2002 No. 234

FOOD

The Meat (Hazard Analysis and Critical Control Point) (Scotland) Regulations 2002

Made	*16th May 2002*
Laid before the Scottish Parliament	*16th May 2002*
Coming into force in accordance with regulation 3	

The Scottish Ministers in exercise of the powers conferred by sections 6(4), 16(1)(b), (d) and (f), 17(1), 26(2)(a) and 48(1) of the Food Safety Act 1990(**a**), having had regard in accordance with section 48(4A)(**b**) of that Act to relevant advice given by the Food Standards Agency and after consultation in accordance with section 48(4) and (4B)(**c**) of that Act, by section 2(2) of the European Communities Act 1972(**d**) insofar as these Regulations amend the Products of Animal Origin (Import and Export) Regulations 1996(**e**) and of all other powers enabling them in that behalf, hereby make the following Regulations:

Citation and extent

1.—(1) These Regulations may be cited as the Meat (Hazard Analysis and Critical Control Point) (Scotland) Regulations 2002.

(2) These Regulations extend to Scotland only.

Interpretation

2.—(1) In these Regulations–

"the Fresh Meat Regulations" means the Fresh Meat (Hygiene and Inspection) Regulations 1995(**f**);

"fresh", as applied to red meat or to poultry meat, means all meat, including chilled or frozen meat, which has not undergone any preserving process and includes meat vacuum wrapped or wrapped in a controlled atmosphere;

"licensed poultry meat cutting plant" means cutting premises licensed under regulation 4 of the Poultry Meat Regulations;

(a) 1990 c.16; section 6(4) was amended by paragraph 6 of Schedule 9 to the Deregulation and Contracting Out Act 1994 (c.40) and paragraph 10(3) of Schedule 5 to the Food Standards Act 1999 (c.46) ("the 1999 Act"); sections 16(1) and 48(1) were amended by paragraph 8 of Schedule 5 to the 1999 Act; section 17(1) was amended by paragraphs 8 and 12 of Schedule 5 to the 1999 Act; amendments made by Schedule 5 to the 1999 Act shall be taken as pre-commencement enactments for the purposes of the Scotland Act 1998 (c.46) ("the 1998 Act") by virtue of section 40(2) of the 1999 Act. The functions of the Secretary of State were transferred to the Scottish Ministers by virtue of section 53 of the 1998 Act.

(b) Section 48(4A) was inserted by paragraph 21 of Schedule 5 to the Food Standards Act 1999.

(c) Section 48(4B) was inserted by paragraph 21 of Schedule 5 to the Food Standards Act 1999.

(d) 1972 (c.68). Section 2(2) was amended by paragraph 15(3) of Schedule 8 to the Scotland Act 1998 (c.46). The functions conferred on a Minister of the Crown under section 2(2) of the European Communities Act 1972, insofar as within devolved competence, were transferred to the Scottish Ministers by virtue of section 53 of the Scotland Act 1998.

(e) S.I. 1996/3124, amended by S.I. 1997/3023, 1998/994 and 1999/683 and S.S.I. 2000/62, 171 and 288, 2001/169 and 257 and 2002/87.

(f) S.I. 1995/539, amended by S.I. 1995/731, 1763 and 2148, 2200, 3124 and 3189, 1996/1148 and 2235, 1997/1729 and 2074, S.S.I. 2000/62, 171 and 288, 2001/160, 358, 394 and 429 and 2002/35.

"licensed poultry meat slaughterhouse" means a slaughterhouse licensed under regulation 4 of the Poultry Meat Regulations;

"licensed red meat cutting plant" means cutting premises licensed under regulation 4 of the Fresh Meat Regulations;

"licensed red meat slaughterhouse" means a slaughterhouse licensed under regulation 4 of the Fresh Meat Regulations;

"livestock unit" has the same meaning as in regulation 2(1) of the Fresh Meat Regulations;

"poultry" and "poultry meat" have the same meaning as in regulation 2(1) of the Poultry Meat Regulations;

"the Poultry Meat Regulations" means the Poultry Meat, Farmed Game Bird Meat and Rabbit Meat (Hygiene and Inspection) Regulations 1995(**a**);

"red meat" has the same meaning as meat in regulation 2(1) of the Fresh Meat Regulations;

"the specified amount" means–

(a) in the case of any licensed red meat slaughterhouse, 500 livestock units;

(b) in the case of any licensed red meat cutting plant, 150 tonnes of fresh red meat;

(c) in the case of any licensed poultry meat slaughterhouse, 200,000 poultry; and

(d) in the case of any licensed poultry meat cutting plant, 150 tonnes of fresh poultry meat.

(2) Nothing in these Regulations shall apply in relation to any licensed red meat slaughterhouse which is used to process bovine animals under the purchase scheme introduced by Commission Regulation (EC) No. 716/96 adopting exceptional support measures for the beef market in the United Kingdom(**b**).

Commencement

3.—(1) Subject to paragraph (2) below, these Regulations come into force on 7th June 2002.

(2) Notwithstanding paragraph (1) above, these Regulations come into force on 7th June 2003 in so far as they apply in relation to any small meat establishment.

(3) For the purposes of paragraph (2) above, a "small meat establishment" means–

(a) a licensed red meat slaughterhouse, a licensed poultry meat slaughterhouse, a licensed red meat cutting plant or a licensed poultry meat cutting plant which–

(i) was operational in the calendar year 2000 and had an average weekly throughput in that year lower than the specified amount;

(ii) became operational for the first time on or after 1st January 2001 but before 1st May 2002 and had an average weekly throughput during the time it was operational in that period lower than the specified amount; or

(iii) became operational for the first time on or after 1st May 2002 and which the Agency considers is likely to have an average weekly throughput lower than the specified amount;

(b) a cold store licensed under regulation 4 of the Fresh Meat Regulations or regulation 4 of the Poultry Meat Regulations, in each case with a storage capacity of less than 25,000 cubic metres;

(c) a re-packaging centre licensed under regulation 4 of the Fresh Meat Regulations; or

(d) a re-wrapping centre licensed under regulation 4 of the Poultry Meat Regulations.

Amendment of the Fresh Meat (Hygiene and Inspection) Regulations 1995

4.—(1) The Fresh Meat Regulations are amended in accordance with the following paragraphs of this regulation.

(2) The following sub-paragraph is inserted between sub-paragraphs (aA) and (b) of regulation 8(1) (supervision of premises):–

"(aB) the inspection of any documents and records required to be retained by the occupier pursuant to regulation 20(1) (eA) or (eB);".

(3) In regulation 8(1)(e), for "and 17" there is substituted ", 17, 17A, 17B and 17C".

(a) S.I. 1995/540 amended by S.I. 1995/1763, 2200, 2148 and 3025 and 1997/1729 and S.S.I. 2000/62, 171 and 288 and 2002/87.

(b) O.J. No. L 99, 20.4.96, p.14.

(4) In regulation 20(1)(d) (duties of occupier)–

(a) for "carry out" there is substituted "conduct regular"; and

(b) the phrase "(including any microbiological checks the Agency may require)" is omitted.

(5) In regulation 20(1)(e), for "pursuant to" there is substituted "by virtue of".

(6) The following sub-paragraphs are inserted between sub-paragraphs (e) and (f) of regulation 20(1):–

"(eA) shall retain for a period of at least one year any documents and records established by the occupier in accordance with paragraph (4)(g) below;

(eB) shall retain for a period of at least 18 months any records which, in compliance with Schedule 17A, 17B or 17C, as appropriate, have been made following the carrying out by the occupier of microbiological checks in accordance with paragraph (5) or (6) below;".

(7) The following paragraphs are inserted after regulation 20(3):–

"(4) The occupier of any licensed slaughterhouse, licensed cutting premises, licensed cold store or licensed repackaging centre shall conduct the regular checks on the general hygiene of conditions of production in those premises which are required by paragraph (1)(d) above by implementing and maintaining a permanent procedure developed in accordance with the following principles:–

(a) identify any hazards that must be prevented, eliminated or reduced to acceptable levels;

(b) identify the critical control points at the step or steps at which control is essential to prevent or eliminate a hazard or reduce it to acceptable levels;

(c) establish critical limits at critical control points which separate acceptability from unacceptability for the prevention, elimination or reduction of identified hazards;

(d) establish and implement effective monitoring procedures at critical control points;

(e) establish corrective actions when monitoring indicates that a critical control point is not under control;

(f) establish procedures to verify whether the measures outlined in sub-paragraphs (a) to (e) above are working effectively, and ensure that such verification procedures shall be carried out regularly; and

(g) establish documents and records commensurate to the nature and size of the business to demonstrate the effective application of the measures outlined in sub-paragraphs (a) to (f) above and to facilitate official controls.

(5) The occupier of any licensed slaughterhouse shall, in conducting the regular checks on the general hygiene of conditions of production in those premises as required by paragraph (1)(d) above, carry out microbiological checks–

(a) in relation to carcases, in accordance with the procedures laid down in–

(i) Schedule 17A; or

(ii) Schedule 17B; and

(b) in relation to cleaning and disinfection of the premises, in accordance with the procedures laid down in Schedule 17C.

(6) The occupier of any licensed cutting premises shall, in conducting the regular checks on the general hygiene of conditions of production in those premises which are required by paragraph (1)(d) above, carry out microbiological checks in relation to cleaning and disinfection of the premises, in accordance with the procedures laid down in Schedule 17C.".

(8) After Schedule 17 (transport of fresh meat-requirements applicable to occupiers or persons responsible for the control and management of transport) there shall be inserted Schedules 17A, 17B and 17C, which are set out in the Schedule to these Regulations.

Amendment of the Poultry Meat, Farmed Game Bird Meat and Rabbit Meat (Hygiene and Inspection) Regulations 1995

5.—(1) The Poultry Meat Regulations are amended in accordance with the following paragraphs of this regulation.

(2) The following sub-paragraph is inserted between sub-paragraphs (aA) and (b) of regulation 8(1) (supervision of premises):–

"(aB) the inspection of any documents and records required to be retained by the occupier pursuant to regulation 18(1)(f);".

(3) In regulation 18(1)(d) (duties of occupier)–

(a) for "carry out" there is substituted "conduct regular"; and

(b) the word "and" at the end is omitted.

(4) After regulation 18(1)(e) there is inserted–

"; and

(f) retain for a period of at least two years any documents and records established by the occupier in accordance with paragraph (4)(g) below".

(5) The following paragraph is inserted after regulation 18(3):–

"(4) The occupier of any licensed slaughterhouse used for slaughtering poultry, licensed cutting premises used for cutting up fresh poultry meat, licensed cold store used for the storage of fresh poultry meat or licensed re-wrapping centre used for packing, wrapping or re-wrapping fresh poultry meat shall conduct the regular checks on the general hygiene of conditions of production in those premises which are required by paragraph (1)(d) above by implementing and maintaining a permanent procedure developed in accordance with the following principles:–

(a) identify any hazards that must be prevented, eliminated or reduced to acceptable levels;

(b) identify the critical control points at the step or steps at which control is essential to prevent or eliminate a hazard or reduce it to acceptable levels;

(c) establish critical limits at critical control points which separate acceptability from unacceptability for the prevention, elimination or reduction of identified hazards;

(d) establish and implement effective monitoring procedures at critical control points;

(e) establish corrective actions when monitoring indicates that a critical control point is not under control;

(f) establish procedures to verify whether the measures outlined in sub-paragraphs (a) to (e) above are working effectively, and ensure that such verification procedures shall be carried out regularly; and

(g) establish documents and records commensurate to the nature and size of the business to demonstrate the effective application of the measures outlined in sub-paragraphs (a) to (f) above and to facilitate official controls.".

Amendments to the Products of Animal Origin (Import and Export) Regulations 1996

6. In Schedule 2 (regulations relevant to intra–community trade) to the Products of Animal Origin (Import and Export) Regulations 1996(**a**)–

(a) in paragraph 6 for "the Meat (Disease Control) (Scotland) Regulations 2000.", there is substituted the following:–

"S.S.I. 2000/288
S.S.I. 2001/160
S.S.I. 2001/358
S.S.I. 2001/394
S.S.I. 2001/429
S.S.I. 2002/35
The Meat (Hazard Analysis and Critical Control Point) (Scotland) Regulations 2002.".

(a) S.I. 1996/3124, amended by 1997/3023, 1998/994 and 1999/683 and S.S.I. 2000/62, 171 and 288, 2001/169 and 257 and 2002/87.

(b) in paragraph 7, for "the Poultry Meat, Farmed Game Bird Meat and Rabbit Meat (Hygiene and Inspection) Amendment (Scotland) Regulations 2002.", there is substituted the following–

"S.S.I. 2002/87

The Meat (Hazard Analysis and Critical Control Point) (Scotland) Regulations 2002.".

MARY MULLIGAN
Authorised to sign by the Scottish Ministers

St Andrew's House,
Edinburgh
16th May 2002

Regulation 4(8)

SCHEDULE

"Regulations 8(1)(e), 20(1)(eB) and 20(5)(a)(i)

Schedule 17A

COMMUNITY PROCEDURES FOR CONDUCTING MICROBIOLOGICAL CHECKS ON CARCASES

Sampling procedure and number of samples to be taken

1. (a) Between 5 and 10 carcases should be sampled on a single day during each week. The day of sampling should be changed each week to ensure that every day of the working week is covered. The frequency of sampling the carcases in low throughput slaughterhouses and in slaughterhouses not working on a full-time basis should be determined by the OVS based on the judgement of the OVS on hygiene standards with respect to the slaughter at each plant.

(b) A sample from four sites from each carcase should be taken half way through the slaughter day, after dressing and before chilling commences.

(c) Carcase identification, date and time of sampling should be recorded for each sample and the name of the person performing the sampling.

(d) The frequency of sampling may be reduced to fortnightly testing if satisfactory results are obtained on six consecutive weeks, but weekly sampling must be resumed if unsatisfactory results are obtained.

Sampling sites

2. (a) The following sites will usually be appropriate for process control:

Cattle: *neck, brisket, flank, and rump*
Sheep, goat: *flank, thorax lateral, brisket, and breast*
Pig: *back, jowl (or cheek), hind limb medial (ham), and belly*
Horse: *flank, brisket, back, and rump.*

(b) However, alternatives sites may be used following consultation with the OVS where it has been demonstrated that, because of the slaughter technology at a particular plant, other sites are more likely to carry higher levels of contamination. In these cases sites shown to carry higher levels of contamination may be chosen.

Excision Sampling Method

3. The following protocol should be followed at the slaughterhouse:

(a) Four tissue samples representing a total of 20 cm^2 should be obtained from each carcase.

(b) Pieces of tissue may be obtained using a sterile cork borer (2.5 cm diameter) or by cutting a slice of 5 cm^2 and maximum thickness of 5 mm off the carcase with a sterile instrument.

(c) Samples from the four sampling sites of each tested carcase may be analysed separately or may be pooled in the same container before examination. Where unacceptable results are obtained from pooled samples and corrective actions do not lead to better hygiene, further samples should not be pooled until problems have been resolved.

(d) The samples must be placed aseptically into a sample container or plastic dilution bag at the slaughterhouse, for transfer to the laboratory.

Method for the examination of samples

4. The following protocol should be followed in the laboratory:

(a) Samples should be stored refrigerated until examination at 4°C. Samples should be examined within 24 hours after sampling.

(b) Samples should be homogenised in a plastic dilution bag for at least two minutes in 100 ml of dilution media (see IS0 6887-1) at about 250 cycles of a peristaltic Stomacher or homogenised by a rotary blender (homogeniser).

(c) Dilution before plating should be carried out in 10-fold steps in the dilution media.

(d) Analysis should be performed for total viable counts and Enterobacteriaceae. ISO-methods should provide the basis for examination of samples.

Records

5. (a) All test results must be recorded in terms of colony forming units (cfu)/cm^2 of surface area. The daily log mean results for carcases sampled on one day must be calculated and recorded.

(b) Records must include:

(i) type, origin and identification of the sample, date and time of sampling, name of the person that performed the sampling,

(ii) name and address of the laboratory which analysed the sample, date of investigation of samples in the laboratory and details of the method used including inoculation of different agars, incubation temperature, time, and results as number of cfu per plate used to calculate the result in cfu/cm^2 of surface area.

(c) A responsible person from the laboratory should sign the records.

(d) To permit evaluation, results must be shown on process control charts or tables, containing at least the last 13 weekly test results in order.

Verification Criteria

6. (a) Daily log mean results must be allocated into one of three categories for process control verification: “acceptable”, “marginal”, and “unacceptable” as set out in the table below, where ‘M’ and ‘m’ denote the upper limits for the marginal and acceptable categories, respectively, for samples taken according to the excision method.

(b) The test results should be categorised according to the respective microbiological criteria in the same order as the samples are collected.

(c) As each new test result is obtained, the verification criteria are applied anew to evaluate the status of process control with respect to microbiological contamination and hygiene.

(d) An unacceptable result or unsatisfactory marginal result trends should trigger action to review process controls, discover the cause if possible, and prevent recurrence.

Daily log mean values (cfu/cm^2)	Acceptable range		Marginal range (>m but •M)	Unacceptable range (> M)
	Cattle/sheep/ goat/horse	Pig:	Cattle/pig/sheep/goat/ horse	Cattle/pig/sheep/ goat/horse
Total viable counts (TVC)	< 3.5 log	< 4.0 log	3.5 log (pig: 4.0 log) - 5.0 log	> 5.0 log
Enterobacteriaceae	< 1.5 log	< 2.0 log	1.5 log (pig: 2.0 log) - 2.5 log (pig: 3.0 log)	> 2.5 log (pig > 3.0 log)

Feedback to staff

7. (a) The results of the test must be fed back to the responsible staff as soon as possible.

(b) The results should be used to maintain and improve the standard of slaughter hygiene. Causes of poor results may be clarified by consultation with the slaughtering staff where the following factors could be involved: poor working procedures, absence or inadequacy of training and/or instructions, the use of unsuitable cleaning and/or disinfection materials and chemicals, inadequate maintenance of cleaning apparatus, and inadequate supervision.

Regulations 8(1)(e), 20(1)(eB) and 20(5)(a)(ii)

Schedule 17B

NATIONAL PROCEDURES FOR CONDUCTING MICROBIOLOGICAL CHECKS ON CARCASES

Sampling procedure and number of samples to be taken

1. (a) Between 5 and 10 carcases should be sampled on a single day each week. The day of sampling should be changed each week to ensure that every day of the working week is covered. The frequency of testing the carcases in low throughput slaughterhouses and for slaughterhouses not working on a full-time basis should be determined by the OVS based on the judgement of the OVS on hygiene standards with respect to the slaughter at each plant.

(b) A sample from four sites from each carcase should be taken half way through the slaughter day, after dressing and before chilling commences.

(c) Carcase identification, date and time of sampling should be recorded for each sample and the name of the person performing the sampling.

(d) The frequency of sampling may be reduced to fortnightly testing if satisfactory results are obtained on six consecutive weeks, but weekly sampling must be resumed if unsatisfactory results are obtained.

Sampling sites

2. (a) The following sites will usually be appropriate for process control:

Cattle: *neck, brisket, flank, and rump*
Sheep, goat: *flank, thorax lateral, brisket, and breast*
Pig: *back, jowl (or cheek), hind limb medial (ham), and belly*
Horse: *flank, brisket, back, and rump.*

(b) However, alternative sites may be used, following consultation with the OVS where it has been demonstrated that, because of the slaughter technology at a particular plant, other sites are more likely to carry higher levels of contamination. In these cases sites shown to carry higher levels of contamination may be chosen.

Wet & Dry Swabbing Method

3. The following protocol should be followed at the slaughterhouse:

(a) Where swabs are moistened prior to collection of samples, a sterile peptone salt diluent (see ISO 6887-1) should be used.

(b) The sampling area for swabbing should cover 100cm² per sampling site. However, a smaller area may be tested, subject to the approval of the OVS on the basis of historical data.

(c) The swab should be moistened for at least 5 seconds in the diluent and rubbed initially vertically, then horizontally, then diagonally for not less than 20 seconds across the swab site. As much pressure as possible should be used. After using the wet swab, the same sampling technique should be repeated by a dry swab.

(d) Samples from the four sampling sites of each tested carcase may be analysed separately or may be pooled in the same container before examination. Where unacceptable results are obtained with pooled samples and corrective actions do not lead to better hygiene, further samples should not be pooled until problems have been resolved.

(e) The samples must be placed aseptically into a sample container or plastic dilution bag at the slaughterhouse for transfer to the laboratory.

Method for the examination of samples

4. The following protocol should be followed in the laboratory:

(a) Samples should be stored refrigerated until examination at 4°C. Samples should be examined within 24 hours after sampling.

(b) Samples should be homogenised in a plastic dilution bag for at least two minutes in 100 ml of dilution media (see ISO 6887-1) at about 250 cycles of a peristaltic Stomacher or homogenised by a rotary blender (homogeniser). Alternatively swab samples may be shaken vigorously in the dilution media.

(c) Dilution before plating should be carried out in 10-fold steps in the dilution media.

(d) Analysis should be performed for total viable counts and Enterobacteriaceae. ISO-methods should provide the basis for examination of samples.

Records

5. (a) All test results must be recorded in terms of colony forming units (cfu) per cm^2 of surface area. The daily log mean results for the carcases sampled on one day must be calculated and recorded.

(b) Records must include:

(i) origin, type and identification of the sample, date and hour of sampling, name of the person that performed the sampling.

(ii) name and address of the laboratory which analysed the sample, date of investigation of samples in the laboratory and details of the method used including inoculation of different agars, incubation temperature, time, and results as number of cfu per plate used to calculate the result in (cfu) per cm^2 of surface area.

(c) A responsible person from the laboratory should sign the records.

(d) To permit evaluation, results must be shown on process control charts or tables, containing at least the last 13 weekly test results in order.

Verification Criteria

6. (a) Daily log mean results must be allocated into one of three categories for process control verification: “acceptable”, “marginal”, and “unacceptable” as set out in the table below, where ‘M’ and ‘m’ denote the upper limits for the marginal and acceptable categories, respectively, for samples taken according to the wet and dry swabbing method.

(b) The test results should be categorised according to the respective microbiological criteria in the same order as the samples are collected.

(c) As each new test result is obtained, the verification criteria are applied anew to evaluate the status of process control with respect to microbiological contamination and hygiene.

(d) An unacceptable result or unsatisfactory marginal result trends should trigger action to review process controls, discover the cause if possible, and prevent recurrence.

Daily log mean values (cfu/cm^2)	Acceptable range		Marginal range (>m but •M)	Unacceptable range (> M)
	Cattle/sheep/ goat/horse	Pig:	Cattle/pig/sheep/goat/ horse	Cattle/pig/sheep/ goat/ horse
Total viable counts (TVC)	< 2.8 log	< 3.3 log	2.8 log (pig: 3.3 log) - 4.3 log	> 4.3 log
Enterobacteriaceae	< 0.8 log	< 1.3 log	0.8 log (pig: 1.3 log) - 1.8 log (pig: 2.3 log)	> 1.8 log (pig > 2.3 log)

Feedback to staff

7. (a) The results of the test must be fed back to the responsible staff as soon as possible.

(b) The results should be used to maintain and improve the standard of slaughter hygiene. Causes of poor results may be clarified by consultation with the slaughtering staff where the following factors could be involved: poor working procedures, absence or inadequacy of training and/or instructions, the use of unsuitable cleaning and/or disinfection materials and chemicals, inadequate maintenance of cleaning apparatus, and inadequate supervision.

Regulations 8(1)(e), 20(1)(eB) and 20(5)(b) and (6)

Schedule 17C

COMMUNITY PROCEDURES FOR CONDUCTING MICROBIOLOGICAL CHECKS IN RELATION TO CLEANING AND DISINFECTION OF PREMISES

1. Microbiological sampling must take place before production starts, never during production. If visible dirt is present cleaning should be judged as unacceptable without any further microbiological evaluation.

Sampling Sites

2. (a) To ensure that all surfaces are tested in the course of a month a schedule should be made indicating which surfaces should be sampled on which days.

(b) Surfaces to be tested must be cleaned and disinfected, dry, flat, sufficiently large and smooth.

(c) Three samples should be taken from large objects. Places which should receive most attention are the areas which may come into contact with the product. Approximately two thirds of the total number of samples should be taken from food contact surfaces.

(d) The following points should, for example, be chosen as sampling sites: knives (junction of blade and handle), hollow blood draining knives, elastrators, bung bagging machines, scraping/gambrelling table (pig), sawblades and cutters, cattle dehiding, other carcase dressing instruments, polishing machine, shackles and containers for transport, transport conveyor belts, aprons, cutting tables, flap doors, chutes for food organs, etc.

Frequency

3. (a) A minimum of 10 samples (or up to 30 samples in a large production area) should be carried out within a period of two weeks.

(b) If the results are satisfactory over a period of time the frequency of sampling may be reduced following the agreement of the OVS, but fortnightly sampling must be resumed if unsatisfactory results are obtained.

Sampling Method

4. Either the Agar contact plate method or the swab technique may be used. In addition to the given descriptions, ISO methods may be used.

(a) **Agar Contact Plate Method**

(i) Small plastic dishes with lids (i.e. internal diameter 5 cm) filled with plate count agar (according to ISO, latest version) and dishes filled with violet red bile glucose agar (VRBG agar according to ISO, latest version) are pressed on to each sampling site and subsequently incubated. The contact surface of each plate is 20 cm^2.

(ii) Shortly before preparation of the plates, the relevant agar has to be melted to 100°C and cooled to 46 to 48°C. The plates have to be placed in a laminar air flow cabin and should be filled with agar until a convex surface is obtained. The prepared plates should be dried before use by incubating them upside down overnight at 37°C. This is also a useful check for possible contamination during preparation; plates with visible colonies must be discarded. After preparation the agar has a shelf life of approximately three months when kept at 2 to 4°C in closed bottles.

(iii) The used contact plates do not need to be cooled during transport and before incubation. The plates have a shelf life of one week at 2 to 4°C, when sealed into plastic bags.

(b) **Swab Technique**

(i) Samples should be collected with cotton swabs moistened with 1 ml of 0.1% NaCI peptone solution (8,5 g NaCI, 1 g trypton casein-pepton, 0.1% agar, and 1000 ml distilled water) from a surface area of preferably 20 cm^2.

(ii) If sampling is performed following cleaning and disinfection an amount of 30 g/litre Tween 80 and 3 g/litre Lecithin (or other products with a similar effect) should be added to the moistening solution for swabs.

(iii) The sampled surface must be swabbed 10 times from top to bottom applying a firm pressure on the surface.

(iv) Swabs should be collected in a bottle containing 40 ml buffered peptone with 0.1% agar saline solution, then cooled and stored at 4°C until further processing.

(v) The bottle should be shaken vigorously before diluting in 10-fold steps in 40 ml 0.1% NaCI peptone solution followed by microbiological examination (e.g. drop-plating technique).

Method for the examination of samples

5. (a) Analysis must be performed for total viable counts (TVC). Inoculated plate count agar plates and agar contact plates must be incubated for 24 hours at 37°C $\pm$ 1°C under aerobic conditions for total colony count (TVC). This procedure should take place within two hours of sampling. The number of bacterial colonies should be counted and recorded.

(b) Analysis for Enterobacteriaceae is voluntary unless required by the official veterinary surgeon. For quantitative estimation of Enterobacteriaceae VRBG agar must be used. Incubation of inoculated plates and agar contact plates should begin within two hours of sampling. After 24 hours incubation at 37°C $\pm$ 1°C under aerobic conditions, the plates must be examined for Enterobacteriaceae growth.

Records and Results

6. (a) The bacterial counts must be reported according to the number of organisms per cm^2 of surface area.

(b) Records must include:

(i) identification of the sample, date and time of sampling, name of the person that performed the sampling,

(ii) name and address of the laboratory which analysed the sample, date of investigation of samples in the laboratory, details of the method used and results.

(c) A responsible person from the laboratory should sign the records.

(d) Results have to be entered on a registration form and allocated into one of two categories established for the purpose of process control verification of cleaning and disinfection: “acceptable” and “unacceptable”. The acceptable range for the number of colonies of TVC or Enterobacteriaceae are shown in the table below.

Values for the number of colonies for testing of surfaces

	Acceptable range	Unacceptable range
Total viable counts (TVC)	0 – 10/ cm^2	> 10/ cm^2
Enterobacteriaceae	0 – 1/ cm^2	> 1/ cm^2

Feedback to staff

7. (a) The results of the test have to be reported to the responsible staff as soon as possible.

(b) The results should be used to maintain and improve the standard of cleaning and disinfection. Causes of unsatisfactory results should be clarified by consultation with the cleaning staff. The following factors may be involved: absence or inadequacy of training and/or instructions, the use of unsuitable cleaning and/or disinfection materials and chemicals, inadequate maintenance of cleaning apparatus, and inadequate supervision.".

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations, which extend to Scotland only, amend–

(a) the Fresh Meat (Hygiene and Inspection) Regulations 1995; and

(b) the Poultry Meat, Farmed Game Bird Meat and Rabbit Meat (Hygiene and Inspection) Regulations 1995.

These Regulations give effect to Commission Decision 2001/471/EC laying down rules for the regular checks on the general hygiene carried out by the operators in establishments according to Directive 64/433/EEC on health conditions for the production and marketing of fresh meat and Directive 71/118/EEC on health problems affecting the production and placing on the market of fresh poultry meat (O.J. No. L 165, 21.6.2001, p.48).

The Regulations come into force on 7th June 2002, but the Regulations provide a longer transitional period until 7th June 2003 in respect of small meat establishments to (regulation 3).

Regulation 4 of the Regulations amends the Fresh Meat (Hygiene and Inspection) Regulations 1995 so that–

(a) the occupier of a slaughterhouse, cutting premises, a cold store or a re-packaging centre licensed under those Regulations is obliged to conduct the regular checks on the general hygiene of conditions of production in those premises which are already required by regulation 20(1)(d) of those Regulations by implementing and maintaining a permanent procedure developed in accordance with certain HACCP (Hazard Analysis and Critical Control Point) principles;

(b) the occupier of a licensed slaughterhouse is obliged, in conducting these regular checks on the general hygiene of conditions of production in those premises which are referred to above, to carry out microbiological checks in relation to carcases and the cleaning and disinfection of the premises; and

(c) the occupier of a licensed cutting premises is obliged, in conducting the regular checks on the general hygiene of conditions of production in those premises which are referred to above, to carry out microbiological checks in relation to cleaning and disinfection of the premises.

Regulation 5 of the Regulations amends the Poultry Meat, Farmed Game Bird Meat and Rabbit Meat (Hygiene and Inspection) Regulations 1995 so that the occupier of a slaughterhouse used for slaughtering poultry, cutting premises used for cutting up fresh poultry meat, a cold store used for the storage of fresh poultry meat or a re-wrapping centre used for packing, wrapping or re-wrapping fresh poultry meat (in each case licensed under those Regulations) is obliged to conduct the regular checks on the general hygiene of conditions of production in those premises which are already required by regulation 18(1)(d) of those Regulations by implementing and maintaining a permanent procedure developed in accordance with certain HACCP principles.

Regulation 6 (which is made under section 2(2) of the European Communities Act 1972) makes two consequential amendments to the Products of Animal Origin (Import and Export) Regulations 1996.

A Regulatory Impact Assessment for these Regulations, which includes a compliance cost assessment of the effects which these Regulations would have on business costs, has been prepared in respect of these Regulations and a copy placed in the Scottish Parliament Information Centre. Copies can be obtained on request from the Meat Hygiene Division of the Food Standards Agency Scotland, 6th Floor, St Magnus House, 25 Guild Street, Aberdeen, AB11 6NJ.

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