STATUTORY RULES OF NORTHERN IRELAND

2002 No. 209

ANIMALS

Animal By-Products Order (Northern Ireland) 2002

Made - - - -	*29th May 2002*
Coming into operation	*8th July 2002*

The Department of Agriculture and Rural Development(**1**), in exercise of the powers conferred on it by Articles 2(3), 5(1), 19, 29(1), 44, 46(7A) and 60(1) of the Diseases of Animals (Northern Ireland) Order 1981(**2**), and of every other power enabling it in that behalf, hereby makes the following Order:

Part I

Introduction

Citation and commencement

1. This Order may be cited as the Animal By-Products Order (Northern Ireland) 2002 and shall come into operation on 8th July 2002.

Interpretation and scope

2.—(1) In this Order, unless the context otherwise requires—

"animal" includes poultry;

"animal by-products" means—

(a) animal carcases;

(b) parts of animal carcases (including blood); or

(c) products of animal origin;

not intended for human consumption, with the exception of animal excreta and catering waste;

"approved disinfectant" means a disinfectant for the time being approved by the Department under the Diseases of Animals (Approval of Disinfectants) Order (Northern Ireland) 1972(**3**);

(**1**) The Department was renamed by S.I. 1999/283 (N.I. 1), Art. 3(4)
(**2**) S.I. 1981/1115 (N.I. 22) as amended by S.I. 1984/702 (N.I. 2) Art. 17 and S.I.1994/1891 (N.I. 6) Arts. 19, 22 and 23
(**3**) S.R. & O. (N.I.) 1972 No. 16 as amended by S.R.& O. 1975 No. 69 and S.R. 1995 No. 467

"catering waste" means the following products when they are no longer intended for human consumption—

(a) waste from catering and domestic premises;

(b) waste from the production of products which are intended to be used for human consumption without further cooking; or

(c) waste from the production of bread, cakes, pasta, pastry, pizzas and similar products (whether or not intended to be used for human consumption without further cooking);

"container" means a bin, box, skip or other receptacle used for the carriage of animal by-products or catering waste, which is not self-propelled;

"high risk material" means animal by-products of the following description, or any material containing such by-products—

(a) animal by-products which present a serious risk of spreading communicable disease to man or animals;

(b) all animals kept for agricultural production, which have died or been killed but were not slaughtered for human consumption, including stillborn animals and foetuses but excluding animals slaughtered during transit for reasons of their welfare;

(c) dead animals not referred to in paragraph (b) but which are designated as high risk material by notice by the Department;

(d) animals (other than those slaughtered for human consumption) which are killed in the context of disease control measures;

(e) animal by-products from animals which, during pre-slaughter veterinary inspection, show clinical signs of diseases communicable to man or animals;

(f) fish which show clinical signs of disease communicable to man or fish;

(g) all animal by-products (other than hides, skins, hooves, feathers, wool, horns, blood and similar products) which are from animals (other than fish, crustaceans or molluscs) slaughtered in the normal way if either—

  (i) the animal by-product is not presented for post mortem veterinary inspection, or

  (ii) during the post mortem veterinary inspection the animal by-product shows gross pathological lesions indicating disease communicable to man or animals;

(h) all meat, poultry meat, fish, game and foodstuffs of animal origin which are spoiled in such a way that they present a risk to human or animal health;

(i) animal by-products from animals, fish or game, fresh meat, poultrymeat, meat products and milk products imported from any country other than a member State which fail to comply with the veterinary requirements for their importation into the Community, unless they are re-exported or their import is accepted under restrictions laid down in Community provisions; or

(j) animal by-products containing residues of substances which may pose a danger to human or animal health, or milk, meat or products of animal origin rendered unfit for human consumption by the presence of such residues;

"knacker's yard" means any premises used in connection with the business of killing, flaying or cutting up animals the flesh of which is not intended for human consumption but does not include—

(a) hunt kennels or other premises where the flesh is fed to animals;

(b) premises used for diagnostic, educational or research purposes;

(c) premises which do not take high risk material; or

(d) premises where animals are cut up solely for the purpose of incineration;

"livestock" means—

(a) any creature, including fish, kept for the production of food, wool, skin or fur, and any creature, other than a dog, kept for use in the farming of land; and

(b) any ruminant animal, pig, poultry or equine animal;

"low risk material" means animal by-products other than high risk material;

"person in charge" includes—

(a) in relation to an aircraft, the commander of that aircraft; and

(b) in relation to a vessel, the master of that vessel;

"the 1981 Order" means the Diseases of Animals (Northern Ireland) Order 1981;

"pharmaceutical or technical products" means products intended for purposes other than human food or animal feeding stuffs;

"used cooking oil" means catering waste consisting of oils and fats from food-processing and the by-products of such oils and fats (other than any such oils and fats derived in any way from ruminant bones) where these are collected from food businesses (as such term is defined in Article 2 of Council Directive 93/43/EC on the hygiene of foodstuffs(**4**).

(2) Rendered material complies with the microbiological standards for the purposes of this Order if—

(a) in the case of rendered material derived from high risk material, it is free from *Clostridium perfringens*;

(b) it is free from Salmonella; and

(c) it successfully passes the test for *Enterobacteriaceae* in paragraph 5 of Part IV of Schedule 3;

(3) The provisions of this Order shall not apply in relation to—

(a) hides, skins, shells, hooves, feathers, wool, horns, blood and similar products which are not used in the manufacture of feeding stuffs but shall apply to such products when originating from animals which show clinical signs of any disease communicable through that product to man or animals;

(b) specified risk material controlled by the Specified Risk Material Regulations (Northern Ireland) 1997(**5**) or the Specified Risk Material Order (Northern Ireland) 1997(**6**);

(c) a by-product from a wild mammal or wild bird, other than one produced in premises used for processing mammals or birds;

(d) petfood from butchers' shops;

(e) milk or milk products other than—

(i) high-risk milk or milk products, and

(ii) milk or milk products originating from animals which show clinical signs of any disease communicable through milk or milk products to man or animals;

(f) fish caught and discarded at sea and waste from the processing of fish at sea; or

(g) the feeding of birds of prey.

(**4**) O.J. No. L175, 19.07.93, p. 1
(**5**) S.R. 1997 No. 552 as amended by S.R. 1999 No. 157, S.R. 1999 No. 431, S.R. 2000 No. 295, S.R. 2001 No. 48, S.R. 2001 No. 196 and S.R. 2001 No. 376
(**6**) S.R. 1997 No. 551 as amended by S.R. 2001 No. 1 and S.R. 2001 No. 377

Extension of definitions of animals and poultry

3. For the purposes of the 1981 Order in its application to this Order—

(a) the list of animals in Part I of Schedule 1 to the 1981 Order is hereby extended so as to comprise—

(i) any kind of mammal except man;

(ii) any kind of four-footed beast which is not a mammal;

(iii) fish, reptiles and crustaceans; and

(iv) other cold-blooded creatures of any species;

(b) the list of poultry in Part II of Schedule 1 to the 1981 Order is hereby extended so as to comprise birds of every species; and

(c) the lists of diseases in Parts III and IV of Schedule 1 to the 1981 Order are hereby extended so as to comprise all diseases of animals and birds.

Part II

Disposal of High Risk and Low Risk Material

Scope of Part II

4. The provisions of this Part shall apply in relation to all high risk and low risk material.

Restrictions on disposal of animal by-products

5.—(1) Subject to the provisions of this Article, any person who has in his possession or under his control any animal by-product shall without undue delay consign it for, or dispose of it by—

(a) rendering or part-rendering in premises approved under Article 7;

(b) incineration;

(c) burning other than in an incinerator, or burying, if—

(i) it is in a place where access is difficult; or

(ii) the quantity of by-product and the distance to premises in which disposal is permitted under this Article do not justify transporting it;

(d) use for diagnostic, educational or research purposes;

(e) in the case of low risk material, production of petfood or pharmaceutical or technical products, or storage for the production of petfood at premises registered under Article 15;

(f) treatment at a knacker's yard approved under Article 17 or feeding to zoo, circus or fur animals, recognised packs of hounds or maggots farmed for fishing bait at premises registered under Article 16, provided that the material consigned is—

(i) a by-product referred to in paragraph (b), (c) or (g)(i) of the definition of high risk material in Article 2(1) (provided that it is not from an animal slaughtered as a result of the presence or suspected presence of a notifiable disease listed in Annex I to Council Directive 82/894/EEC (on the notification of animal diseases within the Community)(**7**)); or

(ii) low risk material; or

(**7**) O.J. No. L378, 31.12.82 as amended by Council Regulation (EEC) No. 3768/85 (O.J. No. L362, 31.12.85. p. 8), Commission Decision 89/162/EEC (O.J. No. L61, 4.3.89, p. 48), and Commission Decision 92/450/EEC (O.J. No. L248, 28.8.92, p. 77)

(g) export from Northern Ireland.

(2) If the Department serves on the person in charge of any animal by-product a notice certifying that—

(a) the by-product is from animals infected or suspected of being infected with an epizootic disease and should not be transported because of health risks;

(b) the by-product contains, or is suspected of containing, residues or pathogens which could constitute a risk to human or animal health and which could survive rendering; or

(c) there is a lack of capacity at rendering premises or incinerators,

then that person shall, without undue delay, dispose of the by-product by burning or by burial as may be specified in the notice.

(3) A person shall not feed to any ruminant animal, pig or poultry or allow any ruminant animal, pig or poultry to have access to, any unrendered animal by-product.

Collection and transport of animal by-products

6.—(1) The owner or person in charge of any premises used for the collection or holding of animal by-products shall ensure that such material is collected or held on the premises in such a manner as to prevent the leakage or escape of any effluent and so that no animals or birds can gain access to that material.

(2) Any container or vehicle used for the transport of animal by-products must be leak-proof and adequately covered.

(3) Any vehicle, tarpaulin or other cover and any reusable container used in the transport of animal by-products must be maintained in a clean condition.

(4) A person shall not use or cause or permit to be used any vehicle for the removal of part-rendered or rendered animal by-products unless the material is—

(a) carried in a leak-proof container which is closed by a tightly fitting lid or other cover which prevents spillage and both the container and the lid or other cover are capable of being cleansed and disinfected; or

(b) enclosed by impervious material capable of being thoroughly cleansed and disinfected and the vehicle is so constructed as to prevent any leakage or spillage of that material.

(5) The person in charge of any vehicle or container who uses or causes that vehicle or container to be used for the removal of any animal by-products, part-rendered animal by-products or rendered animal by-products shall, before each occasion on which it is so used, thoroughly cleanse and disinfect it with an approved disinfectant.

(6) The person in charge of any vehicle or container who uses or causes that vehicle or container to be used for the removal of any animal by-products, part-rendered animal by-products or rendered animal by-products shall, after each occasion on which it was so used, and in any event before further use is made of it for the removal of such material or any animals or poultry or other matter, thoroughly cleanse and disinfect it with an approved disinfectant.

(7) A person shall not—

(a) place or carry any ruminant animal, pig or poultry, feeding stuffs intended for feeding to any ruminant animal, pig or poultry or anything intended to be used for or about any ruminant animal, pig or poultry in any vehicle or container which contains animal by-products; or

(b) place or carry any animal by-products in any vehicle or container which contains rendered or part-rendered animal by-products.

(8) Where animal by-products which have been derived from animals or fish fit for human consumption are transported in bulk directly to rendering premises, the container shall be labelled with—

(a) the source and description of the animal by-product; and

(b) the words "Not for human consumption" in letters at least 2 centimetres high which are clearly visible and legible.

Approval of premises and equipment for rendering animal by-products

7.—(1) A person shall not use any premises or equipment for rendering or part-rendering any animal by-products except under and in accordance with the conditions of an approval granted by the Department.

(2) The Department shall grant an approval for premises and equipment for rendering or part-rendering high risk or low risk material if it is satisfied that—

(a) the premises comply with the requirements of Schedule 1 and will be maintained and operated in accordance with that Schedule;

(b) the material will be rendered or part-rendered in accordance with Schedule 2;

(c) the rendered material has been sampled on a daily basis over a period of 30 days before the approval is granted and the samples taken comply with the microbiological standards in Article 2(2), except that this requirement shall not apply when animal by-products—

(i) are to be rendered in accordance with Method 1 of Part II of Schedule 2; or

(ii) are to be part-rendered in accordance with the conditions of the approval;

(d) the rendering equipment will not be used to render any specified risk material controlled by the Specified Risk Material Regulations (Northern Ireland) 1997 or the Specified Risk Material Order (Northern Ireland) 1997;

(e) where applicable, there will be no cross-contamination between different types of material; and

(f) all other conditions of this Order will be complied with.

(3) The approval shall specify—

(a) the name and address of the premises;

(b) the rendering equipment and the method of rendering or part-rendering;

(c) whether material may be rendered or part-rendered;

(d) the type of material which may be rendered or part-rendered;

(e) the parameters to be achieved during rendering or part-rendering; and

(f) any other conditions which the Department considers necessary to ensure that this Order is complied with.

(4) While the rendered product is being tested in accordance with paragraph (2)(c), the Department may grant a provisional approval for rendering the material, which shall specify how the rendered material shall be disposed of.

Operation of approved rendering plants

8.—(1) A person holding an approval under Article 7 shall maintain and operate the premises and equipment in accordance with Schedule 1 and shall render material in accordance with Schedule 2 and the approval.

(2) A person shall not render specified risk material controlled by the Specified Risk Material Regulations (Northern Ireland) 1997 or the Specified Risk Material Order (Northern Ireland) 1997 in any equipment approved for rendering animal by-products under Article 7.

Sampling the rendered product

9.—(1) If rendered material is intended for use in feeding stuffs (other than petfood) then the operator of a rendering plant shall act in accordance with this Article.

(2) The operator shall establish and use an identification system which makes it possible to identify each rendered batch.

(3) In the case of rendered material derived from high risk material, the operator shall, once every week—

(a) take from the outlet of each cooker in use at the premises a sample of at least 50 grammes of freshly rendered proteinaceous material; and

(b) send the sample to an authorised laboratory for testing for *Clostridium perfringens*.

(4) In the case of all rendered material, the operator shall, on each day that the material is despatched from the premises—

(a) take samples of the rendered proteinaceous material using one of the methods specified in Part I of Schedule 3 and aggregate the samples to produce a final sample in accordance with that method; and

(b) send the final sample to an authorised laboratory for testing for Salmonella and *Enterobacteriaceae*.

(5) Whenever an operator sends a sample to an authorised laboratory, he shall send with the sample the following information in writing—

(a) the name and address of the premises at which the sample was taken;

(b) the date on which the sample was taken; and

(c) the identity of the sample.

(6) If the test demonstrates that the rendered material does not comply with the microbiological standards in Article 2(2), then the operator shall—

(a) notify the Department immediately of the full details of the nature of the sample and the lot from which it was derived;

(b) ensure that no further rendered material suspected or known to be contaminated is moved from the premises unless—

(i) he takes all necessary measures to ensure that it is not used for feeding stuffs; or

(ii) it has been re-rendered under the supervision of the Department and re-sampled and re-tested by the Department, and re-testing has shown that the re-rendered material complies with the microbiological standards in Article 2(2);

(c) establish the causes of failure of compliance;

(d) increase the rate of sampling and testing of rendered material; and

(e) instigate appropriate decontamination and cleaning procedures within the premises.

Authorisation and operation of laboratories

10.—(1) The Department shall authorise laboratories to carry out one or more of the tests in this Article if it is satisfied that they have the necessary facilities, personnel and operating procedures to do so.

(2) In deciding whether to grant or continue an authorisation, the Department may require the laboratory to successfully undertake any quality control tests as it shall reasonably think fit.

(3) The operator of an authorised laboratory carrying out tests on material submitted to him in accordance with this Order shall do so in accordance with this Article.

(4) A test for *Clostridium perfringens* shall be carried out in accordance with the method in Part II of Schedule 3 or (if specified in the authorisation) with a method which conforms with ISO 7937/1997 modified (BS EN-13401:1999) (Enumeration of *Clostridium perfringens*)(**8**).

(5) A test for Salmonella shall be carried out in accordance with one of the methods in Part III of Schedule 3 or (if specified in the authorisation) with a method which conforms with—

(a) ISO 6579/1993 (BS5763:Part 4:1993) (Detection of Salmonella)(**9**);

(b) BS EN-12824:1998 (Horizontal method for the detection of Salmonella)(**10**); or

(c) NMKL 71:1999(**11**).

(6) A test for *Enterobacteriaceae* shall be carried out in accordance with the method in Part IV of Schedule 3 or (if specified in the authorisation) with a method which conforms with ISO 7402/1993 (BS5763:Part 10:1993) (Enumeration of *Enterobacteriaceae)(**12**)*.

(7) The operator of a laboratory authorised under this Article shall forthwith notify the Department and the operator of the rendering plant, in the event of tests establishing that the material does not comply with microbiological standards in Article 2(2).

(8) The operator of an authorised laboratory shall notify the Department on the last day of every month of the number, type and results of tests carried out.

Records for authorised laboratories

11. The operator of a laboratory authorised under Article 10 shall record—

(a) the name and address of the premises at which the sample was taken;

(b) the date on which the sample was taken;

(c) the identity of the sample;

(d) the date on which the sample was received at the laboratory;

(e) the date on which the sample was tested at the laboratory;

(f) the test to which the sample was subjected; and

(g) the result of that test.

Incineration

12. A person who incinerates animal by-products shall ensure that they are either—

(a) completely incinerated immediately on arrival; or

(b) stored in adequately covered leak-proof containers and completely incinerated without undue delay.

Burial of animal by-products

13. A person burying animal by-products shall—

(**8**) Published by the British Standards Institute, British Standards House, 389 Chiswick High Road, London W4 4AL
(**9**) Published by the British Standards Institute; *see above*
(**10**) Published by the British Standards Institute; *see above*
(**11**) Published by the Nordic Committee on Food Analysis, National Veterinary Institute, Department of Food and Hygiene, PO Box 8156, N-0033, Oslo, Norway
(**12**) Published by the British Standards Institute; *see above*

(a) sprinkle them with an approved disinfectant where this will prevent the spread of disease; and

(b) bury them without undue delay in such a way that carnivorous animals cannot gain access to them.

Information to be furnished to the Department

14.—(1) A person who proposes to become engaged in the business of collection, holding or removal of animal by-products shall, not less than 10 days before he becomes so engaged, register with the Department providing the following information—

(a) his name and the address at or from which the business is to be carried on;

(b) whether his proposed business involves the collection, holding or removal of animal by-products or a combination of such activities;

(c) the date on which he proposes to commence that business; and

(d) the purpose for which the animal by-products are intended to be used.

(2) A person who engages in the business of collection, holding or removal of animal by-products shall notify the Department in writing of any changes in the particulars previously notified under paragraph (1) , such notification to be made within 14 days of the change.

(3) A person who engages in the business of collection, holding or removal of animal by-products shall notify the Department in writing within one month of ceasing to engage in such business.

Petfood, pharmaceutical and technical premises

15.—(1) A person shall not use any premises for the production of petfood or for the production of pharmaceutical or technical products from animal by-products unless the premises and the occupier of the premises are registered by the Department in accordance with this Article.

(2) The Department shall register premises under this Article if it is satisfied that—

(a) the premises have adequate facilities for storing and treating the animal by-products without risk to human or animal health;

(b) the finished product will not create a risk to human or animal health; and

(c) all other provisions of this Order will be complied with.

(3) A person shall not use any premises for the collection of animal by-products intended for the production of petfood (other than premises on which the animal by-products originate or premises registered under paragraph (1)) unless the premises and the occupier of the premises are registered by the Department in accordance with this Article.

(4) The Department shall maintain a register of premises registered under this Article containing the following information—

(a) the name of the operator;

(b) the address of the premises; and

(c) the business carried on at the premises.

(5) A person shall not accept any unrendered or part-rendered high risk material into premises registered under this Article.

(6) The occupier of premises registered under paragraph (1) shall ensure that all animal by-products not incorporated into the product and all waste material arising during the production, are disposed of in accordance with Article 5.

(7) The occupier of premises registered under paragraph (1) shall ensure that all finished material not used for its intended purpose is disposed of by burial or in accordance with Article 5.

(8) The occupier of premises registered under paragraph (3) shall ensure that all animal by-products not consigned for the production of petfood are disposed of in accordance with Article 5.

(9) The Department may by notice require the occupier of the premises registered under this Article to store, process, despatch or dispose of animal by-products as may be specified in the notice.

Registration of premises used for the feeding of animal by-products to zoo, circus or fur animals, recognised packs of hounds or maggots farmed for fishing bait

16.—(1) A person shall not receive or use on any premises any animal by-product for feeding to zoo, circus or fur animals, recognised packs of hounds or maggots farmed for fishing bait, unless the premises and the occupier of the premises are registered by the Department in accordance with this Article.

(2) The Department shall maintain a register of premises used for the feeding of animal by-products to zoo, circus or fur animals, recognised packs of hounds and maggots farmed for fishing bait containing the following information—

(a) the name of the operator;

(b) the address of the premises; and

(c) the business carried on at the premises.

(3) A person shall not accept any animal by-product into premises registered under this Article other than material permitted to be consigned there under Article 5.

(4) The occupier of premises registered under this Article shall ensure that all unused animal by-products and all animal by-products remaining after feeding are disposed of in accordance with Article 5.

Approval of knackers' yards

17.—(1) A person shall not operate a knacker's yard except under and in accordance with the conditions of an approval granted by the Department.

(2) The Department shall grant an approval if it is satisfied that the premises comply with the conditions in Schedule 4 and that they will be maintained and operated in accordance with this Order and the conditions of the approval.

(3) The Department shall not grant an approval for a knacker's yard for the production of feeding stuffs for animals whose flesh is not intended for human consumption unless the premises were used as a knacker's yard for the production of such feeding stuffs on 27th November 1990.

(4) The approval granted under paragraph (1) shall specify—

(a) the operator of the premises and the address;

(b) whether or not the knacker's yard is approved to produce feeding stuffs for animals whose flesh is not intended for human consumption, and if it is, the production method; and

(c) any other conditions which the Department considers necessary to ensure that this Order is complied with.

Operation of knackers' yards and supply of feeding stuffs from knacker's yards

18.—(1) A person holding an approval under Article 17 to operate a knacker's yard shall maintain and operate the premises in accordance with the requirements in Schedule 4 and any additional requirements contained in the approval.

(2) A person shall not accept any animal by-product into a knacker's yard other than material permitted to be consigned there under Article 5.

(3) A person (whether a knacker or any subsequent supplier) shall not supply for use in domestic premises any feeding stuff derived from mammalian high risk material which has been treated in accordance with sub-paragraph (1)(a) or (b) of paragraph 11 of Schedule 4.

Records for animal by-products

19.—(1) A person who removes, or causes or permits to be removed, animal by-products or part-rendered material from any premises shall keep a record of each consignment showing—

(a) the date on which the material was removed from the premises;

(b) the quantity and description of the material and whether unrendered or part-rendered;

(c) the destination to which it was removed; and

(d) the name of the person transporting it.

(2) A person transporting animal by-products or part-rendered material shall, at the time of collection, record—

(a) the address of the premises from which the material was collected;

(b) the date on which the material was collected;

(c) the quantity and description of the material; and

(d) the destination to which it is to be taken.

(3) A person receiving animal by-products or part-rendered material shall keep a record of incoming consignments showing—

(a) the date on which the material arrived;

(b) the address of the premises from which the material was removed;

(c) the quantity and description of the material; and

(d) the name and address of the person who transported it.

(4) In addition to the records required to be kept under paragraph (3), (and in the case of removal from the premises of animal by-products or part-rendered material, in paragraph (1)), the occupier of rendering premises (other than part-rendering premises) shall keep a record for all animal by-products (including part-rendered material) rendered of—

(a) the weight rendered and the date of rendering;

(b) the temperature achieved by the by-products;

(c) in a batch system, the time for which the by-products were rendered;

(d) if appropriate, the particle size to which the by-products were reduced before rendering;

(e) if appropriate, the pressure to which the by-products were subjected during rendering;

(f) if appropriate, the feed rate of the by-products;

(g) if appropriate, the fat re-cycling rate;

(h) the quantity and description of rendered material produced;

(i) the results of all tests on samples submitted to an authorised laboratory in accordance with Article 9 and any action taken under that Article in respect of samples not complying with the microbiological standards specified in Article 2(2); and

(j) in the case of all rendered material—

(i) the method of disposal;

(ii) the quantity disposed of;

(iii) the date of disposal;

(iv) the name of the person transporting it; and

(v) the address of the disposal premises.

(5) In addition to the records required to be kept under paragraph (3) (and, in the case of removal from the premises of animal by-products or part-rendered material, paragraph (1)), the occupier of part-rendering premises shall keep a record for all animal by-products part-rendered of—

(a) the weight part-rendered and the date of part-rendering; and

(b) the quantity and description of part-rendered material produced.

(6) In addition to the records required to be kept under paragraph (3) (and, in the case of removal from the premises of unused animal by-products and animal by-products remaining after feeding, paragraph (1)), the occupier of any premises registered under Article 16 (zoo animals, etc.) shall keep records of the disposal or use of the animal by-products.

(7) In addition to the records required to be kept under paragraph (3) (and, in the case of removal from the premises of animal by-products, paragraph (1)), the occupier of a knacker's yard shall keep a record of—

(a) the quantity of material treated in accordance with paragraph 11 of Schedule 4, (treatment of by-products for the production of feeding stuffs) and the date and method of treatment;

(b) in the case of the sale or supply of mammalian high risk material which has been sterilised or denatured in accordance with paragraph 11(1)(a) or (b) of Schedule 4—

(i) the quantity sold or supplied;

(ii) the date on which the material was sold or supplied;

(iii) the name and address of each person to whom the feeding stuffs were sold or supplied; and

(iv) address of the premises where the feeding stuffs are to be used.

Part III

Catering waste intended for feeding to livestock

Scope of Part III

20. The provisions of this Part, other than Article 24, apply to catering waste (other than used cooking oil) whether processed or unprocessed which—

(a) contains or has been in contact with animal carcases, parts of animal carcases (including blood) or products of animal origin (other than milk or milk products, eggs, rennet, gelatine or melted fat which have been incorporated into another product); or

(b) originates from any premises where any animal carcases, parts of animal carcases or products of animal origin (with the exceptions referred to in sub-paragraph (a), are handled or where foodstuffs containing or coming into contact with any of the same are prepared or produced.

Feeding catering waste to livestock

21.—(1) A person shall not feed or cause or permit to be fed to any livestock, or allow any livestock to have access to any catering waste or any feeding stuffs which have been in contact with it.

(2) A person shall not bring catering waste onto any premises where any livestock are kept.

Holding catering waste

22. The owner or person in charge of any premises used for the holding of catering waste shall ensure that such material is held on the premises in such a manner as to prevent the leakage or escape of any effluent and so that no animals or birds can gain access to that material.

Disposal of catering waste

23.—(1) Subject to Article 26, a person shall not dispose of any catering waste in his possession except by one or more of the following methods—

(a) disposal to a district council refuse collection centre;

(b) disposal to a refuse disposal agency approved by the Department; or

(c) disposal on the premises where the catering waste originated.

Transport of catering waste

24.—(1) A person shall not use or cause or permit any vehicle to be used for the removal of catering waste to which this Article applies unless the material is—

(a) carried in a leak-proof container which is enclosed to prevent any leakage or spillage and which is capable of being cleansed and disinfected; or

(b) enclosed by impervious material capable of being thoroughly cleansed and disinfected and the vehicle is so constructed as to prevent any leakage or spillage of that material out of the vehicle.

(2) Any vehicle, tarpaulin or other cover and any reusable container used in the transport of catering waste shall be maintained in a clean condition.

(3) A person shall not place or carry any livestock, feedingstuffs intended for feeding to livestock or anything intended to be used for or about any livestock in any vehicle or container which contains catering waste.

Catering waste from a means of transport from outside Northern Ireland

25.—(1) A person shall not feed or cause or permit to be fed to any livestock or allow any livestock to have access to any catering waste brought into Northern Ireland, and originally intended for consumption on the means of transport in which it was brought and to which Article 21 does not apply or any feeding stuffs which have been in contact with such catering waste

(2) Catering waste shall not be landed in Northern Ireland from any vessel, aircraft, hovercraft or road or other vehicle except in leak-proof bags which are immediately placed in a leak-proof container which is closed by a tightly fitting lid or other cover which prevents spillage and both that container and its lid or other cover are capable of being cleansed and disinfected.

(3) A person shall not remove catering waste, or permit it to be removed, from any place where it has been landed except in accordance with a licence issued by the Department.

(4) Subject to paragraph (3), the owner or person in charge of the vessel, aircraft or road or other vehicle from which the catering waste is landed shall, under such supervision as the Department may require, take that catering waste or cause it to be taken in a container, which complies with the requirements of paragraph (2), to the nearest place approved by the Department where it must be incinerated or immediately buried.

(5) Any container, and its lid or other cover, used to transport catering waste in accordance with this Article shall be thoroughly cleansed and disinfected with an approved disinfectant immediately after each such use.

(6) A person shall not discharge or cause or permit to be discharged from an aircraft over Northern Ireland or from an aircraft, vessel or hovercraft within 3 miles of the coast of Northern Ireland any catering waste unless such discharge is required in the interests of the safety of the passengers, crew, animals or birds carried on such aircraft, vessel or hovercraft.

Part IV

General

Notice requiring the disposal of animal by-products or catering waste

26. If any provision of this Order is not being complied with or if an inspector considers it necessary for the prevention of diseases of animals, he may serve a notice on any person in possession of any animal by-products or catering waste requiring him to dispose of it as may be specified in the notice.

Cleansing and disinfection

27.—(1) If an inspector suspects that any vehicle, container, equipment or any premises to which this Order applies constitutes a disease risk he may serve a notice on the owner or person in charge of the vehicle, container or equipment or on the owner or occupier of the premises, requiring the vehicle, container, equipment or premises to be cleansed and disinfected as the inspector considers necessary.

(2) A notice under paragraph (1) may—

(a) specify the method of cleansing and disinfection;

(b) specify the method of disposal of any material remaining in or on the vehicle, container, equipment or premises; and

(c) prohibit the movement of animal by-products or catering waste into the vehicle or container or into the premises until such time as the required cleansing and disinfection have been satisfactorily completed.

Compliance with notices

28. Any notice served under this Order shall be complied with at the expense of the person on whom the notice is served, and if it is not complied with, an inspector may arrange for it to be complied with.

Tampering with samples

29.—(1) A person shall not treat or otherwise tamper with any sample taken under this Order.

(2) For the purposes of this Order a person shall be deemed to have treated a sample if he does anything in relation to it with intent to affect the result of a test to be carried out under this Order.

Keeping of records

30. Any person required to keep a record under this Order shall—

(a) keep such a record in written or electronic form;

(b) retain such a record for a period of 2 years; and

(c) produce such a record to an inspector on demand being made by him at any reasonable time during that period of 2 years and allow him to take a copy or print out of it or an extract from it.

Registrations, approvals, authorisations and licences

31.—(1) Any person wishing to register or to obtain an approval, authorisation or licence under this Order, shall apply in writing therefor to the Department.

(2) Any licence, notice, approval or authorisation under this Order shall be in writing, may be subject to conditions and may be amended, suspended or revoked by notice in writing at any time and in particular may be suspended or revoked if the Department is of the opinion that the provisions of the Order are not being complied with.

Transitional provisions

32. Any laboratory authorised by the Department under Article 3 of the Diseases of Animals (Animal Protein) (No. 2) Order (Northern Ireland) 1989(**13**), or approval or registration under Regulations 5 and 7 to 9 of the Animal By-Products Regulations (Northern Ireland) 1993(**14**) shall, notwithstanding the revocation of that Order and those Regulations, be deemed to be an authorised laboratory, approved rendering premises or registered premises for the purposes of Articles 7, 10, 15 and 16 respectively.

Revocations

33.—(1) The following Orders are hereby revoked, namely—

(a) the Diseases of Animals (Animal Protein) (No. 2) Order (Northern Ireland) 1989;

(b) the Diseases of Animals (Animal Protein) (No. 2) (Amendment) Order (Northern Ireland) 1992(**15**);

(c) the Diseases of Animals (Animal Protein) (No. 2) (Amendment) Order (Northern Ireland) 1993(**16**);

(d) the Catering Waste (Feeding to Livestock) Order (Northern Ireland) 2001(**17**).

Sealed with the Official Seal of the Department of Agriculture and Rural Development on 29th May 2002.

L.S.

R. S. Johnston
A senior officer of the
Department of Agriculture and Rural
Development

(**13**) S.R. 1989 No. 347 as amended by S.R. 1992 No. 62 and S.R.1993 No. 193
(**14**) S.R. 1993 No. 192 as amended by S.R. 1998 No. 108; these Regulations were revoked by S.R. 2002 No. 210
(**15**) S.R. 1992 No. 62
(**16**) S.R. 1993 No. 193
(**17**) S.R. 2001 No. 286

SCHEDULE 1 Articles 7 and 8

Requirements for rendering plants

General requirements

1. The approved premises shall be adequately separated from other buildings and from the public highway, except that they may be in the same building as a slaughterhouse provided that they are in a completely separate part.

2. Animals and unauthorised persons shall not be permitted to enter the premises. Animals shall not be permitted to have access to unrendered animal by-products or any liquid from them. Preventive measures against birds, rodents, insects and other vermin shall be taken systematically.

3. Floors shall be impervious, cleanable and be laid so that liquids drain away, and cannot seep from the unclean area into the clean area.

4. The premises shall be drained by a waste water disposal system. Waste water originating in the unclean area shall be treated to ensure that no pathogens remain.

5. Adequate lavatories, changing areas and washbasins shall be available for staff.

Clean and unclean areas

6. There shall be a clean area and an unclean area, adequately separated. The unclean area shall be easy to clean and disinfect. There shall be a covered place (the reception area) to receive and store the unrendered animal by-products.

7. Unrendered animal by-products shall be unloaded in the reception area and either—

(a) rendered immediately, or

(b) stored in the reception area and rendered without undue delay.

8. If carcases are de-skinned or de-haired, there shall be adequate facilities in the unclean area for doing this, and there shall be a storage room for hides.

9. Rendered material shall be handled, processed and stored in the clean area in such a way as to prevent recontamination. Rendered material shall not be allowed to come into contact with any unrendered animal by-products.

10. Persons who have been in the unclean area shall not enter the clean area without first disinfecting or changing their footwear and changing their outer clothing. Equipment and utensils which have been in the unclean area shall not be taken into the clean area unless they have been suitably cleansed and disinfected.

Cleansing and disinfection facilities

11. There shall be adequate facilities (including a water supply) provided to enable containers and vehicles (including their wheels) to be cleansed and disinfected in accordance with this paragraph. Vehicles (including their wheels) used for the transport of animal by-products shall be cleansed and disinfected before entering the clean area or (if they do not enter the clean area) before they leave the premises. Containers used for animal by-products shall be cleansed and disinfected after each use.

Equipment

12. If the rendering method requires animal by-products to be reduced in size before rendering, the unclean area shall contain equipment to do this, and also equipment for loading the resultant material into the rendering unit.

13. The premises shall have equipment capable of producing sufficient hot water and steam if these are used to render animal by-products.

14.—(1) Rendering premises shall be equipped with suitable rendering equipment. Where heat treatment is required, this installation shall be equipped with:

(a) measuring equipment to check temperature and, if necessary, pressure at critical points;

(b) recording devices to record continuously the results of measurements; and

(c) an adequate safety system to prevent insufficient heating.

15. Installations and equipment shall be kept in a good state of repair. All measuring equipment shall be calibrated at regular intervals. A record shall be kept showing when re-calibrations were carried out.

Laboratories

16. Where microbiological tests are required under Article 10, the premises shall either have their own laboratory authorised under this Order or make use of the services of a laboratory authorised under this Order.

SCHEDULE 2 Articles 2, 7, 8 and 17

Rendering

Part I

Rendering Standards

Mammalian animal by-products

1.—(1) An operator shall render mammalian animal by-products in accordance with either—

(a) Method 1 of Part II of this Schedule; or

(b) any of the other methods in Part II of this Schedule if, after rendering, the resulting proteinaceous material is disposed of by burial, incineration, or a similar method which ensures that it will not enter any food or feed chain and will not be used as fertiliser.

(2) This paragraph shall not apply in relation to the rendering of the following mammalian material—

(a) low risk material for the production of petfood;

(b) hides, skins, hooves, horns or hair;

(c) blood or blood products;

(d) milk or milk products; or

(e) glands, tissues or organs for pharmaceutical use.

High risk material

2. An operator shall render non-mammalian high risk material and mammalian high risk material specified in paragraph 1(2) in accordance with either—

(a) Method 1 of Part II of this Schedule; or

(b) any of the other methods in Part II of this Schedule (either in accordance with the parameters for the selected method set out in the Schedule or in accordance with the different parameters set out in the approval issued under Article 7) provided that the rendered material complies with the microbiological standards in Article 2(2).

Low-risk material

3. An operator shall render non-mammalian low-risk material and mammalian low risk material specified in paragraph 1(2) in accordance with either—

(a) paragraph 2; or

(b) a method and parameters specified in the approval which ensure that the rendered material complies with the microbiological standards in Article 2(2).

Part-rendering

4. Animal by-products may be part-rendered by any method approved by the Department if, after part-rendering, the material is disposed of in accordance with Article 5.

Gelatine and rendered fats

5. The preceding methods and parameters shall not apply in relation to the rendering of animal by-products for the production of gelatine or rendered fats. Any animal by-products other than gelatine or rendered fats remaining after production shall be disposed of in accordance with Article 5.

Hides

6. Hides shall be either rendered in accordance with the preceding provisions of this Schedule or salted using sodium chloride.

Re-rendering material

7. If the required parameters are not achieved during any rendering operation, the material shall be rendered again so that those parameters are achieved.

Part II

Rendering Methods

Method 1

Continuous or Batch Pressure

Reduction

1. If the particle size of the animal by-products to be rendered is more than 50 mm, the animal by-products shall be reduced in size using equipment specified in the approval, set so that the particle size after reduction is no greater than 50 mm or such smaller size as the approval shall specify. The effectiveness of the equipment shall be checked daily and its condition recorded. If checks disclose the existence of particles larger than is permitted in the approval, the process shall be stopped and repairs made before the process is resumed.

Time and temperature

2. After reduction the animal by-products shall be heated to a core temperature of more than 133°C for at least 20 minutes without interruption at a pressure of at least 3 bar.

3. The rendering may be carried out in batch or continuous systems.

Method 2

Natural Fat Batch

Reduction

1. If the particle size of the animal by-products to be rendered is more than 150 mm, the animal by-products shall be reduced in size using equipment specified in the approval, set so that the particle size after reduction is no greater than 150 mm or such smaller size as the approval shall specify. The effectiveness of the equipment shall be checked daily and its condition recorded. If checks disclose the existence of particles larger than is permitted in the approval, the process shall be stopped and repairs made before the process is resumed.

Time and temperature

2. After reduction the animal by-products shall be heated to a core temperature greater than 100°C for at least 125 minutes, a core temperature greater than 110°C for at least 120 minutes and a core temperature greater than 120°C for at least 50 minutes.

3. The rendering shall be carried out in a batch system.

4. The animal by-products may be cooked such that the time-temperature requirements are achieved at the same time.

Method 3

Natural Fat

Continuous or Batch

Reduction

1. If the particle size of the animal by-products to be rendered is more than 30 mm, the animal by-products shall be reduced in size using equipment specified in the approval, set so that the particle size after reduction is no greater than 30 mm or such smaller size as the approval shall specify. The effectiveness of the equipment shall be checked daily and its condition recorded. If checks disclose the existence of particles larger than is permitted in the approval, the process shall be stopped and repairs made before the process is resumed.

Time and temperature

2. After reduction, the animal by-products shall be heated to a core temperature greater than 100°C for at least 95 minutes, a core temperature greater than 110°C for at least 55 minutes and a core temperature greater than 120°C for at least 13 minutes.

3. The rendering may be carried out in batch or continuous systems.

4. The animal by-products may be cooked such that the time-temperature requirements are achieved at the same time.

Method 4

Added Fat

Continuous or Batch

Reduction

1. If the particle size of the animal by-products to be rendered is more than 30 mm, the animal by-products shall be reduced in size using equipment specified in the approval, set so that the particle size after reduction is no greater than 30 mm or such smaller size as the approval shall specify. The effectiveness of the equipment shall be checked daily and its condition recorded. If checks disclose the existence of particles larger than is permitted in the approval, the process shall be stopped and repairs made before the process is resumed.

Time and temperature

2. After reduction the animal by-products shall be placed in a vessel with added fat and heated to a core temperature greater than 100°C for at least 16 minutes, a core temperature greater than 110°C for at least 13 minutes, a core temperature greater than 120°C for at least 8 minutes and a core temperature greater than 130°C for at least 3 minutes.

3. The rendering may be carried out in batch or continuous systems.

4. The animal by-products may be cooked such that the time-temperature requirements are achieved at the same time.

Method 5

Defatted

Continuous or Batch

Reduction

1. If the particle size of the animal by-products to be rendered is more than 20 mm, the animal by-products shall be reduced in size using equipment specified in the approval set so that the particle size after reduction is no greater that 20 mm or such smaller size as the approval shall specify. The effectiveness of the equipment shall be checked daily and its condition recorded. If checks disclose the existence of particles larger than is permitted in the approval, the process shall be stopped and repairs made before the process is resumed.

Time and temperature

2. After reduction the animal by-products shall be heated until they coagulate and then pressed so that fat and water are removed from the proteinaceous material. The proteinaceous material shall then be heated to a core temperature greater than 80°C for at least 120 minutes and a core temperature greater than 100°C for at least 60 minutes.

3. The rendering may be carried out in batch or continuous systems.

4. The animal by-products may be cooked such that the time-temperature requirements are achieved at the same time.

Method 6

Aquatic Animals

Combined Acidification and Heat Treatment

1. The animal by-products shall be reduced to a size specified in the approval. They shall then be mixed with formic acid to reduce the pH to a level specified in the approval. They shall then be stored for a period specified in the approval.

2. They shall then be heated to the temperature and time criteria specified in the approval.

3. After heat treatment, the product shall be separated into liquid, fat and greaves by mechanical means. In order to obtain an animal protein concentrate, the liquid shall be pumped into two heat exchangers which are steam heated and equipped with vacuum chambers in order for its moisture to be removed in the form of water vapour. The greaves shall then be added to the protein concentrate.

SCHEDULE 3

Articles 2, 9 and 10

Sampling and Testing Methods

Part I

Manner of Sampling

Method 1

1. In accordance with the following table, samples of approximately equal size shall be extracted evenly from the whole of the rendered material. These samples shall then be divided into groups of approximately equal numbers, the number of groups being the number of aggregate samples specified in the table. The samples in each group shall then be mixed together to form aggregate samples.

Total quantity of rendered material consigned from the premises	*Number of samples extracted*	*Number of aggregate samples obtained by mixing the relevant number of samples*
Loose animal protein		
up to 1 tonne	7	1
1–2.5 tonnes	7	2
2.5–10 tonnes	√20 × weight of sampled portion in tonnes	2
10–40 tonnes	√20 × weight of sampled portion in tonnes	3
over 40 tonnes	√20 × weight of sampled portion in tonnes (maximum – 40 incremental samples)	4
Bagged animal protein		

Total quantity of rendered material consigned from the premises	*Number of samples extracted*	*Number of aggregate samples obtained by mixing the relevant number of samples*
1–16 bags	4	1
17–200 bags	√No. of bags of sampled portion	2
201–800 bags	√No. of bags of sampled portion	3
over 800 bags	√No. of bags of sampled portion (maximum – 40 incremental samples)	4

2. Each aggregate sample shall be placed into a separate sterile receptacle and each shall be thoroughly mixed by stirring or shaking.

3. Approximately equal amounts shall be taken from each aggregate sample and mixed so as to provide a single final sample of approximately 500 grammes. This final sample shall be transferred into a suitable sterile screw top container which shall then be sealed and marked to indicate its identity.

Method 2

1. In accordance with the following table, samples of approximately equal size shall be extracted evenly from the whole of the rendered material. These samples shall then be divided into groups of approximately equal numbers, the number of groups being the number of aggregate samples specified in the table. The samples in each group shall then be mixed together to form aggregate samples.

Total consignments consigned from the premises	*Number of samples extracted*	*Number of aggregate samples obtained by mixing the relevant number of samples*
Loose or bagged animal protein		
1–5 consignments	1 per consignment	1
6–10 consignments	1 per consignment	2
11–15 consignments	1 per consignment	3
Over 15 consignments	1 per consignment	4

For the purpose of this method “consignment” means the total quantity of rendered material loaded onto a single vehicle or trailer.

2. Each aggregate sample shall be placed into a separate sterile receptacle and each shall be thoroughly mixed by stirring or shaking.

3. Approximately equal amounts shall be taken from each aggregate sample and mixed so as to provide a single final sample of approximately 500 grammes. This final sample shall be transferred into a suitable sterile screw top container which shall then be sealed and marked to indicate its identity.

Part II

Method for the Isolation of *clostridium perfringens*

Time of testing

1. Tests shall be begun on receipt of the sample or on the first working day which allows this method to be completed. If the test is not begun on the day of receipt the sample shall be stored in a refrigerator at between 2°C and 8°C until required. If the sample has been refrigerated it shall be removed from the refrigerator and stored at room temperature for at least one hour before the test is started.

Samples

2. Tests shall be carried out using two 10 gramme portions of each sample submitted for testing. Each 10 gramme sample shall be placed aseptically in a jar containing 90 ml *Clostridium perfringens* diluent consisting of 0.1% peptone and 0.8% sodium chloride at a pH of 7 and mixed thoroughly until the sample is evenly suspended.

Inoculations

3. For each portion of the sample 1 ml of suspension/solution shall be transferred to a sterile 90 mm petri dish (in duplicate), to which 15 ml of egg yolk-free tryptose sulphite cycloserine agar (EY-free TSC agar)(**18**) at a temperature of 46°C ± 1°C shall be added and immediately gently mixed by swirling the dish with 5 clockwise and 5 anticlockwise circular movements.

4. Once the agar has set, each agar plate shall be overlaid with a further 10 ml EY-free TSC agar at a temperature of 46°C ± 1°C. Once the overlay has set and with the plate lids uppermost the plates shall be incubated anaerobically at 37°C ± 1°C for 20 hours ± 2 hours.

Samples with colonies of Clostridium perfringens

5. After incubation each set of duplicate plates shall be examined for colonies characteristic of *Clostridium perfringens* (black). The sample provisionally fails if any colonies characteristic of *Clostridium perfringens* are present, in which case the following procedure shall be followed to establish whether or not the colonies are *Clostridium perfringens*.

6. In the case of each plate 10 characteristic colonies of *Clostridium perfringens* shall each be subcultured onto a further EY-free TSC agar plate. If there are less than 10 colonies on the plate, all characteristic colonies shall be subcultured onto further plates. The plates shall be incubated anaerobically at 37°C ± 1°C for 20 hours ± 2 hours.

7. If the surface area of the plates is overgrown and it is not possible to select well isolated characteristic colonies, 10 suspect colonies shall each be subcultured onto duplicate EY-free TSC agar plates and incubated anaerobically at 37°C ± 1°C for 20 hours ± 2 hours.

8. One characteristic colony from each plate shall be subcultured onto EY-free TSC agar and incubated anaerobically at 37°C ± 1°C for 20 hours ± 2 hours.

Subcultured colonies

9. After incubation each plate shall be examined for colonies characteristic of *Clostridium perfringens*. All colonies characteristic of *Clostridium perfringens* shall be—

(**18**) EY- free TSC agar. *See* Hauschild, A.H.W. and Hilsheimer, R. (1974) Applied Microbiology 27:78–82. American Society for Microbiology, 1913 1 St N.W., Washington DC 20006, USA

(a) stab inoculated into motility nitrate medium(**19**); and

(b) inoculated into either lactose gelatine medium(**20**) or charcoal gelatine discs(**21**) and incubated anaerobically at 37°C ± 1°C for 20 hours ± 2 hours.

Examination of subcultures

Motility

10. The motility nitrate medium shall be examined for the type of growth along the stab line. If there is evidence of diffuse growth out into the medium away from the stab line, the bacteria shall be considered to be motile.

Reduction of nitrate to nitrite

11. After examination of the motility nitrate medium 0.2ml to 0.5ml of nitrite detection reagent shall be added to it. The formation of a red colour confirms that the bacteria have reduced nitrate to nitrite. Cultures that show a faint reaction (i.e. a pink colour) should be discounted. If no red colour is formed within 15 minutes, a small amount of zinc dust shall be added and the plate allowed to stand for 15 minutes. If a red colour is formed after the addition of zinc dust no reduction of nitrate to nitrite has taken place.

Production of gas and acid from lactose and liquefaction of gelatine

12. The lactose gelatine medium shall be examined for the presence of small gas bubbles in the medium.

13. The lactose gelatine medium shall be examined for colour. A yellow colour indicates fermentation of lactose.

14. The lactose gelatine medium shall be chilled for one hour at 2–8°C and then checked to see if the gelatine has liquefied. If the medium has solidified it shall be re-incubated anaerobically for a further 18–24 hours, the medium chilled for a further one hour at 2–8°C and again checked to see if the gelatine has liquefied.

15. The presence of *Clostridium perfringens* shall be determined on the basis of the results from paragraphs 10 to 14. Bacteria which produce black colonies on EY-free TSC agar, are non-motile, reduce nitrate to nitrite, produce gas and acid from lactose and liquefy gelatine within 48 hours shall be considered to be *Clostridium perfringens*.

Control Tests

16. Control tests shall be carried out each day that a test is initiated using

(a) *Clostridium perfringens* NCTC 10662(**22**) no more than seven days old at the time of use;

(b) *Escherichia coli* NCTC 10418 or equivalent not more than seven days old at the time of use; and

(c) rendered animal protein which is free of *Clostridium perfringens*.

(**19**) Motility nitrate medium. *See* Hauschild AHW, Gilbert RJ, Harmon SM, O'Keefe MF, Vahlefeld R, (1997) ICMSF Methods Study VIII, Canadian Journal of Microbiology 23, 884–892. National Research Council of Canada, Ottawa ON K1A OR6, Canada

(**20**) Lactose gelatine medium. *See* Hauschild AHW, Gilbert R J, Harmon S M, O'Keefe M F, Vahlefeld R, (1997) ICMSF Methods Study VIII, Canadian Journal of Microbiology 23, 884–892

(**21**) Charcoal gelatine discs. *See* Mackie and McCartney, (1996) Practical Medical Microbiology 14,509. Churchill Livingstone, Robert Stevenson House, 1–3 Baxter's Place, Leith Walk, Edinburgh EH1 3AF

(**22**) The National Collection of Type Cultures, Central Public Health Laboratory, 61 Colindale Avenue, London NW9 5HT.

17. 10 gramme portions of the rendered animal protein shall be placed aseptically in each of two jars containing 90 ml Buffered Peptone Water (BPW)(**23**) and mixed thoroughly until the samples are evenly suspended.

18. One colony of *Clostridium perfringens* shall be placed in 10 ml BPW and mixed to form an even suspension. 0.1 ml of the suspension shall be added to the suspension in the preceding paragraph. This shall be repeated for *Escherichia coli*.

19. These are then treated and examined in the same way as test samples. If no typical colonies are formed then that day's testing shall be invalid and shall be repeated.

Part III

Methods for the Isolation of Salmonella

A. Bacteriological Method

1. Tests shall be begun on receipt of the sample or on the first working day which allows this method to be completed. If the test is not begun on the day of receipt the sample shall be stored in a refrigerator until required. If the sample has been refrigerated it shall be removed from the refrigerator and stored at room temperature for at least four hours before the test is started.

Day 1

2. Tests shall be carried out in duplicate using two 25 gramme portions of each sample submitted for testing. Each 25 gramme sample shall be placed aseptically in a jar containing 225 ml Buffered Peptone Water (BPW) and incubated at 37°C ± 1°C for 18 hours.

Day 2

3. 0.1 ml from the jar of incubated BPW shall be inoculated into 10 ml Rappaport Vassiliadis (RV) broth(**24**) and incubated at 41.5°C ± 0.5°C for 24 hours.

Day 3

4. The RV broth shall be plated out onto two 90 mm plates of Brilliant Green Agar(BGA)(**25**) or onto one 90mm plate of BGA and one 90 mm plate of Xylose Lysine Deoxycholate Agar (XLD)(**26**) using a 2.5 mm diameter loop. The plates shall be inoculated with a droplet taken from the edge of the surface of the fluid by drawing the loop over the whole of one plate in a zig zag pattern and continuing to the second plate without recharging the loop. The space between the loop streaks shall be 0.5 cm–1.0 cm. The plates shall be incubated at 37°C ± 1°C overnight.

5. The residual RV broth shall be reincubated at 41.5°C ± 0.5°C for a further 24 hours.

Day 4

6. The plates shall be examined and a minimum of 3 colonies from each plate showing suspicion of Salmonella growth shall be subcultured—

(**23**) Buffered Peptone Water. *See* Edel, W. and Kampelmacher, E.H. (1973) Bulletin of World Health Organisation, 48: 167–174, World Health Organisation Distribution and Sales, CH-1211, Geneva 27, Switzerland (ISSN 0042-9686)

(**24**) Rappaport Vassiliadis Broth. *See* Vassiliadis, P., Pateraki, E., Papaiconomou, N., Papadakis, J. A,. and Trichopoulos, D. (1976) Annales de Microbiologie (Institut Pasteur) 127B; 195–200. Elsevier, 23rue Linois, 75724 Paris, Cedex 15, France

(**25**) Brilliant Green Agar. *See* Edel, W and Kampelmacher, E.H. (1969) Bulletin of World Health Organisation, 41:297–306, World Health Organisation Distribution and Sales, CH-1211, Geneva 27, Switzerland (ISSN 0042-9686)

(**26**) Xylose Lysine Deoxycholate Agar. *See* Taylor, W.I. (1965) American Journal of Clinical Pathology, 44:471–475, Lippincott and Raven, 227 E. Washington Street Philadelphia PA19106, USA

(a) onto a nutrient agar plate;

(b) onto a MacConkey agar plate(**27**); and

(c) into biochemical media suitable for the identification of Salmonella.

These media shall be incubated at 37°C ± 1°C overnight.

7. The reincubated RV broth shall be plated out as described in paragraph 4.

Day 5

8. The incubated composite media or equivalent shall be examined and the findings recorded, discarding cultures which are obviously not Salmonella. Slide serological tests shall be performed using Salmonella polyvalent "O" and polyvalent "H" (phase 1 and 2) agglutinating sera on selected suspect colonies collected from the nutrient agar or MacConkey agar plates. If reactions occur with one or both sera, the colonies shall be typed by slide serology and a subculture sent to one of the Department's laboratories at either Food Science Division, Newforge Lane, Belfast, BT9 5PX or, Veterinary Science Division, Stoney Road, Belfast, BT4 3SD, for further typing.

9. The plates referred to in paragraph 7 shall be examined and further action taken as in paragraphs 6 and 8.

B. Electrical conductance method

1. Tests shall be begun on receipt of the samples of processed animal protein or on the first working day which allows the following method to be completed. If the test is not begun on the day of receipt the sample shall be stored in a refrigerator until required. If the sample has been refrigerated it shall be removed from the refrigerator and stored at room temperature for at least four hours before the test is started.

Day 1

2. Tests shall be carried out in duplicate using two 25 gramme portions of each sample submitted for testing. Each 25 gramme sample shall be placed aseptically in a jar containing 225 ml Buffered Peptone Water (BPW) and incubated at 37°C ± 1°C for 18 hours.

Day 2

3. The incubated BPW shall be added to Rappaport Vassiliadis Broth in electrical conductance cells or tubes to be inserted into electrical conductance cells. Detection of growth will utilise indirect impediometry as in the method of Donaghy and Madden (1993)(**28**). For cells or tubes containing more than 5 ml medium 0.2 ml of the BPW shall be added and for cells or tubes containing 5ml or less medium 0.1 ml of the BPW shall be added. Cells or tubes shall be connected to appropriate electrical conductance measuring equipment set to monitor and record changes in electrical conductance at 6 minute intervals over a 24 hour period. The temperature of cells and tubes shall be kept at 42°C.

Day 3

4. At the end of the 24 hour period, the information recorded by the conductance measuring equipment shall be analysed and interpreted using criteria defined by the manufacturers of the equipment. Where a tube or cell is provisionally identified as being positive for Salmonella, the result shall be confirmed by subculturing the contents of the tube or cell onto two 90 mm plates of BGA or onto one 90 mm plate of BGA and one 90mm plate of Xylose Lysine Deoxycholate Agar

(**27**) MacConkey agar. *See* (1963) International Standards for Drinking Water. World Health Organisation Distribution and Sales, CH-1211, Geneva 27, Switzerland

(**28**) Donaghy and Madden. *See* Donaghy, J.A. and Madden R.H. (1993) International Journal of Food Microbiology. 17;281–288

(XLD) using a 2.5 mm diameter loop. The plates shall be inoculated with a droplet taken from the edge of the surface of the fluid by drawing the loop over the whole of one plate in a zig zag pattern and continuing to the second plate without recharging the loop. The space between the loop streaks shall be 0.5 cm–1.0 cm. The plates shall be incubated at 37°C ± 1°C overnight.

Day 4

5. The plates shall be examined and a minimum of 3 colonies from each plate showing suspicion of Salmonella growth shall be subcultured—

(a) onto a nutrient agar plate;

(b) onto a MacConkey agar plate; and

(c) into biochemical media suitable for the identification of Salmonella.

These media shall be incubated at 37°C ± 1°C overnight.

Day 5

6. The incubated composite media or equivalent shall be examined and the findings recorded, discarding cultures which are obviously not Salmonella. Slide serological tests shall be performed using Salmonella polyvalent "O" and polyvalent "H" (phase 1 and 2) agglutinating sera on selected suspect colonies collected from the nutrient agar or MacConkey plates. If reactions occur with one or both sera, the colonies shall be typed by slide serology and a subculture shall be sent to one of the Department's laboratories at either Food Science Division, Newforge Lane, Belfast, BT9 5PX or Veterinary Science Division, Stoney Road, Belfast, BT4 3SD, for further typing.

Part IV

Method for the isolation of enterobacteriaceae

1. Tests shall be begun on receipt of the sample or on the first working day which allows this method to be completed. If the test is not begun on the day of receipt the sample shall be stored in a refrigerator until required at between 2°C and 8°C. If the sample has been refrigerated it shall be removed from the refrigerator and stored at room temperature for at least one hour before the test is started.

Samples

2. Tests shall be carried out using five 10 gramme portions of each sample submitted for testing. Each 10 gramme sample shall be placed aseptically in a jar containing 90 ml Buffered Peptone Water (BPW) and mixed thoroughly until the sample is evenly suspended.

Inoculations

3. For each portion of the sample 1 ml of solution shall be transferred to a sterile 90 mm petri dish (in duplicate). The plates shall be labelled to identify the portion of sample they were taken from. 15 ml of Violet Red Bile Glucose Agar (VRBGA)(**29**) at a temperature of 46°C ± 1°C shall be added to each petri dish and immediately gently mixed by swirling the dish with five clockwise and five anticlockwise circular movements.

(**29**) Violet Red Bile Glucose Agar-See Mossel, D.A.A., Eelderink, I. Koopmans, M., van Rossem, F. (1978) Laboratory Practice 27 No. 12 1049–1050; Emap Maclaren, PO Box 109, Maclaren House, 19 Scarbrook Road, Croydon CR9 1QH.

4. Once the agar has set, each agar plate shall be overlaid with a further 10 ml VRBGA at a temperature of 46°C ± 1°C. Once the overlay has set, the plates shall be inverted and incubated aerobically at 37°C ± 1°C for 20 hours ± 2 hours.

Samples with colonies of Enterobacteriaceae

5. After incubation each set of duplicate plates shall be examined for colonies characteristic of Enterobacteriaceae (purple colonies 1–2mm in diameter). All characteristic colonies on each plate shall be counted and the arithmetic mean of the duplicate plates taken.

The sample provisionally fails if either—

(a) any arithmetic mean is above 30(**30**); or

(b) three or more arithmetic means are above 10;

in which case the following procedure shall be followed to establish whether or not the colonies are Enterobacteriaceae.

6. After counting the colonies, characteristic colonies shall be taken at random from the agar plates, the number being at least the square root of the colonies counted. The colonies shall be subcultured onto a nutrient agar plate and incubated aerobically at 37°C ± 1°C for 20 hours ± 2 hours.

Examination of subcultures

7. An oxidase test and a glucose fermentation test shall be performed on each of the five subcultured colonies. Colonies which are oxidase-negative and glucose fermentation-positive shall be considered to be Enterobacteriaceae.

8. If not all of the colonies prove to be Enterobacteriaceae, the total count in paragraph 5 shall be reduced in proportion prior to establishing whether or not the sample should fail.

Controls

9. Control tests shall be carried out each day that a test is initiated using—

(a) *Escherichia* coli NCTC 10418 no more than seven days old at time of use; and

(b) rendered animal protein which is free of Enterobacteriaceae.

10. A 10 gramme portion of the rendered animal protein shall be placed aseptically in a jar containing 90 ml BPW and mixed thoroughly until the sample is evenly suspended.

11. One colony of *Escherichia* coli shall be placed in 10 ml BPW and mixed to form an even suspension. 0.1 ml of the suspension shall be added to the suspension in the preceding paragraph.

12. This is then treated and examined in the same way as test samples. If no typical colonies are formed then that day's testing shall be invalid and shall be repeated.

(30) An arithmetic mean of 30 is equivalent to 3×10^2 colony forming units per gramme of original sample

SCHEDULE 4 Articles 17, 18 and 19

Requirements for knackers' yards

General requirements

1. The approved premises must be adequately separated from the public highway and other premises such as slaughterhouses.

2. Preventive measures against birds, rodents, insects and other vermin shall be taken systematically.

3. Floors must be impervious, capable of being cleansed and disinfected and laid so that liquids drain into a waste-water disposal system and cannot seep from the unclean area to the clean area.

4. Adequate lavatories, changing rooms and washbasins shall be available for staff.

Clean and unclean areas in premises producing feeding stuffs for animals whose flesh is not intended for human consumption

5.—(1) In premises producing feeding stuffs for animals whose flesh is not intended for human consumption there shall be a clean area and an unclean area, adequately separated. The unclean area shall be easy to clean and disinfect. It shall have a covered place (the reception area) to receive and store the untreated animal by-products.

(2) Untreated animal by-products shall be unloaded in the reception area and either—

(a) treated immediately; or

(b) stored in suitable containers in the reception area and treated without undue delay.

(3) Treated animal by-products shall be handled and stored in a clean area in such way as to prevent recontamination. Treated animal by-products shall not be allowed to come into contact with any untreated animal by-products.

Reception and storage facilities in premises not producing feeding stuffs

6.—(1) In premises not producing feeding stuffs for animals whose flesh is not intended for human consumption there shall be a covered place (the reception area) to receive and store the animal by-products. The premises shall be easy to clean and disinfect.

(2) Animal by-products shall be unloaded in the reception area and stored in suitable containers until disposal. They shall be disposed of without undue delay.

Hides

7. If carcases are de-skinned or de-haired there shall be adequate facilities for doing this, and there shall be a storage room for hides. Hides shall be salted using sodium chloride.

Cleansing and disinfection facilities

8.—(1) There shall be adequate facilities (including a water supply) provided to enable containers and vehicles (including their wheels) to be cleansed and disinfected in accordance with this paragraph.

(2) Containers used for animal by-products shall be cleansed and disinfected after each use.

(3) In premises producing feeding stuffs for animals whose flesh is not intended for human consumption, vehicles (including their wheels) used for the transport of animal by-products shall

be cleansed and disinfected before entering the clean area or (if they do not enter the clean area) before they leave the premises.

(4) In premises which do not produce feeding stuffs, vehicles (including their wheels) used for the transport of animal by-products shall be cleansed and disinfected before they leave the premises.

Repair of installations

9. Installations and equipment shall be kept in a good state of repair and any measuring equipment shall be calibrated at regular intervals. A record shall be kept showing when re-calibration was carried out.

Products of knackers' yards

10. A product of a knacker's yard shall be either—

(a) disposed of without delay in accordance with Article 5; or

(b) treated in accordance with paragraph 11 and marketed locally within Northern Ireland for feeding animals whose flesh is not intended for human consumption.

Feeding stuffs

11.—(1) Animal by-products intended for use as feeding stuff for animals whose flesh is not intended for human consumption shall be either—

(a) sterilised by being boiled or steamed under pressure until every piece of meat is cooked throughout, or

(b) denatured by being stained with a solution of the colouring agent Black PN or Brilliant Black BN (E 151, Colour Index 197 No. 28440), the solution being of such a strength that the colouring on the stained meat is clearly visible and applied so that the whole surface of all pieces of meat have been covered with the solution either by immersing the meat in, or spraying or otherwise applying, the solution and, in the case of a piece of meat weighing 25 kilogrammes or more, applying the solution after the surface of the meat has been opened by multiple and deep incisions; or

(c) reduced to a particle size of no more than 50 mm and then heated to a core temperature of more than 133°C at a pressure of at least 3 bar for at least 20 minutes without interruption.

(2) Feeding stuffs shall be packaged before distribution and sale and the packaging shall include the name and address of the knacker's yard and be clearly and legibly marked "Not for human consumption".

EXPLANATORY NOTE

(This note is not part of the Order.)

This Order replaces the Diseases of Animals (Animal Protein) (No. 2) Order (Northern Ireland) 1989 as amended, and the Catering Waste (Feeding to Livestock) Order (Northern Ireland) 2001. It also replaces the Animal By-Products Regulations (Northern Ireland) 1993 as amended, which are

revoked by the Animal By-Products (Revocation) Regulations (Northern Ireland) 2002 (S.R. 2002 No. 210). It implements—

- (Council Directive 90/667/EEC laying down the veterinary rules for the disposal and processing of animal waste, for its placing on the market and for the prevention of pathogens in feeding stuffs of animal or fish origin and amending Directive 90/425/EEC (O.J. No. L363, 27.12.90, p. 51)) as supplemented by:
- (Commission Decision 92/562/EEC on the approval of alternative heat treatment systems for processing high-risk material (O.J. No. L359, 9.12.92, p. 23));
- (Commission Decision 94/382/EC on the approval of alternative heat treatment systems for processing animal waste of ruminant origin, with a view to the inactivation of spongiform encephalopathy agents (text with EEA relevance) (O.J. No. L172, 7.7.94, p. 25));
- (Commission Decision 95/29/EC amending Decision 94/382/EC on the approval of alternative heat treatment systems for processing animal waste of ruminant origin, with a view to the inactivation of spongiform encephalopathy agents (O.J. No. L38, 18.2.95, p. 17)); and
- (Commission Decision 96/449/EC on the approval of alternative heat treatment systems for processing animal waste with a view to the inactivation of spongiform encephalopathy agents (text with EEA relevance) (O.J. No. L184, 24.6.96, p. 43)).

These establish systems and standards for the rendering of animal by-products.

The Order also implements Council Decision 95/348/EC laying down the veterinary and animal health rules applicable in the United Kingdom and Ireland to the treatment of certain types of waste intended to be marketed locally as feedstuffs for certain animal categories (O.J. No. L202, 26.8.95, p. 8).

Animal by-products

Animal by-products are defined as carcases, parts of carcases or products of animal origin, which are not intended for human consumption, but the definition excludes catering waste and excreta. Animal by-products are divided into two categories: high risk (e.g. fallen stock) and low risk (e.g. slaughterhouse waste which is fit for human consumption).

Part II of the Order requires that animal by-products must be disposed of, without undue delay, by—

(a) rendering in approved premises: the Order sets construction and operational standards for such premises; sets the standards to which animal by-products must be rendered; and requires the microbiological testing of dry rendered material intended for use in animal feeding stuffs other than petfood;

(b) incineration;

(c) in certain, specified, circumstances, burning or burial;

(d) use for diagnostic, educational or research purposes;

(e) for low risk material only, use for the production of petfood, pharmaceutical or technical products. The Order requires such premises to be registered and to have suitable facilities for the disposal of unused or waste material;

(f) for low risk material and certain types of high risk material, treatment at an approved knacker’s yard or for feeding at hunt kennels, maggot farms and similar premises. The Order sets construction and operational standards for approved knackers' yards and the standards to which knackers must treat animal by-products for use as feeding stuffs for animals whose flesh is not intended for human consumption. It also requires hunt kennels and similar premises to be registered;

(g) export from Northern Ireland.

The Order requires persons who engage in the business of collection, holding or removal of animal by-products to register with the Department and requires certain records to be kept.

Catering waste intended for feeding to livestock

Part III of the Order prohibits the feeding to livestock of catering waste (other than used cooking oil) which contains, or has been in contact with animal carcases, parts of animal carcases (including blood) or products of animal origin. It also regulates the holding, disposal and transport of catering waste and the landing of catering waste in Northern Ireland from a means of transport from outside Northern Ireland.

General provisions

Part IV of the Order makes provision for the service of notices requiring animal by-products or catering waste to be disposed of, and for the cleansing and disinfection of vehicles and the keeping of records. Provision is made for certain approvals, authorisations and registrations granted under the revoked legislation to remain valid.

Any person who without lawful authority or excuse, proof of which shall lie on him, contravenes any provision of the Order shall be guilty of an offence against the Diseases of Animals (Northern Ireland) Order 1981. The penalty, on summary conviction, is in the case of an offence committed in relation to carcases or other inanimate things a fine not exceeding level 5 on the standard scale (currently £5000) together with a further fine not exceeding level 3 on the standard scale (currently £1000) in respect of every 508 kilogrammes in weight of the carcases or other things after the first 508 kilogrammes.