Chapter 18 Waste Management
(including Animal By-Products)

18. Introduction

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18. Introduction

Food waste, animal by-products and other waste materials can be a significant source of microbiological and physical contamination of food that is intended for human consumption. Waste products must not re-enter the food chain. Waste material is also a potential source of food for pests, which may give rise to further microbiological contamination. Such hazards could cause illness or injury to consumers and so must be prevented or minimised. Environmental contamination is a hazard which other legislation seeks to control.

The disposal of animal by-products, including Specified Risk Material, must be carried out according to specific legislation and the category of product, to ensure protection of animal and human health.

Examples demonstrating the importance of waste management:

<table>
<thead>
<tr>
<th>Problem</th>
<th>Effect</th>
<th>Possible outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gut spillage during evisceration</td>
<td>Contamination of a carcase and cross-contamination of other carcases by the bacteria in the digestive tracts of animals</td>
<td>A source of microbiological contamination</td>
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<tr>
<td>Storage of unfit meat with meat intended for human consumption</td>
<td>Fit product may become contaminated or substituted with unfit product</td>
<td>Cross contamination of food, or unfit product enters the food chain</td>
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<td>Inappropriate storage and handling of waste</td>
<td>Pests may be encouraged onto the site</td>
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18.1. Duty of care with regard to waste

Any substance or object that a business discards, intends to discard, or is required to discard is waste and is subject to legal requirements, including ‘a duty of care’. Even if material is sent for recycling or undergoes treatment in house, it can still be waste. Commercial, industrial, household wastes and special wastes are classified as ‘controlled waste’. The duty of care applies to all ‘controlled waste’.

In meat plants much of the waste material will be categorised as animal by-products and must be disposed of appropriately (see ‘18.2. Animal by-products’), although they are presently not treated as controlled waste for the purposes of the duty of care. Other waste material includes discarded packaging, wrapping and general office refuse such as paper, glass, plastic.

A copy of the duty of care Code of Practice may be obtained from: www.gov.uk/managing-your-waste-an-overview/duty-of-care

For Northern Ireland: https://www.daera-ni.gov.uk/articles/duty-care

Advice and further information on duty of care can be provided by a number of organisations such as:

Environment Agency (England and Wales) at: www.environment-agency.gov.uk.

Scottish Environment Protection Agency (Scotland) at: www.sepa.org.uk.

Department of Agriculture, Environment and Rural Affairs (Northern Ireland) at: https://www.daera-ni.gov.uk/topics/waste.

18.2. Animal by-products

‘Animal by-products not intended for human consumption’ are classified as Category 1, 2 or 3. They must be handled and processed in compliance with both:

- Animal By-Products (Enforcement) (England) / (Scotland) / (Wales) Regulations 2011
- Animal By-Products (Identification) (ABPI) Regulations 1995 as amended (1999 in Northern Ireland)
- Regulation (EC) No 1069/2009 laying down health rules as regards animal by-products and derived products not intended for human consumption

The three categories of animal by-products must be kept separate from the point where they arise. If materials from two categories are mixed, that mixture must be treated as the highest risk category, for example a mixture of Category 2 and 3 material must all become Category 2 material.

18.3. Legal requirements for waste management

The following sections set out the waste management requirements of the regulations that apply to slaughter, dressing and further processing of meat.

A. Waste management

Legal requirement
852/2004 Annex II Food Premises: Chapter I point 2(c)
A1. The layout, design, construction, siting and size of food premises are to (c) permit good food hygiene practices, including protection against contamination and, in particular, pest control.

852/2004 Annex II Foodstuffs: Chapter IX points 3 & 8
A2. At all stages of production, processing and distribution, food is to be protected against any contamination likely to render the food unfit for human consumption, injurious to health or contaminated in such a way that it would be unreasonable to expect it to be consumed in that state.

A1. and A2. Compliance regarding design and layout for waste management

- Organise the premises so as to permit good food hygiene practices, including protection against contamination and pests.

A1. and A2. Good practice

Allow sufficient space for waste management equipment (for example, chutes, feather flumes, containers) to be installed, and for procedures (for example, removal from work areas, storage, disposal) to be carried out hygienically and without the risk of contamination of products for human consumption.

Legal requirement
852/2004 Annex II Foodstuffs: Chapter IX points 3 & 8
A3. Hazardous and / or inedible substances, including animal feed, are to be stored in separate and secure containers.

852/2004 Annex II Food Waste: Chapter VI point 3
A4. Adequate provision is to be made for the storage and disposal of food waste, non-edible by-products and other refuse. Refuse stores are to be designed and managed in such a way as to enable them to be kept clean and, where necessary, free of animals and pests.

A3. and A4. Compliance regarding design and layout for waste storage

- Make adequate provision for separate and secure storage of containers for hazardous and / or
inedible substances and for storage and disposal of food waste, animal by-products and other refuse.

- Design refuse stores so they can be kept clean and, where necessary, free of animals and pests.

**A3. and A4. Good practice**

Allocate suitable places for the storage of waste before disposal, that is away from food rooms and readily cleanable and which prevent pests having access to the waste. Do not allow the build-up of waste materials that can attract, harbour and sustain pests. See chapter 6 on 'Pest Control'.

Where skips or trailers are used for the holding of waste in the yard, these need to be kept covered to prevent birds having access except at times when contents are being added to them or they are being emptied.

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**Legal requirement**

852/2004 Annex II Food Waste: Chapter VI point 3

A4. Adequate provision is to be made for the storage and disposal of food waste, non-edible by-products and other refuse. Refuse stores are to be designed and managed in such a way as to enable them to be kept clean and, where necessary, free of animals and pests.

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**A4. Compliance regarding management of waste**

- Make adequate provision for the storage and disposal of food waste, animal by-products and other refuse.

- Manage refuse stores so they can be kept clean and, where necessary, free of animals and pests.

**A4. Good practice**

Put in place adequate procedures and staff instructions for the collection, storage and disposal of food waste, inedible by-products, animal by-products and other refuse, including how effective cleaning, maintenance and pest control are to be achieved.

Staff handling waste must wash their hands before handling food.

See chapters 4 on ‘Maintenance, 5 on ‘Cleaning’, 6 on ‘Pest control' and 8 on ‘Personal hygiene’.
Legal requirement

852/2004 Annex II Food waste: Chapter VI point 1

A5. Food waste, non-edible by-products and other refuse are to be removed from rooms where food is present as quickly as possible, so as to avoid their accumulation.

A5. Compliance regarding accumulation of waste

- Avoid accumulation of food waste, animal by-products and other refuse by removing it from rooms where food is present as quickly as possible.

A5. Good practice

Make sure that food waste is removed regularly from areas where it is produced or is placed in containers provided for the purpose. Provide sufficient containers to hold the quantity of food waste normally produced. Empty or remove containers from the room once they become full and at the end of the working day to facilitate cleaning.

Legal requirement

852/2004 Annex II Food waste: Chapter VI point 2

A6. Food waste, non-edible by-products and other refuse are to be deposited in closable containers, unless food business operators can demonstrate to the competent authority that other types of containers or evacuation systems used are appropriate. These containers are to be of an appropriate construction, kept in sound condition, be easy to clean and, where necessary, to disinfect.

852/2004 Annex II Foodstuffs: Chapter IX point 8

A7. Hazardous and / or inedible substances, including animal feed, are to be stored in separate and secure containers.

Commission Regulation EU No. 142/2011 Annex VIII, Chapter I, Section 1, paras 2 & 3

A8. ...reusable containers, and all reusable items of equipment or appliances that come into contact with animal by-products or processed products, must be (a) cleaned, washed and disinfected after each use; (b) maintained in a clean condition; and (c) clean and dry before use.

A9. Reusable containers must be dedicated to the carriage of a particular product to the extent necessary to avoid cross-contamination.

A6. to A9. Compliance regarding containers for waste

- Deposit food waste, animal by-products and other refuse in closable containers, unless other types of containers or evacuation systems can be demonstrated as appropriate to the
competent authority.

- Use containers for waste that are of an appropriate construction, are easy to clean and, where necessary, to disinfect and keep them in sound condition.
- Store hazardous and / or inedible substances, including animal feed, in separate and secure containers.
- If used, reusable containers must be dedicated to the carriage of a particular product to the extent necessary to avoid cross-contamination.

A6. to A9. Good practice

Use separate secure containers for storing hazardous waste. Refuse such as paper cardboard, or packing materials need not be placed in closed containers provided they are kept separate from other waste. Containers in food handling areas need not be closed while in use to avoid contamination. Containers for the storage of other refuse or waste should be closed with lids, ties or seals before removal from the premises.

Unless they are disposable, refuse containers need to be made of durable material (for example, plastic, metal) that is easy to clean and disinfect. They should be kept in sound condition, secure from leaks and pests. Where wet waste is produced containers can be lined with plastic bags.


Cleaning – cleaning schedules should include refuse stores and containers, which need to be cleaned and disinfected frequently. See chapter 5 on ‘Cleaning’.

Marking – containers/bins used for holding specific types of waste, including ABPs need to be clearly marked.

TIP

Marking of containers – Labels can get dirty, drop off, or be misread, so colour coding is recommended to assist correct use and everyone should be made clearly aware of the colour coding system, for example, wall signs can be used as a reminder to all staff.

Disposal of food waste – lockable large containers or other types of containers used for the disposal of food waste are acceptable.

Waste outside the premises – secured lockable large container can also be used for waste outside the premises ready for dispatch for disposal.
Legal requirement
852/2004 Annex II Food waste: Chapter VI point 4

A10. All waste is to be eliminated in a hygienic and environmentally friendly way in accordance with Community legislation applicable to that effect, and is not to constitute a direct or indirect source of contamination.

A10. Compliance regarding disposal of waste

- Eliminate all waste in a hygienic and environmentally friendly way in accordance with relevant Community legislation, and so it does not constitute a direct or indirect source of contamination.

A10. Good practice

Waste disposal arrangements must comply with relevant legislation. In particular, the handling and disposal of animal by-products. See ‘B. Slaughterhouse requirements’.

The frequency with which waste is removed from the premises will depend on the nature and quantity of the material. Do not allow containers and stores to overflow, to litter the surrounding area or, if liquid, to leak into drains or streams.

Waste management duty of care – this requires that businesses ensure all waste is handled, recovered or disposed of responsibly, that it is only handled, recovered or disposed of by individuals or businesses that are authorised to do so, and that a record is kept of all wastes received or transferred through a system of signed Waste Transfer Notes. See ‘18.1. Duty of care with regard to waste’.

Legal requirement
852/2004 Annex II Training: Chapter XII point 1

A11. Food business operators are to ensure that food handlers are supervised and instructed and / or trained in food hygiene matters commensurate with their work activity.

A11. Compliance regarding training, instruction and supervision

- Supervise and instruct and / or train food handlers in food hygiene matters related to their work activity.

A11. Good practice

Instruct staff about the food safety hazards associated with waste and the need to report problems promptly. Supervise as necessary and issue reminders if lapses occur. Keep accurate individual training records to show what instruction/training has been given. See chapter 7 on ‘Training’.
Everyone with waste management responsibilities needs to be aware of the company’s procedures for ensuring that waste storage, handling and disposal arrangements do not contaminate food.

B. Slaughterhouse requirements

Legal requirement
853/2004 Article 1 point 6(a)

B1. This Regulation (853/2004) shall apply without prejudice to (a) relevant animal and public health rules, including more stringent rules laid down for the prevention, control and eradication of certain transmissible spongiform encephalopathies (TSEs).

B1. Compliance regarding SRM and animal by-products legislation

- Comply with other relevant animal and public health rules.

B1. Good practice

Other regulations apply to the removal of Specified Risk Material (SRM) and the rules relating to Animal by-products (ABP) which need to be categorised, stained, kept separate and disposed of correctly.

SRM – see chapter 19 on ‘SRM’.

ABP – see information in this section and chapter 5 of the separate ‘Edible co-products industry guide’ available at: www.food.gov.uk/foodindustry/guidancenotes/meatregsguid/coproductbyproductguide.
Legal requirement

853/2004 Annex II Section I Chapter IV point 16(b) & (c); Section II Chapter IV point 7(a) & (b)

B2. After post-mortem examination:
   (i) parts unfit for human consumption must be removed as soon as possible from the clean sector of the establishment
   (ii) meat detained or declared unfit for human consumption and animal by-products must not come into contact with meat declared fit for human consumption

853/2004 Annex II Section I Chapter II point 5; Section II Chapter II point 5

B3. There must be lockable facilities for the refrigerated storage of detained meat and separate lockable facilities for the storage of meat declared unfit for human consumption.

B2. and B3. Compliance regarding detained and unfit meat

- After post-mortem examination remove those parts that are unfit for human consumption from the clean area of the slaughterhouse as soon as possible.
- After post-mortem examination meat detained or declared unfit for human consumption and animal by-products must not come into contact with meat declared fit for human consumption.
- Provide lockable facilities for the refrigerated storage of detained meat and separate lockable facilities for the storage of meat declared unfit for human consumption.

B2. and B3. Good practice

Detained meat and offal, and products that are unfit or not intended for human consumption must not come into contact with meat that has passed or is still awaiting inspection.

See chapter 11 on ‘Acceptance and slaughter of animals’.

Facilities – appropriate storage is needed for detained meat and for meat that is declared unfit for human consumption, before its disposal as an animal by-product. See chapter 2 on ‘Design and facilities’.
18.4. Official control requirements

**Legal requirement**

**854/2004 Article 4 point 4c**
Audits by officials of good hygiene practices shall verify that meat plant operators apply pre-operational, operational and post-operational hygiene procedures continuously and properly.

**854/2004 Article 4 point 5**
Audits by officials of HACCP – based procedures shall verify that meat plant operators apply such procedures continuously and properly.

**854/2004 Annex I Chapter I point 1**
The official veterinarian is to verify continuous compliance with food business operators’ own procedures concerning any collection, transport, storage, handling, processing and use or disposal of animal by-products, including specified risk material for which the food business operator is responsible.