Statutory Instrument 1999 No. 646

The Animal By-Products Order 1999

STATUTORY INSTRUMENTS

1999 No. 646

ANIMALS

ANIMAL HEALTH

The Animal By-Products Order 1999

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The Minister of Agriculture, Fisheries and Food, the Secretary of State for Scotland and the Secretary of State for Wales, acting jointly, in exercise of the powers conferred on them by sections 1, 8(1), 87(2), (3) and (5)(a) and 88(2) and (4)(a) of the Animal Health Act 1981[1], and of all other powers enabling them in that behalf, make the following Order:

PART I

INTRODUCTION

Title and commencement

1. This Order may be cited as the Animal By-Products Order 1999 and shall come into force on 1st April 1999.

Extension of definitions of "animals" and "poultry"

2. For the purposes of the Animal Health Act 1981 in its application to this Order -

(a) the definition of "animals" in section 87(1) of that Act 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 definition of "poultry" in section 87(4) of that Act is hereby extended so as to comprise all birds; and

(c) the definitions of "disease" in section 88(1) and (3) of that Act are hereby extended so as to comprise all diseases of animals and birds.

Interpretation and scope

3. - (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" means approved under this Order by the appropriate Minister;

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

(a) waste from catering and domestic waste;

(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);

"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 appropriate Minister;

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

(e) animal by-products (including blood) from animals which, during pre-slaughter veterinary inspection, show clinical signs of disease 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 post-mortem veterinary inspection the animal by-product shows gross pathological lesions indicating disease communicable to man or animals;

(h) all meat, poultrymeat, 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;

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

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

"swill" means -

(a) non-mammalian animal by-products rendered in accordance with paragraph 5 of Part I of Schedule 2; or

(b) catering waste processed in accordance with Schedule 5.

(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 Enterobacteriaceaein 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

feedingstuffs 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 1997[2] or the Specified Risk Material Order 1997[3];

(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.

(5) Any reference in this Order to a Schedule or article is, unless the context otherwise requires, a reference to a Schedule to this Order or an article of this Order.

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 following 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 approved premises;

(b) incineration;

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

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

(ii) the quantity of by-product and the distance to premises in which disposal is otherwise 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 12;

(f) treatment at an approved knacker's yard, or feeding to zoo, circus or fur animals, recognised packs of hounds or
maggots farmed for fishing bait at premises registered under article 13, 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 3(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)[4]); or

(ii) low risk material; or

(g) export from Great Britain.

(2) If the appropriate Minister serves on the person in charge by any animal by-product a notice certifying that -

(a) the by-product is from animals infected with, 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) No person shall feed to any ruminant animal, pig or poultry, or allow any such animal to have access to, any unrendered
animal by-product.

Collection and transport of animal by-products

6. Any person collecting or transporting animal by-products shall -

(a) use adequately covered leak-proof containers or vehicles;

(b) maintain vehicles, tarpaulins or other covers and reusable containers in a clean condition; and

(c) where animal by-products derived from animals or fish fit for human consumption are transported in bulk directly to rendering premises, label the container with -

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

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

Approval of premises and equipment for rendering animal by-products

7. - (1) No person shall use any premises or equipment for rendering or part-rendering animal by-products unless the premises, the equipment and the operator of the premises are approved by the appropriate Minister in accordance with this article.

(2) The appropriate Minister shall grant approval under this article for premises and equipment for rendering or part-rendering high risk or low risk material if he is satisfied that -

(a) the premises comply with the requirements in 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 3(2), except that this requirement shall not apply when animal by-products -

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

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

(iii) are non-mammalian by-products which are to be rendered for the production of swill for feeding to pigs or poultry;

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

(e) where appropriate, 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 operator and the 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 appropriate Minister considers necessary to ensure that this Order is complied with.

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

Operation of approved rendering plants

8. - (1) Any 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) No person shall render specified risk material controlled by the Specified Risk Material Regulations 1997 or the Specified Risk Material Order 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 feedingstuffs (other than swill or 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 grams of freshly rendered proteinaceous material; and

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

(4) In the case of all rendered material, the operator shall, on each day that the material is consigned 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 approved laboratory for testing for Salmonella and Enterobacteriaceae.

(5) Whenever an operator sends a sample to an approved 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) No person shall tamper with a sample taken under this article with intent to affect the result of a test.

(7) If the test demonstrates that the rendered material does not comply with the microbiological standards in article 3(2), then the
operator shall -

(a) immediately notify the appropriate Minister 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 feedingstuffs; or

(ii) it has been re-rendered under the supervision of the appropriate Minister and resampled and re-tested by the
appropriate Minister, and the re-testing has shown that the re-rendered material complies with the microbiological
standards in article 3(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.

Incineration

10. Any 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

11. Any person burying animal by-products shall -

(a) sprinkle them with a suitable disinfectant if this will help prevent the spread of disease; and

(b) bury them in such a way that carnivorous animals cannot gain access to them.

Petfood, pharmaceutical and technical premises

12. - (1) No person shall use any premises for the production of petfood or pharmaceutical or technical products from animal by-products unless the premises and the occupier of the premises are registered with the appropriate Minister in accordance with this article.

(2) The appropriate Minister shall register premises under paragraph (1) above if he is satisfied that -

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

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

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

(3) No person shall use any premises for the collection of animal by-products intended for the production of petfood (other than the premises on which the animal by-products originate or premises registered under paragraph (1) above) unless the premises and the occupier of the premises are registered with the appropriate Minister in accordance with this article.

(4) The appropriate Minister 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) No person shall accept any unrendered or part-rendered high risk material into premises registered under this article.

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

(7) The occupier of premises registered under paragraph (1) above 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) above shall ensure that all animal by-products not consigned for the production of petfood are disposed of in accordance with article 5.

(9) The appropriate Minister may by notice require the occupier of 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

13. - (1) No person shall 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 with the appropriate Minister in accordance with this article.

(2) The appropriate Minister shall maintain a register of premises used for the feeding of animal by-products to zoo, circus and 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) No person shall 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

14. - (1) No person shall operate a knacker's yard unless the premises are approved by the appropriate Minister in accordance with this article.

(2) The appropriate Minister shall grant approval under this article if he 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 appropriate Minister shall not approve a knacker's yard for the production of feedingstuffs for animals whose flesh is not intended for human consumption unless he is satisfied that the premises were used as a knacker's yard for the production of such feedingstuffs on 27th November 1990.

(4) The approval granted under paragraph (1) above shall specify -

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

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

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

Operation of knackers' yards and supply of feedingstuffs from knackers' yards

15. - (1) Any person approved under article 14 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) No person shall accept any animal by-product into a knacker's yard other than material permitted to be consigned there under article 5.

(3) No person (whether a knacker or any subsequent supplier) shall supply for use in domestic premises any feedingstuffs 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.

Approval and operation of laboratories

16. - (1) The appropriate Minister shall approve laboratories under this article to carry out one or more of the tests in this article if he is satisfied that they have the necessary facilities, personnel and operating procedures to do so.

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

(3) The operator of a laboratory approved under this article 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 perfringensshall be carried out in accordance with the method in Part II of Schedule 3 or (if specified in the approval) with a method which conforms with ISO 7937/1985 (BS 5763: Part 9: 1986 (1998) (Enumeration of Clostridium perfringens)[5].

(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 approval) with a method which conforms with -

(a) ISO 6579/1993 (BS 5763: Part 4: 1993) (Detection of Salmonella)[6];

(b) BS EN-12824: 1998 (Horizontal method for the detection of Salmonella)[7]; or

(c) NMKL 71: 1993[8].

(6) A test for Enterobacteriaceaeshall be carried out in accordance with the method in Part IV of Schedule 3 or (if specified in the approval) with a method which conforms with ISO 7402/1993 (BS5763: Part 10: 1993) (Enumeration of Enterobacteriaceae)[9].

(7) The operator of a laboratory approved under this article shall forthwith notify the appropriate Minister for the rendering plant, and the operator of the rendering plant, in the event of tests establishing that the material does not comply with the microbiological standards in article 3(2).

(8) The operator of a laboratory approved under this article shall notify the appropriate Minister for the laboratory on the last day of every month of the number, type and results of tests carried out.

Records for animal by-products

17. - (1) Any person consigning 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 taken from the premises;

(b) the quantity and description of the material;

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

(d) the name of the haulier transporting it.

(2) Any 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) Any 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 consigned;

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

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

(4) In addition to the records required to be kept by him under paragraph (3) (and, in the case of consignment from the premises
of unrendered material, 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 of samples submitted to an approved laboratory in accordance with article 9 and any action taken under that article after a sample has been shown not to comply with the microbiological standards specified in article 3(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 haulier; and

(v) the address of the disposal premises.

(5) In addition to the records required to be kept by him under paragraph (3) (and, in the case of consignment from the premises of unrendered 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 by him under paragraph (3) (and, in the case of consignment 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 13 (zoo animals, etc.) shall keep records of the use to which the animal by-products were put.

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

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

(b) in the case of the 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 name and address of each person buying the feedingstuffs;

(ii) the premises to which the feedingstuffs are to be taken for use;

(iii) the quantity sold; and

(iv) the date on which the material was sold.

Records for approved laboratories

18. The operator of a laboratory approved under article 16 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; and

(f) the result of the test.

PART III

CATERING WASTE INTENDED FOR FEEDING TO PIGS AND POULTRY

Feeding catering waste to ruminants, pigs and poultry

19. - (1) No person shall feed to any ruminant animal, or allow any ruminant animal to have access to, any catering waste to which this Part applies, or any feedingstuffs which have been in contact with it.

(2) No person shall feed to any pig or poultry, or allow any pig or poultry to have access to, any catering waste to which this Part applies unless it has been processed in accordance with this Part.

(3) No person shall feed to any pig or poultry, or allow any pig or poultry to have access to, any feedingstuffs which have been in contact with unprocessed catering waste unless the feedingstuffs have subsequently been processed as catering waste in accordance with this Part.

(4) The requirements in this Part shall apply in relation to catering waste which contains or has been in contact with animal

carcases, parts of animal carcases (including blood) or products of animal origin (other than milk, eggs, rennet or melted fat which have been incorporated into another product).

Catering waste from a means of transport from outside Great Britain

20. No person shall feed to any ruminant animal, pig or poultry, or allow any such animal to have access to, any catering waste imported into Great Britain and originally intended for consumption on the means of transport in which it was imported, or any feedingstuffs which have been in contact with it.

Transporting unprocessed catering waste

21. - (1) Any person collecting or transporting unprocessed catering waste intended for feeding to pigs or poultry shall -

(a) use adequately covered leak-proof containers or vehicles;

(b) maintain vehicles, tarpaulins or other covers and reusable containers in a clean condition; and

(c) take it without undue delay to approved processing premises.

(2) No person shall bring unprocessed catering waste on to any premises where ruminant animals, pigs or poultry are kept.

(3) No person shall carry processed catering waste in a vehicle containing unprocessed catering waste.

Approval of premises producing swill from catering waste

22. - (1) No person shall process catering waste to produce swill for feeding to pigs or poultry except on premises approved under this article.

(2) The appropriate Minister shall grant approval under this article for premises and equipment for processing catering waste to produce swill for feeding to pigs or poultry if he is satisfied that -

(a) the premises comply with the requirements in Schedule 5 and will be maintained and operated in accordance with that Schedule;

(b) the catering waste will be processed in accordance with Schedule 5;

(c) the catering waste will not be fed to ruminants;

(d) the premises are not used to render animal by-products other than for the production of swill; and

(e) the conditions of this Order will be complied with.

(3) The approval shall specify -

(a) the operator of the premises;

(b) the address of the premises;

(c) the parts of the premises in which catering waste may be received and processed;

(d) the cooking parameters if these are different from those specified in Schedule 5; and

(e) any other conditions which the appropriate Minister considers necessary to ensure that this Order is complied with.

Operation of premises approved to process catering waste

23. - (1) Any person holding an approval under article 22 shall maintain and operate the premises and equipment in accordance with the requirements in Schedule 5 and shall process the catering waste in accordance with that Schedule.

(2) No person shall render animal by-products (except for the production of swill) on any premises approved under article 22.

Records for premises approved to process catering waste

24. The occupier of premises processing catering waste shall record -

(a) the date on which the incoming waste arrived;

(b) the address of the premises from which the waste was collected;

(c) the quantity and description of the incoming waste; and

(d) the name of the haulier who transported it.

PART IV

SWILL FOR USE AS FEEDINGSTUFFS

Consigning swill

25. - (1) No person shall consign from any holding swill for feeding to pigs or poultry except under the authority of an approval granted by the appropriate Minister under this article.

(2) The appropriate Minister shall grant an approval under this article if he is satisfied that the conditions of this Order will be complied with.

(3) The approval shall specify the address of the holding to which the swill may be consigned.

(4) Any person consigning swill from any holding shall keep a record of each consignment showing -

(a) the date on which the material was consigned;

(b) the quantity of the material;

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

(d) the name of the haulier who transported it.

Feeding swill to pigs or poultry

26. - (1) No person shall feed swill to pigs or poultry on any premises except under the authority of an approval granted by the appropriate Minister under this article.

(2) The appropriate Minister shall grant an approval under this article if he is satisfied that the conditions of this Order will be complied with.

(3) The occupier of premises used for feeding swill to pigs or poultry (other than pigs or poultry which are on the same holding as the processing premises) shall keep a record of each incoming consignment of swill showing -

(a) the date on which the material arrived;

(b) the premises from which the material was consigned;

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

(d) the name of the haulier who transported it.

PART V

GENERAL

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

27. If he thinks it necessary for animal health purposes, or if any provision of this Order is not being complied with, an inspector may serve a notice on any person in possession of any animal by-product or catering waste requiring him to dispose of it as may be specified in the notice.

Cleansing and disinfection

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

(2) The notice may -

(a) specify the method of cleansing and disinfection;

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

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

Powers of inspectors

29. - (1) An inspector who enters any premises in exercise of his powers under the Animal Health Act 1981 may -

(a) carry out any inquiries, examinations and tests;

(b) take any samples; and

(c) examine and copy any records kept under this Order;

which are necessary to ascertain whether the provisions of this Order have been or are being complied with.

(2) An inspector may, for the purposes of identification, mark any animal or thing in relation to which any of the powers in
paragraph (1) above has been exercised.

(3) No person shall, or shall attempt to, deface, obliterate or remove any such mark as is referred to in paragraph (2) above.

(4) The occupier of any premises or any person in his employment shall render such reasonable assistance to an inspector as the
inspector may require for the purpose of facilitating the exercise of his powers under paragraphs (1) and (2) above and in particular
shall provide a printout of any records kept in electronic form.

Form of approvals, etc.

30. Any approval, registration or notice 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 appropriate Minister is

reasonably of the opinion that the provisions of this Order are not being complied with.

Compliance with notices

31. 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 at the expense of that person.

Form of records

32. Any record required to be kept under this Order shall be in written or electronic form and shall be kept for at least two years.

Enforcement

33. - (1) This Order shall be enforced by the appropriate Minister in relation to -

(a) premises which are licensed under the Fresh Meat (Hygiene and Inspection) Regulations 1995[10];

(b) premises which are licensed under the Poultry Meat, Farmed Game Bird Meat and Rabbit Meat (Hygiene and Inspection) Regulations 1995[11];

(c) premises which are licensed under the Wild Game Meat (Hygiene and Inspection) Regulations 1995[12];

(d) combined premises as defined in the Meat Products (Hygiene) Regulations 1994[13]; and

(e) combined premises as defined in the Minced Meat and Meat Preparations (Hygiene) Regulations 1995[14].

(2) Other than as specified in paragraph (1) this Order shall be enforced by the local authority.

Transitional provisions

34. Any notice, licence, approval, authorisation or registration issued under the provisions of the Animal By-Products Order 1992[15] or the Diseases of Animals (Waste Food) Order 1973[16] shall continue to have effect as if made under the equivalent provision of this Order.

Revocations and consequential amendments

35. - (1) The instruments in Part I of Schedule 6 are revoked.

(2) The instrument in Part II of Schedule 6 is amended in accordance with that Part.

Jeff Rooker

Minister of State Ministry of Agriculture, Fisheries and Food

3rd March 1999

Sewel
Under Secretary of State Scottish Office

2nd March 1999

Signed by authority of the Secretary of State for Wales

Jon Owen Jones
Parliamentary Under Secretary of State Welsh Office

8th March 1999

SCHEDULE 1

Article 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. Preventative 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, except in the case of premises rendering non-mammalian animal by-products for the production of swill for feeding to pigs or poultry.

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.

It will have 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 preclude 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 resulting 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) Subject to sub-paragraph (2) below, 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.

(2) In the case of premises rendering non-mammalian animal by-products for the production of swill for feeding to pigs or poultry, the premises shall be equipped with a suitable cooker with measuring equipment to check that the animal by-products are rendered to the required temperature.

15. Installations and equipment shall be kept in a good state of repair. All measuring equipment shall be calibrated at regular intervals.

Laboratories

16. Where microbiological tests are required under article 9, the premises shall either have their own laboratory approved under this Order or make use of the services of a laboratory approved under this Order.

SCHEDULE 2

Articles 3, 7 and 8

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) of this Schedule, 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 different parameters set out in the approval) provided that the rendered material complies with the microbiological standards in article 3(2).

Low-risk material

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

(a) paragraph 2 above; or

(b) a method and parameters specified in the approval which ensure that the rendered material complies with the microbiological standards in article 3(2).

Part-rendering

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

Non-mammalian animal by-products used for the production of swill

5. Notwithstanding the requirements of paragraphs 2 or 3 above, in the case of non-mammalian high risk or low risk material which is being rendered for the production of swill for feeding to pigs or poultry, the material shall be rendered for at least 60 minutes at a temperature of not less than 100°C or by an alternative method specified in the approval.

Gelatin and rendered fats

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

Hides

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

Re-rendering material

8. 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 millimetres, 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 millimetres 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, temperature and pressure

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 millimetres, 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 millimetres 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 millimetres, 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 millimetres 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 millimetres, 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 millimetres 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 millimetres, 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 20 millimetres 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 a temperature specified in the approval for a time 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 3, 9 and 16

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 tonne	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		
1 - 16 bags	4	1
17 - 200 bags	number of bags of sampled portion	2
201 - 800 bags	number of bags of sampled portion	3
over 800 bags		

number of bags of sampled portion
4

(maximum - 40 incremental samples)

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 grams. 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 grams. 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 gram portions of each sample submitted for testing. Each 10 gram sample shall be placed aseptically in a jar containing 90 ml Clostridium perfringensdiluent 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 solution shall be transferred to a sterile 90 mm petri dish (in duplicate), to which 15 ml of Shahidi - Ferguson agar (SF agar)[17] at a temperature of 49°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 SF agar at a temperature of 49°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 perfringensare 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 perfrin gensshall be subcultured on to a further SF agar plate. If there are less than 10 colonies on the plate, all characteristic colonies shall be subcultured on to the further plate. 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 be subcultured on to duplicate SF 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 on to SF 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 perfrin gensshall be -

(a) stab inoculated into motility nitrate medium[18]; and

(b) inoculated into either lactose gelatin medium[19] or charcoal gelatin discs[20];

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, 0.2 ml to 0.5 ml 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 gelatin

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

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

14. The lactose gelatin medium shall be chilled for one hour at 2 - 8°C and then checked to see if the gelatin 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 gelatin has liquefied.

15. The presence of Clostridium perfringensshall be determined on the basis of the results from paragraphs 10 to 14. Bacteria which produce black colonies on SF agar, are non-motile, reduce nitrate to nitrite, produce gas and acid from lactose and liquefy gelatin 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 perfringensno more than seven days old at the time of use;

(b) Escherichia coliNCTC 10418[21] or equivalent not more than seven days old at the time of use; and

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

17. 10 gram portions of the rendered animal protein shall be placed aseptically in each of two jars containing 90 ml Buffered Peprone Water (BPW)[22] and mixed thoroughly until the samples are evenly suspended.

18. One colony of Clostridium perfringensshall 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 gram portions of each sample submitted for testing. Each 25 gram sample shall be placed aseptically in a jar containing 225 ml Buffered Peptone Water (BPW) and incubated at 37°C for 18 hours.

Day 2

3. 0.1 ml from the jar of incubated BPW shall be inoculated into 10 ml Rappaports Vassiliadis broth (RV broth)[23] and incubated at 41.5°C±0.5°C for 24 hours.

Day 3

4. The RV broth shall be plated out on to two 90 millimetre plates of Brilliant Green Agar (BGA)[24] or on to one 90 millimetre plate of BGA and one 90 millimetre plate of Xylose Lysine Deoxycholate Agar (XLD)[25] 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 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 -

(a) on to a blood agar plate;

(b) on to a MacConkey agar plate[26]; and

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

These media shall be incubated at 37°C overnight.

7. The reincubated RV both 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 blood agar or MacConkey plates. If reactions occur with one or both sera, the colonies shall be typed by slide serology and a subculture sent (in Scotland) to the Veterinary Laboratory, Lasswade, Midlothian and (in England and Wales) to a Veterinary Investigation Centre of the Ministry of Agriculture, Fisheries and Food for further typing.

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

B. ELECTRICAL CONDUCTANCE METHOD

1. Tests shall be begun on receipt of the sample 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 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 gram portions of each sample submitted for testing. Each 25 gram sample shall be placed aseptically in a jar containing 225 ml Buffered Peptone Water/Lysine/Glucose (BPW/L/G)[27] and incubated at 37°C for 18 hours.

Day 2

3. The incubated BPW/L/G shall be added to Selenite Cystine Trimethylamine-N-Oxide Dulcitol (SC/T/D)[28] and Lysine Decarboxylase Glucose (LD/G)[29] media in electrical conductance cells or wells. For cells or wells containing more than 5 ml medium 0.2 ml of the BPW/L/G shall be added and for cells or wells containing 5 ml or less medium 0.1 ml of the BPW/L/G shall be added. Cells or wells 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 wells shall be kept at 37°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 well or cell is provisionally identified as being positive for Salmonella, the result shall be confirmed by subculturing the contents of the well or cell on to two 90 millimetre plates of BGA or on to one 90 millimetre plate of BGA and one 90 millimetre plate of Xylose Lysine Deoxycholate Agar (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 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) on to a blood agar plate;

(b) on to a MacConkey agar plate; and

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

These media shall be incubated at 37°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 blood agar or MacConkey plates. If reactions occur with one or both sera, a subculture shall be sent (in Scotland) to the Veterinary Laboratory, Lasswade, Midlothian, and (in England and Wales) to a Veterinary Investigation Centre of the Ministry of Agriculture, Fisheries and Food 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 gram portions of each sample submitted for testing. Each 10 gram sample shall be placed aseptically in a jar containing 90 ml Buffered Peptone Water 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)[30] at a temperature of 49°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.

4. Once the agar has set, each agar plate shall be overlaid with a further 10 ml VRBGA at a temperature of 49°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 - 2 mm 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[31]; 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 blood 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 coliNCTC 10418 no more than seven days old at time of use; and

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

10. A 10 gram 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 colishall 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.

SCHEDULE 4

Articles 14 and 15

REQUIREMENTS FOR KNACKERS' YARDS

General requirements

1. The approved premises shall 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 shall be laid so that liquids drain away. The premises shall be drained by a waste-water disposal system.

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

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

5. - (1) In premises producing feedingstuffs 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 the clean area in such a way as to preclude 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 feedingstuffs

6. - (1) In premises not producing feedingstuffs 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 feedingstuffs 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 feedingstuffs, 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.

Products of knackers' yards

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

(a) disposed of in accordance with article 5; or

(b) treated in accordance with paragraph 11 below and marketed within Great Britain as feedingstuffs for animals whose flesh is not intended for human consumption.

Feedingstuffs

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

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

(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 kilograms 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 millimetres 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) Feedingstuffs 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".

SCHEDULE 5

Articles 3, 22 and 23

REQUIREMENTS FOR PREMISES PROCESSING CATERING WASTE

General requirements

1. The approved premises shall be adequately separated from other buildings and from the public highway.

2. Animals and unauthorised persons shall not be permitted to enter the premises. Animals shall not be permitted to have access to unprocessed catering waste or any liquid from it. Preventive measures against birds, rodents, insects and other vermin shall be taken systematically.

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

Clean and unclean areas

4. 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 unprocessed catering waste. There shall be adequate hand washing facilities in the reception area.

5. Unprocessed catering waste shall be unloaded in the reception area and either -

(a) processed immediately; or

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

6. Processed catering waste shall be handled and stored in the clean area in such a way as to preclude recontamination.

Processed catering waste shall not be allowed to come into contact with any unprocessed catering waste.

7. 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.

Processing standards

8. Catering waste shall be processed for at least 60 minutes at a temperature of not less than 100°C or by an alternative method specified in the approval.

Cleansing and disinfection facilities

9. There shall be adequate facilities (including a water supply) provided to enable the premises, 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 catering waste 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 catering waste shall be cleansed and disinfected after each use. The

premises shall be cleansed at the end of each day on which processing has taken place.

Equipment

10. The premises shall have a suitable cooker with measuring equipment, calibrated at regular intervals, to check that the

catering waste is processed to the required temperature.

11. Installations and equipment shall be kept in a good state of repair.

SCHEDULE 6

Article 35

REVOCATIONS AND CONSEQUENTIAL AMENDMENTS

PART I

REVOCATIONS

The Diseases of Animals (Waste Food) Order 1973[32]

The Diseases of Animals (Waste Food) (Amendment) Order 1987[33]

The Diseases of Animals (Waste Food) (Amendment) Order 1996[34]

The Processed Animal Protein Order 1989[35]

The Animal By-Products Order 1992[36]

The Animal By-Products (Amendment) Order 1996[37]

The Animal By-Products (Amendment) Order 1997[38]

PART II

AMENDMENTS

The Bovine Spongiform Encephalopathy (No. 2) Order 1996[39]

1. In article 4(1) of the Bovine Spongiform Encephalopathy (No. 2) Order 1996 (Interpretation) for the definition of "rendering" there shall be substituted -

" "rendering" means treating material at a rendering, fishmeal or other plant in accordance with Schedule 2 to the Animal By-Products Order 1999;".

EXPLANATORY NOTE

(This note is not part of the Order)

This Order revokes and replaces the Diseases of Animals (Waste Food) Order 1973 as amended, the Processed Animal Protein Order 1989 and the Animal By-Products Order 1992 as amended. 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 feedstuffs of animal or fish origin and amending directive 90/425/EEC (OJ 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 (OJ 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) (OJ 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 (OJ 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) (OJ 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 (OJ No. L202, 26.8.95, p. 8).

In addition, it implements Article 15 of Council Directive 80/217/EEC introducing Community measures for the control of classical swine fever (OJ No. L47, 21.2.80, p. 11) which requires member States to control the swill feeding of pigs.

Animal by-products

Animal by-products are defined in Part I of the Order as carcases or 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 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 by-products must be rendered; and requires the microbiological testing of rendered material intended for use in animal feedingstuffs other than swill and 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 pet food, 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 a knacker's yard or use 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 by-products for use as feedingstuffs for animals whose flesh is not intended for human consumption. It also requires hunt kennels and similar premises to be registered;

(g) export from Great Britain.

Part II also controls the approval of laboratories, the transport of animal by-products and the records which must be kept (articles 16 to 18).

Catering waste

Part III of the Order requires catering waste which contains, or has been in contact with, meat or meat products to be processed on approved premises to appropriate standards if it is to be fed to pigs and poultry as swill. It may not be fed to ruminant animals.

The Order sets the construction and operational standards for such premises.

Part IV of the Order regulates the feeding of swill (defined as processed catering waste and rendered non-mammalian animal by-products) to pigs and poultry and requires the approval of premises from which swill is consigned or on which it is fed to pigs or poultry.

Part V of the Order makes provision for the service of notices requiring animal by-products and catering waste to be disposed of and for the cleansing and disinfection of vehicles, and also powers of inspectors. There are transitional provisions for approvals and licences granted under the revoked legislation to remain valid.

The Order is enforced by the appropriate Minister in certain specified premises producing meat for human consumption, and in all other cases by the local authority.

Breach of the Order is an offence under section 72 of the Animal Health Act 1981 punishable on conviction by a fine at level 5 on the standard scale.

A regulatory impact assessment has been prepared and placed in the library of each House of Parliament. Copies can be obtained from the Animal Health (Disease Control) Division of the Ministry of Agriculture, Fisheries and Food, Government Buildings, Hook Rise South, Tolworth, Surbiton, Surrey KT6 7NF.

Notes:

[1] 1981 c.22. See section 86(1)(c) for a definition of "the Ministers".back

[2] S.I. 1997/2965.back

[3] S.I. 1997/2964.back

[4] OJ No. L 378, 31.12.82, as amended by Council Regulation (EEC) No. 3768/85 (OJ No. L 362, 31.12.85, p. 8),

Commission Decision 89/162/EEC (OJ No. L 61, 4.3.89, p. 48) and Commission Decision 92/450/EEC (OJ No. L 248,
28.8.92, p. 77).back

[5] Published by the British Standards Institute, British Standards House, 389 Chiswick High Road, London W4 4AL.back

[6] Published by the British Standards Institute; see above.back

[7] Published by the British Standards Institute; see above.back

[8] Published by the Nordic Committee on Food Analysis, National Veterinary Institute, Department of Food and Hygiene, PO
Box 8156, N-0033, Oslo, Norway.back

[9] Published by the British Standards Institute; see above.back

[10] S.I. 1995/539 as amended by S.I. 1995/731, S.I. 1995/1763, S.I. 1995/2200, S.I. 1995/2418, S.I. 1995/3124, S.I.
1995/3189, S.I. 1996/1148, S.I. 1996/2235, S.I. 1997/1729 and S.I. 1997/2074.back

[11] S.I. 1995/540 as amended by S.I. 1995/1763, S.I. 1995/2200, S.I. 1995/3205 and S.I. 1997/1729.back

[12] S.I. 1995/2148 as amended by S.I. 1995/3205.back

[13] S.I. 1994/3082 as amended by S.I. 1995/1763, S.I. 1995/2200, S.I. 1995/3205 and S.I. 1996/1499.back

[14] S.I. 1995/3205 as amended by S.I. 1996/3124.back

[15] S.I. 1992/3303 as amended by S.I. 1996/827 and S.I. 1997/2894.back

[16] S.I. 1973/1936 as amended by S.I. 1987/232 and S.I. 1996/826.back

[17] Shahidi-Ferguson agar - See Shahidi, S. A. and Ferguson, A. R. (1971) Applied Microbiology 21:500 - 506. American
Society for Microbiology, 1913 1 St N.W., Washington DC 20006, USA.back

[18] 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
0R6, Canada.back

[19] Lactose gelatin 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.back

[20] Charcoal gelatin discs - See Mackie and McCartnay, (1996) Practical Medical Microbiology 14, 509. Churchill Livingstone,

Robert Stevenson House, 1 - 3 Baxter's Place, Leith Walk, Edinburgh EH1 3AF.back

[21] The National Collection of Type Cultures, Central Public Health Laboratory, 61 Colindale Ave, London NW9 5HT.back

[22] 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).back

[23] Rappaports 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, 23 rue Linois, 75724 Paris, Cedex 15,
France.back

[24] 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).back

[25] 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.back

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

[27] Buffered Peptone Water/Lysine/Glucose - See Ogden, I. D. (1988) International Journal of Food Microbiology 7:287 - 297,
Elsevier Science BV, P.O. Box 211, 1000 AE, Amsterdam, Netherlands (ISSN 0168 - 1695).back

[28] Selenite Cystine Trimethylamine-N-oxide Dulcitol - See Easter, M. C. and Gibson, D. M., (1985) Journal of Hygiene
94:245 - 262, Cambridge University Press, Cambridge.back

[29] LysineDecarboxylase Glucose - See Ogden, I. D., (1988) International Journal of Food Microbiology 7: 287 - 297, Elsevier
Science BV, P.O. Box 211, 1000 AE, Amsterdam, Netherlands (ISSN 0168 - 1695).back

[30] 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.back

[31] An arithmetic mean of 30 is equivalent to 3×102 colony forming units per gram of original sample.back

[32] S.I. 1973/1936.back

[33] S.I. 1987/232.back

[34] S.I. 1996/826.back

[35] S.I. 1989/661.back

[36] S.I. 1992/3303.back

[37] S.I. 1996/827.back

[38] S.I. 1997/2894.back

[39] S.I. 1996/3183 to which there are amendments not relevant to this Order.back

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