</sup>.
- allow seed dispersal from plant residues that are awaiting disposal.
- transport ragwort unnecessarily.
- transport ragwort unless it is in sealed bags or containers.

<sup>7</sup> Code of Good Agricultural Practice for the Protection of Air, MAFF (Revised 1998) PB 0618

## Rotting down (biodegrading) using a compost bin

**NB:** This does not constitute composting.

### When to use this option

- For disposing of small quantities where ragwort can be safely rotted down on-site.

The capacity of standard compost bins is limited and they are only suitable for small-scale disposal. In compost bins the ragwort material is bio-degraded by the combined process of rotting down and composting.

### What is required

A proprietary rigid type plastic compost bin or similar, with lid, such as available from a garden centre.

### Where to site it

The compost bin should be located away from any ditch, watercourse or area where animals may have access to it.

### How to go about it

The ground should be levelled where the compost bin is sited. The earth should be loosened so that earthworms, insects and micro-organisms can move into material and any liquid can drain and disperse to the soil.

If the material is collected in plastic sacks, these must be emptied into the compost bin directly. If paper sacks are used, these could be loaded into the compost bin and should be sliced and consolidated, to increase the rate of biodegradation. The residues should be covered with a layer of grass clippings to help start the biodegradation process and help prevent the material drying out. If the process dries out, then there is the risk that some seeds or root material may not be destroyed and may lie dormant. Sufficient water should be added to keep the residues moist. However, there is still a risk of spreading viable material when the compost bin is emptied. The risks can be reduced by allowing the rotting down to continue for up to 12 months retention in the compost bin, during which time no fresh material should be added. If there are any concerns about the residues they should be transported to landfill. For advice please check with your Local Authority.

## Controlled burning and small scale incineration

### When to use this option

- For disposing of small quantities where ragwort can be safely wilted prior to burning/incineration.

The secure storage and controlled burning of less than 10 tonnes per day of plant matter may be allowed under an exemption from the Environment Agency within the Waste Management Licensing Regulations or the Agricultural Waste Regulations.

### An exemption is not required for domestic sites.

An exemption is allowed under the regulations above provided waste disposal is undertaken by the owner at the site where it was generated and is from agricultural premises or other relevant land including railway land, forest, woodland and recreational land.

Small scale incineration using a recognised device is preferable to open burning as it provides a greater degree of control and is less likely to cause dark smoke or a public nuisance. It is suitable where ragwort is collected in paper sacks and can be dried sufficiently so that it will burn. It is also suitable for ragwort that has been deflowered and wilted.

Weather conditions (especially wind direction) must be taken into account with due consideration for neighbouring ground cover, combustible vegetation, buildings and housing. Causing nuisance from smoke and deposits from bonfires is an offence<sup>8</sup>.

### Who can do this

- Domestic

You should check with your Local Authority as some Local Authorities have bylaws prohibiting the burning of garden waste.

<sup>8</sup> Environmental Protection Act 1990 Part III – section 79



## ● Non-Domestic

You should contact the Environment Agency to register an exemption to use this option where the disposal rate is less than 10 tonnes per day<sup>9</sup>.

When burning or incinerating, various precautions need to be taken to reduce fire risks especially in regard to siting and supervision.

### **What is required**

A proprietary small-scale incinerator, with a lid complete with chimney or flue and a secure area where the risks of the fire, smoke or residues from the fire will have minimal impact on the environment and neighbours.

### **Where to site it**

The incinerator should be located away from any ditch, watercourse or area where animals are kept. It must be well away from any fuel tanks, gas storage cylinders, buildings, domestic property or road.

Due consideration must be taken to avoid nuisance and risk to others.

### **How to go about it**

The aim is to provide a two stage process: firstly the storage and drying of the sacks of ragwort and secondly to burn the material within the heart of the fire or incinerator. Using paper sacks will allow some wilting to take place. Plastic sacks should not be used for wilting and should not be burnt.

For small quantities bags can be stored in the incinerator, and when dried could then be burnt. For larger quantities the ragwort will need to be wilted, under cover before burning. Steps should be taken to minimise the risk that seed will set and disperse during drying. This can be achieved by deflowering the ragwort plants prior to wilting and sealing the seed heads in bags prior to incineration or landfill.

The addition of straw, dry brush wood or hedge trimmings will help the fire to burn. Where an incinerator is used the sacks of plant residues should be loaded into the incinerator only one at a time, and the flue/lid replaced each time. This will draw the exhaust smoke and gases and help maintain the temperature. From time to time, more dry brush wood/hedge clippings should be added to maintain the seat of the fire.

<sup>9</sup> The Waste Management (England & Wales) Regulations 2005

## Domestic refuse collection

### When to use this option

- On domestic premises, for small amounts of ragwort which can be disposed of in domestic refuse subject to Local Authority approval.

### How to go about it

For a small amount of ragwort arising on domestic premises, sealing the ragwort plant in a double layer plastic sack for collection or placing it into a refuse wheelie bin for collection as domestic refuse, may be acceptable. Check with your Local Authority<sup>10</sup>. To avoid bulk plants can be cut up to assist packing. To avoid seed dispersal, seed heads should be cut off first and packed.

Where the Local Authority provides a 'Green Waste Collection', ragwort should not be mixed with the 'Green Waste', unless the Local Authority permits its inclusion. This is because some composting facilities may not have the necessary resources and procedures in place for handling ragwort. Check with your Local Authority.

## Composting using a fully contained system

### When to use this option

- For disposing of ragwort, where on-site or off-site facilities and expertise is available to compost ragwort or green waste containing ragwort to the British Standard PAS 100:2005<sup>11</sup>.

Composting of ragwort should only be carried out where British Standard PAS 100:2005, or equivalent can be met. This will ensure that all material is composted effectively.

Where there are any concerns that this standard cannot be met then the residues should be disposed to landfill.

### For quantities greater than 5 tonnes

Composting sites where the capacity of the site is greater than 5 tonnes at any one time need to be registered with the Environment Agency for an exemption from Waste Management Licensing<sup>12</sup>.

<sup>10</sup> <http://www.direct.gov.uk>

<sup>11</sup> PAS 100:2005 Specification for composted materials (BSI)

<sup>12</sup> S.I. No. 883 The Waste Management Licensing (England and Wales) (Amendment and Related Provisions) Regulations 2005

## For quantities less than 5 tonnes

Composting sites with a capacity of less than 5 tonnes do not need to be registered with the Environment Agency.

### What is Required

A fenced off area, goods-yard, compound, or enclosed building and a structure that enables the containment of any liquids that may drain from the material and which also prevents it from being affected by rain or by wind.

The combination of enclosure and containment should provide security to prevent unauthorised access.

### Where to site it

Such a system should be sited at least 10 metres from any watercourse, including any pond, ditch, stream or lake and it should be away from animals.

### How to go about it

Please see British Standard PAS 100; 2005 specification for composted materials which can be obtained from the WRAP organisation, e-mail: [helpline@wrap.org.uk](mailto:helpline@wrap.org.uk) or telephone : 0808 1002040

## Biomass facility or permitted incinerator

### When to use this option

- **Where there is an on-site biomass facility or permitted incinerator.**

Some farms, nurseries and rural estates may have their own solid fuel fired boiler. Such systems are commonly fuelled by straw bales, woodchip, coppiced wood, and other forms of biomass e.g. Miscanthus (elephant grass). Such solid fuel burners may be utilised for ragwort disposal where residues are the property of the boiler owner and is located on the same land.

Where ragwort disposal is for a third party, a waste transfer note would be needed.

Where the ragwort material has been dried and then baled after cutting as part of a pasture topping exercise, then such biomass fuelled boilers may be ideal. The size of the combustion chamber and means of loading should be carefully considered. The risks and precautions required during the storage of the baled material should also be thought through.

Incinerators are purely for the disposal of specified waste materials. e.g. proprietary designed and permitted farm type small scale carcass cremators.

## Waste management company

### When to use this option

- For large scale disposal where on-site disposal is not possible.

Using a waste management company is ideal when there is a large quantity of ragwort to be disposed of or where other options are not available. Disposing of material this way means that it is removed professionally and disposed of legally.

The waste management company removing the ragwort should provide either a wheeled or bulk container (a lidded skip or roll-on roll-off hook lift container) or otherwise a refuse collection vehicle with containment or enclosed compactor mechanism. Open skips **should not** be used.

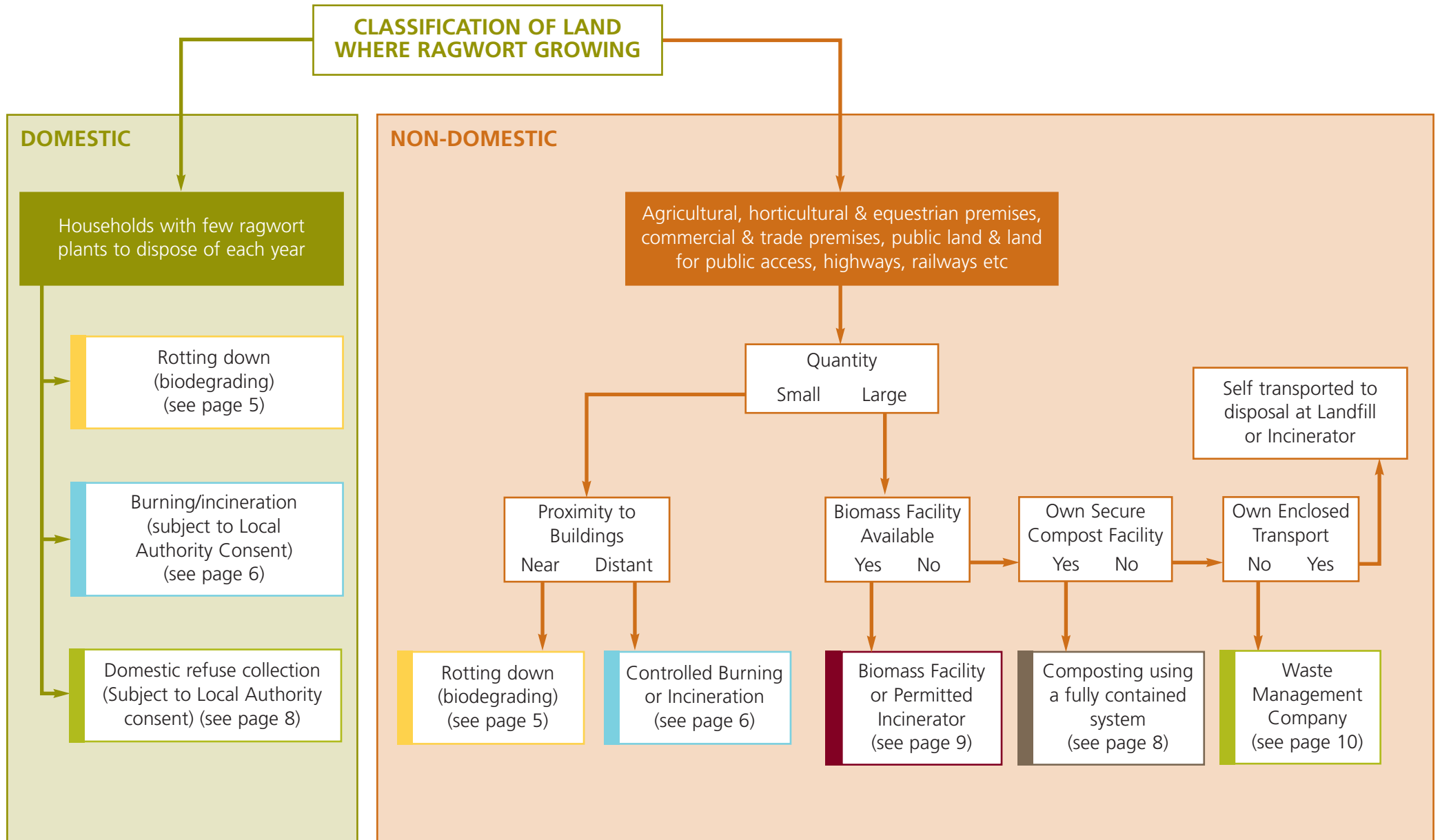
It should be noted, that where the sole purpose or intent is to dispose of waste, then any such material **should not** be transferred to a third party for disposal, unless they are a bona fide registered and licensed waste contractor and the facility is similarly licensed and permitted.

### How to do this

Use the Yellow Pages, or trade directory to find a waste management company or your local waste management officer at the Local Authority may be able to advise of suitable contractors.

The contractor/waste management company must be registered with the Environment Agency. You should contact the Agency to check that the contractor is suitably registered.

# Decision tree to help select the most appropriate disposal option



# Summary of disposal options

Suitability for small/large quantities	Method	Regulations	Labour requirement	Cost	Remarks
Small	Rotting down	Domestic properties not subject to WML <sup>1</sup> Regs WML Regs WML (Amendment) Regs <sup>2</sup>	*	*	Discuss with the Environment Agency
Small	Domestic refuse collection	Domestic properties are not subject to the WML Regs.	*	*	Check with Local Authority
Small – Medium	Controlled burning OR Small scale incineration	Domestic properties are not subject to the WML Regs Exemption required for the WML Regs. or AWRegs <sup>3</sup> COGAP for Air <sup>4</sup>	*/**	*	Check with the Local Authority byelaws. Avoid causing smoke nuisance. Register an exemption with the Environment Agency. Limit is 10 tonnes in 24 hrs only at the site where the waste plant matter arises.
Small – Medium	Small – Medium scale composting	WML Regs WML (Amendment) Regs	*/***	*/**	Register an exemption with the Environment Agency. Check Local Authority need for planning consent
Medium – Large	Biomass combuster/boiler	Directive 2000/76/EC Incineration of Waste PPC Regs. <sup>5</sup>	**	*	Check with the Environment Agency to see if the facility needs to be licensed or permitted.
Small, Medium and Large	Landfill via Waste Management Contractor	WML Regs PPC Regs	*	**/**	Only use licensed contractors and carriers. Only use licensed disposal sites check with the Environment Agency

## Definition of quantities:

Small: Less than 1 cubic metre e.g. plastic composting bin

Medium: 10 cubic metres e.g. medium size builders skip

Large: Greater than 28 cubic metres eg roll-on roll-off container or similar

<sup>1</sup> Waste Management (England & Wales) Licensing Regulations 1994

<sup>2</sup> S.I. No. 883 The Waste Management Licensing (England and Wales) (Amendment and Related Provisions) Regulations 2005

<sup>3</sup> Agricultural Waste Regulations 2005

<sup>4</sup> Code of Good Agricultural Practice for the Protection of Air, MAFF (Revised 1998) PB 0618

<sup>5</sup> Pollution Prevention & Control (England and Wales) Regulations 2000 (as amended)

## Useful Contacts

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