

## 1989 No. 347

## ANIMALS

**Diseases of Animals (Animal Protein) (No. 2)  
Order (Northern Ireland) 1989**

*Made* . . . . . 17th August 1989

*Coming into operation* . . . . . 25th August 1989

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

*Citation and commencement*

1. This Order may be cited as the Diseases of Animals (Animal Protein) (No. 2) Order (Northern Ireland) 1989 and shall come into operation on 25th August 1989.

*Extension of definition of animals*

2. For the purposes of the 1981 Order in its application to this Order 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, and
- (ii) any kind of four-footed beast which is not a mammal.

*Interpretation*

3.—(1) In this Order—

“animal protein” means any material which may be used for feeding to animals or poultry and which contains:

- (a) the whole or any part of—
  - (i) any dead animal or bird; or
  - (ii) any fish, reptile, crustacean or other cold-blooded creature, or any product derived from the whole or part of them;
- (b) blood, hatchery waste, eggs, egg shells, hair, horns, hides, hoofs, feathers and manure;
- (c) human effluent; or
- (d) any protein obtained from any of the materials in (a), (b) or (c) by heat, sedimentation, precipitation, ensiling or any other system of treatment or procedure;

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(a) S.I. 1981/1115 (N.I. 22) as amended by S.I. 1984/702 (N.I. 2) Art. 17

but does not include milk or milk products, shells other than egg shells, fat or dicalcium bone phosphate or anything intended to be used for human consumption;

“authorised laboratory” means a laboratory authorised by the Department in writing;

“approved disinfectant” means a disinfectant approved by the Department under the Diseases of Animals (Approval of Disinfectants) Order (Northern Ireland) 1972(a);

“day” means the period of twenty-four hours which begins with one midnight and ends with the next;

“fat” means any vegetable or mineral oil or any other oleaginous product obtained by a rendering or a refining process;

“laboratory” means any laboratory which has the necessary facilities and personnel for carrying out tests on samples mentioned in paragraph (1) or (2) of Part I of the Schedule in accordance with either of the methods set out in Part II of the Schedule;

“livestock” means cattle, sheep, goats, all other ruminating animals and swine;

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

“poultry” means domestic fowls, turkeys, geese, ducks, guinea-fowls, pigeons, pheasants, partridges or quails;

“processed”, in relation to animal protein, means animal protein which has been subjected to heat, sedimentation, precipitation, ensiling, milling, grinding, or any other system of treatment or procedure so as to render it suitable for direct use, or, after further processing, as a feeding stuff, or as an ingredient of a feeding stuff for animals or poultry;

“protein processor” means a person who engages in the business of processing animal protein;

“receptacle” means a bin, box, skip or other container used for the removal of animal protein;

(2) After 31st December 1989 any reference in this Order to a laboratory shall be a reference to an authorised laboratory.

### *Exemption*

4. The provisions of this Order shall not apply to waste food as defined in and required to be processed under the Waste Food (Feeding to Livestock and Poultry) Order (Northern Ireland) 1974(b).

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(a) S.R. & O. (N.I.) 1972 No. 16 as amended by S.R. 1975 No. 69

(b) S.R. 1974 No. 12 as amended by S.R. 1976 No. 400

*Removal of animal protein*

5.—(1) Subject to the provisions of this Order the removal of animal protein is hereby prohibited.

(2) The prohibition in paragraph (1) shall not apply to the removal of animal protein which takes place under the authority of and in accordance with the conditions of a licence granted by the Department.

(3) The provisions of any licence granted by the Department under paragraph (2) shall—

(a) be published in the Belfast Gazette; and

(b) apply to all persons who remove animal protein.

(4) A licence granted by the Department under paragraph (2) shall not authorise the removal of processed animal protein where such removal is prohibited under Article 9.

(5) A person shall not use or cause or permit to be used any vehicle for the removal of animal protein unless the animal protein is:—

(a) carried in a leak-proof receptacle which is closed by a tightly fitting lid or other cover which prevents spillage and both the receptacle 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 animal protein out of the vehicle.

(6) A person shall not:—

(a) place or carry any livestock or poultry, feeding stuff intended for feeding to livestock or poultry, or anything intended to be used for or about livestock or poultry, in any vehicle or receptacle which contains unprocessed animal protein; or

(b) place or carry any unprocessed animal protein in any vehicle or receptacle which contains processed animal protein.

(7) The person in charge of any vehicle or receptacle who uses or causes that vehicle or receptacle to be used for the removal of processed animal protein shall, before each occasion on which it is so used, thoroughly cleanse and disinfect it with an approved disinfectant.

(8) The person in charge of any vehicle or receptacle who uses or causes that vehicle or receptacle to be used for the removal of any animal protein shall, after each occasion on which it was so used, and in any event before any further use is made of it for the removal of any animal, poultry, animal protein or other matter, thoroughly cleanse and disinfect it with an approved disinfectant.

*Collection or holding of animal protein*

6. The owner or person in charge of any premises used for the collection or holding of animal protein shall ensure that such animal protein 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 animal protein.

*Information to be furnished to the Department*

7.—(1) Any person who, on 25th August 1989 is engaged in the business of removing, holding or processing animal protein or who proposes to become engaged in such a business on or before 1st September 1989 shall, not later than 8th September 1989, furnish the Department in writing with the following information:—

- (a) his name and the address at or from which the business is carried on;
- (b) whether the business in which he is engaged is the removal, holding or processing of animal protein, or a combination of such activities;
- (c) the date on which he began to engage in that business;
- (d) whether the animal protein which he removes, holds or processes is intended for use as, or as an ingredient of feeding stuff for animals or poultry; and
- (e) if he engages in the business of processing animal protein—
  - (i) the description and source of the raw material processed;
  - (ii) the description of the processed animal protein produced; and
  - (iii) the address of each premises at which animal protein is processed in the course of the business.

(2) Any person who proposes to become engaged in the business of removing, holding or processing animal protein after 1st September 1989 shall, not less than 10 days before he becomes so engaged, furnish the Department in writing with the following information:—

- (a) his name and the address at or from which the business is to be carried on;
- (b) whether the business in which he proposes to engage is the removal, holding or processing of animal protein, or a combination of such activities;
- (c) the date on which he proposes to begin engaging in that business;
- (d) whether the animal protein which he proposes to remove, hold or process is intended for use as, or as an ingredient of feeding stuff for animals or poultry; and
- (e) if he intends to engage in the business of processing animal protein—
  - (i) the description and source of the raw materials to be processed;
  - (ii) the description of the processed animal protein to be produced; and
  - (iii) the address of each premises at which animal protein will be processed in the course of the business.

(3) Any person who engages in the business of removing, holding or processing animal protein shall notify the Department in writing of any change in the particulars required to be notified under paragraph (1) or (2), such notification to be made within 14 days of the change.

(4) Any person who engages in the business of removing, holding or processing animal protein after 23rd March 1989 shall notify the Department in writing within one month when he ceases to engage in such a business.

(5) The definition of “animal protein” in Article 3(1) shall apply to the interpretation of this Article as if the words “which may be used for feeding to animals or poultry and” were omitted.

*Taking of samples for testing*

8.—(1) A protein processor shall ensure that—

- (a) on each day on which any supplies of processed animal protein are consigned from premises used by him for the purpose of processing animal protein, a sample is taken in the manner described in paragraph (2) of Part I of the Schedule from the processed animal protein which forms those supplies, and
- (b) the sample is submitted forthwith to a laboratory for testing in accordance with either of the methods set out in Part II of the Schedule.

(2) Where processed animal protein produced on any premises is either used for direct feeding to or for incorporation in a feeding stuff for animals or poultry kept on those premises, the protein processor shall ensure that—

- (a) on each day immediately before any supplies of any such processed animal protein are used for such direct feeding or for incorporation in such feeding stuff, a sample is taken in the manner mentioned in paragraph (1)(a) from those supplies, and
- (b) the sample is submitted for testing in accordance with the provisions of paragraph (1)(b).

(3) After a sample has been tested in accordance with paragraph (1)(b) or (2)(b) by a laboratory it shall be destroyed by that laboratory.

*Duty to prevent movement of contaminated processed animal protein and use of such animal protein for direct feeding or in a feeding stuff*

9. A protein processor who knows that a test carried out on a sample taken from processed animal protein produced on his premises has resulted in the isolation of salmonella from that sample, shall ensure that during the period of one month from the date on which he becomes aware of such result—

- (a) no processed animal protein produced on those premises is removed from any premises occupied by him or under his control; and
- (b) no such processed animal protein which remains under his control is either used for direct feeding to or for incorporation in a feeding stuff for animals or poultry,

unless—

- (i) such processed animal protein is not taken from the same storage facility as that used to store the processed animal protein from which the sample was taken, or
- (ii) such processed animal protein is treated in such manner as to ensure freedom from salmonella and a test carried out by a laboratory in accordance with either of the methods set out in Part II of the Schedule on a sample taken from the processed animal protein so treated does not result in the isolation of salmonella from that sample, or

- (iii) under the authority of a licence granted by the Department under this Article and in accordance with the conditions, if any, of that licence.

*Taking of samples by inspectors*

**10.** Where, in accordance with the provisions of Article 46 of the 1981 Order, an inspector has entered any premises where animal protein is processed, he may—

- (a) take a sample in the manner described in paragraph (1) or (2) of Part I of the Schedule from any such premises of any material or substance which he has reasonable grounds for supposing to be processed animal protein; and
- (b) at the request of the protein processor or person in charge of the premises, take and give to him a like sample to that taken under paragraph (a).

*Testing of samples taken by inspectors*

**11.**—(1) On taking a sample as referred to in Article 10(a) an inspector shall submit it to a laboratory for testing in accordance with either of the methods set out in Part II of the Schedule.

(2) The result of the test carried out under paragraph (1) shall be notified in writing by an inspector to the protein processor or person in charge of the premises with all practicable speed.

(3) After a sample has been tested in accordance with paragraph (1) by a laboratory it shall be destroyed by that laboratory.

*Tampering with samples*

**12.**—(1) A person shall not treat or otherwise tamper with a sample of processed animal protein taken under this Order.

(2) For the purposes of this Article 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 the test required to be carried out under this Order.

*Keeping of records*

**13.** A protein processor shall—

- (a) make a record of the result of any test carried out in accordance with Article 8(1)(b) or (2)(b) as soon as practicable after he has received a report of such result;
- (b) retain such record for a period of 12 months from the date of the test; and
- (c) produce such record to an inspector on demand being made by him at any reasonable time during that period and allow him to take a copy of it or an extract from it.

*Information to be given*

**14.** Where as a result of a test carried out in accordance with the provisions of this Order salmonella is isolated from a sample of processed animal protein, a protein processor shall, with a view to enabling the

Department to trace the processed animal protein from which the sample was taken, give to the Department any information that he has concerning any consignments of or from that processed animal protein, such information to be given on demand being made by an inspector at any reasonable time.

*Revocation*

**15.** The Diseases of Animals (Animal Protein) Order (Northern Ireland) 1989(a) is hereby revoked.

Sealed with the Official Seal of the Department of Agriculture on 17th August 1989.

(L.S.)

*S. R. Armstrong*

Assistant Secretary

SCHEDULE

Articles 3(1), 8(1), 9,  
10 and 11(1)

PART I

*Manner of sampling processed animal protein*

A sample of processed animal protein to be submitted to a laboratory for testing in accordance with the methods set out in Part II of the Schedule shall be obtained by the methods described in paragraph (1) or (2) of this Part of the Schedule.

<i>(1) Sample portion shall be the total load or throughput — either bulk or bags</i>	<i>Number of incremental samples of approximately equal proportions which shall be extracted evenly throughout the sampled portion</i>	<i>Number of aggregate samples which shall be obtained by pooling a relevant number of incremental samples</i>	
A. <i>Loose animal protein</i>			
1 tonne	7	1	} Aggregate samples shall be placed into separate sterile receptacles and each shall be thoroughly mixed by stirring or shaking
1.1-2.5 tonnes	7	2	
2.6-10 tonnes	$\sqrt{20 \times \text{size of sampled portion}}$	2	
10.1-40 tonnes	$\sqrt{20 \times \text{size of sampled portion}}$	3	
Over 40 tonnes	$\sqrt{20 \times \text{size of sampled portion}}$ (maximum — 40 incremental samples)	4	
B. <i>Bagged animal protein</i>			
1-16 bags	4	1	
17-200 bags	$\sqrt{\text{No. of bags in sampled portion}}$	2	
201-800 bags	$\sqrt{\text{No. of bags in sampled portion}}$	3	
Over 800 bags	$\sqrt{\text{No. of bags in sampled portion}}$	4	
	(maximum — 40 incremental samples)		

The final sample shall be obtained by the extraction of an approximately equal amount of the sampled portion from each aggregate sample so as to provide a single final sample of approximately 500 grams. This final sample shall be transferred into a



suitable sterile wide-mouthed screw-top container sealed and marked to indicate the name and address of the premises and the date of sampling.

<p>(2) <i>Sample portion shall be the total quantity of supplies consigned from the premises or used for direct feeding on the premises or for incorporation in a feeding stuff on the day in question</i></p>	<p><i>Number of incremental samples of approximately equal proportions which shall be extracted evenly throughout the sampled portion</i></p>	<p><i>Number of aggregate samples which shall be obtained by pooling a relevant number of incremental samples</i></p>
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*Loose or bagged animal protein.*

<p>1-5 consignments 6-10 consignments 11-15 consignments Over 15 consignments</p>	<p>1 per consignment 1 per consignment 1 per consignment 1 per consignment</p>	<p>1 2 3 4</p>	<p>} Aggregate samples shall be placed into separate sterile receptacles and each shall be thoroughly mixed by stirring or shaking</p>
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(For the purpose of this paragraph "consignment" means the total quantity of processed animal protein loaded onto a single vehicle or trailer for movement to other premises or for movement to a place for incorporation in a feeding stuff).

The final sample shall be obtained by the extraction of an approximately equal amount of the sampled portion from each aggregate sample so as to provide a single final sample of approximately 500 grams. This final sample shall be transferred into a suitable sterile wide-mouthed screw-top container sealed and marked to indicate the name and address of the premises and the date of sampling.

## PART II

### (a) *Bacteriological method for the isolation of salmonella from animal protein*

Samples of processed animal protein submitted for testing shall be examined on the first working day which allows the following method to be completed. Samples not examined on the day of receipt shall be stored in a refrigerator until required. Examination shall be carried out in duplicate using two 25 gram portions of each sample submitted for testing.

#### **Day 1**

The sample shall be removed from refrigeration and left at room temperature for at least four hours. Thereafter, 25 grams shall be added aseptically to a jar containing 225 ml BPW(a) and incubated overnight at 37°C for 18 hours.

#### **Day 2**

0.1 ml from the jar of incubated BPW shall be inoculated into 10 ml RV(b) broth and incubated at 42.5 ± 0.5°C for 24 hours.

**Day 3**

- (i) The RV broth shall be plated out on to two plates of BGA(c) using a 2.5 mm diameter loop. The BGA 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.
- (ii) The residual RV broth shall be reincubated at  $42.5 \pm 0.5^\circ\text{C}$  for a further 24 hours.

**Day 4**

- (i) The plates of BGA shall be examined and a minimum of 3 colonies from the plates showing suspicion of salmonella growth shall be subcultured onto a blood agar plate and a MacConkey agar plate and into biochemical composite media or equivalent. These media shall be incubated at 37°C overnight.
- (ii) The reincubated RV broth shall be plated out as described in (i) of Day 3.

**Day 5**

- (i) 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 to the Veterinary Research Laboratory, Stormont, Belfast or to the Food and Agricultural Microbiology Division, Newforge Lane, Belfast for further typing.
- (ii) The plates referred to in (ii) of Day 4 shall be examined and further action taken as in (i) of Day 4 and (i) of Day 5.
  - (a) Buffered Peptone Water — Edel and Kampelmacher (1973) (Commercially available as Oxoid CM 509, Lab M 46 or equivalent).
  - (b) Rappaports Vassiliadis (RV) Broth — Vassiliadis et al (1976) (Commercially available as Oxoid CM 669 or equivalent).
  - (c) Brilliant Green Agar (Modified) — Edel and Kampelmacher (1969) (Commercially available as Oxoid CM 329, Lab M 34 or equivalent).

The agar shall be reconstituted according to the manufacturer's instructions and poured on to 9 cm diameter culture plates.

**References:**

- Edel W. & Kampelmacher E. H. (1969) Bulletin of the World Health Organisation 41 297-306.
- Edel W. & Kampelmacher E. H. (1973) Bulletin of the World Health Organisation 48 167-174.
- Vassiliadis, P., Pateraki, E., Papaiconomou, N., Papadakis, J. A., and Trichopoulos, D.; (1976) Annales de Microbiologie (Institut Pasteur) 127B 195-200.

(b) *Electrical conductance method for the detection and isolation of salmonella from animal protein*

Samples of processed animal protein submitted for testing shall be examined on the first working day which allows the following method to be completed. Samples not examined on the day of receipt shall be stored in a refrigerator until required. Examinations shall be carried out in duplicate using two 25 gram portions of each sample submitted for testing.

**Day 1**

The sample shall be received or removed from refrigeration and left at room temperature for at least 4 hours. Thereafter 25 grams shall be added aseptically to a jar containing 225 ml BPW/L/G(a) and incubated at 37°C for 18 hours.

**Day 2**

Volumes of the incubated BPW/L/G inoculated with the samples under test shall be transferred to SC/T/D(b) and LD/G(c) media in electrical conductance cells or wells. For cells or wells containing >5 ml medium 0.2 ml shall be transferred and for cells or wells containing <5ml medium 0.1 ml shall be transferred.

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 controlled at 37°C.

**Day 3**

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 identified as being positive for salmonella, the result shall be confirmed by subculturing the contents of the well or cell on to two plates BGA(d) using a 2.5 mm diameter loop. The BGA 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**

The plates of BGA shall be examined and a minimum of 3 colonies from the plates showing suspicion of salmonella growth shall be subcultured on to a blood agar plate and a MacConkey agar plate and into biochemical composite media or equivalent. These media shall be incubated at 37°C overnight.

**Day 5**

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 to the Veterinary Research Laboratory, Stormont, Belfast or to the Food and Agricultural Microbiology Division, Newforge Lane, Belfast for further typing.

(a) Buffered Peptone Water/Lysine/Glucose (BPW/L/G) — Odgen (1988)

(b) Selenite Cystine TMAO Dulcitol (SC/T/D) — Easter and Gibson (1985)

(c) Lysine Decarboxylase Glucose (LD/G) — Odgen (1988)

(d) Brilliant Green Agar (Modified) (BGA) — Edel and Kampelmacher (1969)

**References:**

Odgen I. D. (1988) International Journal of Food Microbiology 7 287-297.

Easter M. C. and Gibson D. M. (1985) Journal of Hygiene 94 245-262.

Edel W. & Kampelmacher E. H. (1969) Bulletin of the World Health Organisation 41 297-306.

## EXPLANATORY NOTE

*(This note is not part of the Order.)*

This Order re-enacts with amendments the Diseases of Animals (Animal Protein) Order (Northern Ireland) 1989. It continues to prohibit the removal of animal protein unless under the authority of a licence (Article 5), and to specify conditions for the collection or holding of animal protein (Article 6). Those who engage in the business of removing, holding or processing animal protein or who propose to do so are required to furnish in writing to the Department of Agriculture certain information concerning those activities (Article 7), and an inspector may take at the premises of production samples of any material or substance which he has reasonable grounds for supposing to be processed animal protein for testing at a laboratory (Article 10).

The main changes of substance are—

- (a) the imposition of a duty on the protein processor to ensure the taking of samples from processed animal protein and its submission to a laboratory for testing for salmonella (Article 8);
- (b) the imposition of a duty on the protein processor to ensure (where he knows that a test on a sample has proved positive) that for a period of one month no processed animal protein produced on his premises is (without further treatment and testing) removed from premises occupied by him or under his control and is not used for direct feeding to or for incorporation in a feeding stuff for animals or poultry, unless the processed animal protein is taken from a separate storage facility or the removal or use is authorised by a licence granted by the Department (Article 9);
- (c) a prohibition on any tampering with samples (Article 12); and
- (d) the imposition of requirements on protein processors to keep records of the results of tests on samples (Article 13) and to give information to enable the tracing of contaminated feeding stuffs (Article 14).

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 carcasses or other inanimate things a fine at level 5 on the standard scale (currently £2,000) together with a further fine at level 3 on the standard scale (currently £400) in respect of every 508 kilogrammes in weight of the carcasses or other things after the first 508 kilogrammes.