



RSPCA welfare standards for

MEAT CHICKENS



Copyright © 2017 RSPCA. All rights reserved. This material must not be reproduced or used in any manner whatsoever without the express written permission of the RSPCA.

Contents

Introduction	iv
Chicks	1
Chick sourcing	1
Specific provisions for chicks	1
Food and water	3
Food	3
Water	4
Environment	6
Buildings	6
Floor and litter.....	8
Lighting	10
Space requirements and flock size	13
Air quality and thermal environment.....	15
Environmental enrichment.....	17
Climate change and animal welfare	19
The range	20
Access to the range.....	22
Verandas	24
Shade and shelter	25
Management	27
Managers.....	27
Stock-keepers.....	28
Inspection	28
Independent welfare audits	29
Equipment	31
Protection from other animals	32
Health	36
Health and welfare monitoring.....	36
Health and welfare	41
Breed	43
On-farm casualty killing/slaughter (culling)	44
Medication	46
Biosecurity	47
Welfare Outcome Assessment	49

Transport	51
Management.....	51
Catching	52
Transport	55
Slaughter/killing	57
Management.....	57
Closed Circuit Television (CCTV).....	59
Health monitoring at the processing plant.....	60
Lairage.....	61
Shackling/restraining	62
Electrical stunning	64
Waterbath stunning	65
Manual head-only electrical stunning.....	66
Bleeding.....	68
Gas killing	68
Appendix 1	75
Welfare audit form example	75
Appendix 2	79
Veterinary Health and Welfare Plan (VHWP) example.....	79
Appendix 3	81
Transport – standard operating and emergency procedure	81
Appendix 4	82
Hock burn assessment guide	82
Appendix 5	83
Foot pad burn assessment guide	83
Appendix 6	84
Dirty feather assessment guide.....	84
Appendix 7	85
Documents required	85
Appendix 8	86
Welfare Outcome Assessment (WOA): Meat chicken protocol	86
Index	96

Introduction

The *RSPCA welfare standards for meat chickens* have been developed to provide the only RSPCA-approved scheme for the rearing, handling, transport and slaughter/killing of meat chickens. They take account of UK legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Committee (FAWC) and the practical experience of the farming industry.

The standards are based upon the 'Five Freedoms' as defined by FAWC. Although these 'freedoms' define ideal states, they provide a comprehensive framework for the assessment of animal welfare on farm, in transit and at the place of slaughter/killing, as well as representing an important element of farm assurance requirements.

- **Freedom from hunger and thirst**
by ready access to fresh water and a diet to maintain full health and vigour.
- **Freedom from discomfort**
by providing an appropriate environment including shelter and a comfortable resting area.
- **Freedom from pain, injury or disease**
by prevention or rapid diagnosis and treatment.
- **Freedom to express normal behaviour**
by providing sufficient space, proper facilities and company of the animal's own kind.
- **Freedom from fear and distress**
by ensuring conditions and care which avoid mental suffering.

These freedoms will be better provided for if those who have care of livestock practise/provide:

- **caring and responsible planning and management**
- **skilled, knowledgeable and conscientious stockmanship**
- **appropriate environmental design**
- **considerate handling and transport**
- **humane slaughter.**

Guide to the use of the RSPCA welfare standards

- (i) The numbered requirements are the standards, all of which must be complied with.
- (ii) Boxed sections (indicated by ⓘ) give additional information, including: providing the reasoning behind a standard, expand on a standard, state how a standard can/will be assessed and/or highlight areas where the standards will be reviewed in the future.
- (iii) It is expected that all relevant UK legislation regarding farm animal husbandry and welfare on-farm, during transport, and at the abattoir, will be fully implemented in addition to the RSPCA welfare standards.
- (iv) **Farmers are required by law to have a thorough knowledge of the 'Defra Code of Recommendations for the Welfare of Livestock: meat chickens and breeding chickens'.**



RSPCA Farm Animals Department

The RSPCA's Farm Animals Department develops the RSPCA welfare standards for farm animals. These detailed documents are intended to represent 'best practice' in the care and welfare of farm animals.

The RSPCA works to continually develop and improve the welfare standards using a range of information, including the latest scientific research and practical farming experience. We regularly consult with other animal welfare and agricultural scientists, veterinary surgeons, and farming industry representatives. This helps to ensure that the RSPCA welfare standards continue to be at the forefront of farm animal care and welfare, and are also achievable on commercial farms.

The standards also take account of feedback from RSPCA Farm Livestock Officers, who carry out monitoring of the RSPCA Assured scheme, RSPCA Assured Assessors who audit scheme members, and the scheme members themselves.

We always value constructive feedback and ideas for improvement from those who are implementing the RSPCA welfare standards. Comments/feedback can be discussed with:

- a) RSPCA Farm Animals Department scientific staff, by contacting them on the below details:

Address: Farm Animals Department

RSPCA
Wilberforce Way
Southwater
Horsham
West Sussex
RH13 9RS

Telephone: 0300 123 0183

Email: farm-animals@rspca.org.uk

- b) RSPCA Farm Livestock Officers, who can discuss any issues during farm visits and offer advice, and can provide feedback to the RSPCA Farm Animals Department scientific staff.

The RSPCA does not approve equipment, but sets standards to ensure any equipment permitted for use is managed appropriately to safeguard the welfare of animals.

RSPCA Assured



RSPCA Assured is the RSPCA's farm assurance and food labelling scheme. RSPCA Assured assesses and approves farms, hauliers and abattoirs that meet all of the applicable RSPCA welfare standards. (Please note that RSPCA Assured does not approve equipment). Processors and packers must also apply for scheme membership for traceability and licence fee purposes.

Products from animals reared under the RSPCA Assured scheme can be labelled with the scheme's food label: 'RSPCA Assured'. Use of the RSPCA Assured name and mark are strictly subject to RSPCA Assured membership, traceability, licence fee and artwork approval. Membership of the scheme is subject to an annual fee and successful assessment, as well as monitoring visits by Farm Livestock Officers from the RSPCA's Farm Animals Department.

RSPCA Assured is a charity in its own right and not for profit. Any surplus income goes back into improving farm animal welfare.

Any queries relating to the operation of the RSPCA Assured scheme (e.g. administration, assessments etc.) should be directed to the RSPCA Assured office (0300 123 0014; info@freedomfood.co.uk).

Chicks

The following standards apply to the rearing and handling of chicks and are to be implemented in addition to all other relevant standards in the other sections of this document.

Chick sourcing

- C 1.1** Chicks must:
- a) be hatched according to the current version of the '*RSPCA welfare standards for hatcheries*'
 - b) be sourced from an RSPCA Assured approved hatchery.

Specific provisions for chicks

- C 2.1** Prior to the placement of chicks, all houses must be thoroughly cleansed, disinfected and tested free from infectious agents as specified in the Veterinary Health and Welfare Plan (VHWP) (see Health and welfare monitoring section and specifically H 1.12 d)).
- C 2.2** Day old chicks must be:
- a) handled carefully
 - b) placed in an appropriate environment.
- C 2.3** Up to the first 7 days of age, the number of feeders and drinkers placed, air quality parameters and ventilation rates must be at least to the levels specified within the breeding company's published management guidelines.

i For clarity, after the first 7 days of life, the above parameters are to be implemented according to the levels specified within this document.

i See standard E 5.1 for stocking rate requirements.

- C 2.4** Birds must be exposed to natural daylight as soon as possible, and certainly no later than 7 days of age.


i Prior to 7 days of age, artificial light may be used to achieve the minimum 20 lux light level requirement (see E 4.4).

Some producers expose chicks to daylight from day old, whilst others have waited until the chicks are three days of age.

Experience has shown that exposing birds to events occurring outside the house at an early age allows them time to develop recognition and familiarity and therefore reduce their fearfulness towards them. This may be of particular benefit to free-range birds and may help encourage ranging behaviour.

- C 2.5** Great care must be taken to avoid heat/cold stress.

- C 2.6** Sufficient time must be allowed to ensure that the necessary target brooding temperature at bird level is achieved prior to the chicks being placed, allowing for differences in the time of year and external temperature.
- C 2.7** Throughout the brooding period the behaviour of the chicks must be closely monitored and the brooding temperature adjusted accordingly.
- C 2.8** Where spot brooding is used:
- a) particular care must be taken in the placement and maintenance of brooder heaters to ensure against risk of fire and emission of carbon monoxide
 - b) the brooder must be suspended above the centre of the surround
 - c) the height of the brooder must be adjustable to ensure that the temperature at the level of the litter is maintained at the optimum level
 - d) brooder surrounds and feeding and watering equipment within the surround must be designed and constructed such that chicks can move freely towards or away from the brooder
 - e) supplementary lighting must be hung next to the brooder for the first few days after placement to attract chicks to the heat source and provide extra illumination of feeders and drinkers
 - f) care must be taken to ensure that feeders do not become hot, especially when metal feeders are used.
- C 2.9** Supplementary feed trays and small water fonts must be provided in addition to any automatic feeders and drinkers at the start of brooding.

 **For the first several hours after placement, cardboard egg trays can be used as additional water containers.**

- C 2.10** Feeders and drinkers must be kept clean and free from litter.
- C 2.11** With the exception of birds reared as free range, the moving of birds from one building to another during the rearing cycle, e.g. brood and move operations, is prohibited.
- C 2.11.1** Where it is permitted to move birds from one building to another during the rearing cycle (see C 2.11), the following standards must be met:
- a) birds must only be moved once
 - b) feeders and drinkers used on the finishing unit must be included within the initial rearing stages
 - * c) any changes to the diet must be managed to prevent any digestive-related issues arising
 - d) birds must be caught and transported in accordance with relevant standards within the transport section, with the exception that stocking density must be reduced by at least 30%
 - e) the rearing site and finishing site must each be managed as 'all-in / all-out.'

Food and water

Livestock need to have ready access to fresh water and a diet to maintain full health and promote a positive state of well-being.

Food

- FW 1.1** Chickens must be fed a wholesome diet which:
- is appropriate to their strain
 - maintains them in good health
 - satisfies their nutritional needs
 - is available to them at all times (except when required by the attending veterinary surgeon).

FW 1.2 Producers must have a written record of the nutrient content of the feed, as declared by the feed compounder.

FW 1.3 Feedstuffs containing mammalian or avian-derived protein are not permitted.

i **FW 1.3 does not include dairy products.**

- FW 1.4** Feed must be safely and hygienically transported, stored and delivered to stock to prevent:
- infestation
 - contamination
 - wetting.

FW 1.5 Food must not be allowed to remain in a contaminated or stale condition.

FW 1.6 Track feeders are prohibited.

FW 1.7 Where a new feeding system is installed, this must be pan feeders.

FW 1.8 A minimum of 25mm of linear (single sided^a) or 16mm of circular feeding space must be provided and accessible for each bird.

i **For circular feeding space, calculations are based on the overall circumference of the feeder.**

^aWhere birds can feed from both sides of a linear feeder, such as a trough, at the same time then a minimum of 12.5mm of feeding space per bird can be provided.

FW 1.9 Feed distribution must ensure uniform feed availability throughout the entire feeder system.

FW 1.10 Feeders must be approximately evenly distributed about the house.

FW 1.11 Chickens must not have to travel more than 4 metres anywhere in the house to reach food.

- FW 1.12** Wire over feeders must not be:
- a) electrified
 - b) connected to any electrical source.

i Where used, anti-perch wire should be covered with plastic tubing to help discourage birds from perching on it.

- FW 1.13** All feeding equipment must be hygienically managed.

Water

- FW 2.1** Chickens must have access to water:
- a) that is clean and fresh
 - b) at all times, except when required by the attending veterinary surgeon.

- FW 2.2 *** The drinking quality of non-mains water must be:
- a) independently tested
 - b) tested every 6 months
 - c) tested at the source.

- FW 2.2.1*** The water quality test records relating to FW 2.2 must:
- a) clearly indicate whether the water tested is considered an acceptable source of drinking water for livestock
 - b) be kept for at least 2 years.

*** i** It is important to stress that water quality may change over time and therefore one should not rely on past analysis. Although water testing should be conducted routinely under normal circumstances, any unusual situation such as changes in water smell, clarity, taste or changes in animals eating or drinking habits, loss of performance or health problems should immediately trigger the need for re-testing.

- FW 2.3** Water must not be allowed to remain in a contaminated or stale condition.
- FW 2.4** Provision must be made for supplying water in freezing conditions.
- FW 2.5** A water storage tank (with fitted lid) must be installed on-site which is capable of providing water to the flock of all ages for a period of at least 24 hours when mains water supply is not available.
- FW 2.6** Where a new drinking system is being installed, this must not be bell drinkers.

FW 2.7 The minimum number of drinkers which must be provided are as follows:

Bell	1 per 100 chickens
Nipple	1 per 10 chickens
Cup	1 per 28 chickens

i It has been shown that certain systems of drinker (360° nipple, high flow rate) can be provided at a minimum of one drinker per 20 chickens. Producers who have installed alternative designs of drinker facilities should discuss their suitability with the RSPCA Farm Animals Department.

FW 2.8 Drinkers must be:

- a) of a design that reduces water wastage
- b) of an appropriate design to enable the birds to drink freely
- c) approximately evenly distributed about the house
- d) placed at optimum height for the size and age of the birds.

FW 2.9* Chickens must not have to travel more than 3 metres anywhere in the house to reach water.

FW 2.10 Water meters must be connected to all the birds' drinking systems to monitor water consumption for each house (see M 1.3 d)).

i The reason behind the requirement to have water meters installed for each house is so that water consumption can be monitored on a flock basis. This is important, as changes in water consumption can help provide an early indication of any health issues arising. However, for this to be an effective tool, the approximate number of birds within a house needs to be known.

In some free range systems, where birds are kept in mobile houses, birds from different houses can share the same range area and therefore the number of birds within a house can vary day-to-day. In this case, monitoring water consumption for a house is unlikely to provide useful data. Therefore, measuring water consumption for the flock, i.e. all the birds from different houses that share a common range, is more appropriate. On this basis, where free-range broilers are kept on a single site, are housed in more than one mobile house (i.e. houses not exceeding 150m² floor space), have access to the same range area at the same time, and can move freely between each house, and the number of birds on that single site does not exceed 15,000, then a single water meter can be used to record and monitor water consumption for these birds as a flock.

FW 2.11 Wire over drinker lines must not be:

- a) electrified
- b) connected to any electricity source.

i Where used, anti-perch wire should be covered with plastic tubing to help discourage birds from perching on it.

FW 2.12 All drinking equipment must be hygienically managed.

Environment

The environment in which livestock are kept needs to take into account their welfare needs, be designed to protect them from physical and thermal discomfort, fear and distress, and allow them to perform their natural behaviour.

- E 1.1** Where management systems, building/equipment designs or layout of facilities not covered in the 'RSPCA welfare standards for meat chickens' are being employed or considered, these must be referred to, and discussed with, the RSPCA Farm Animals Department before they can be considered for certification.
- E 1.2** Where changes are being made to existing buildings or new equipment installed that has not previously been assessed, managers must inform RSPCA Assured beforehand.

i If producers are at all unsure about whether planned changes to buildings or equipment will meet the RSPCA welfare standards they should contact the RSPCA Farm Animals Department.

- E 1.3** Bird welfare must not be compromised/or likely to be compromised by outside environmental factors, such as noise, atmospheric pollution, adverse weather conditions, and other animals and, in the case of free-range systems, soil conditions.

Buildings

i It is essential that buildings are of a size and design to ensure that ventilation is sufficient to maintain good air and litter quality. Therefore, as a guide, experience suggests that for smaller buildings, such as mobile arcs, which are around 4m long and house approximately 500 birds, a minimum ceiling height of 2.5m to the ridges should be provided. It is recommended that larger buildings have a minimum ceiling height of 3m. The sides of buildings should be approximately 0.6m high to allow for popholes, if required.

- E 2.0** All chickens must be provided with accommodation.
- E 2.1** Buildings must be designed and erected to be suitable for local weather conditions and be able to withstand expected seasonal extremes of weather.
- E 2.2** New housing or housing undergoing major structural change must be designed to allow easy removal and minimal carrying and handling of birds during depopulation and placement.
- E 2.3** For all accommodation the following information must be prominently displayed at, or near, the entrance to each building:
- a) total floor area available to the birds
 - b) total number of birds placed
 - c) total number of drinkers and feeders
 - d) target air quality parameters
 - e) lighting levels and regimes
 - f) emergency procedures, i.e. actions in the case of fire, flood, failure of automatic equipment, and when temperatures move outside acceptable limits.

- E 2.4** There must be nothing in the chickens' environment that is likely to cause injury or distress to the birds that can be avoided.
- E 2.5** All equipment and facilities provided to the birds must be:
- fit for purpose
 - well maintained.
- E 2.6** Inside houses:
- the sound level must be minimised
 - ventilation fans, feeding machinery and other equipment must be constructed, placed, operated and maintained in such a way that they cause the least possible amount of noise.
- E 2.7** Internal walls must be smooth, unobstructed and constructed of a durable material capable of withstanding clean-out procedures.
- E 2.8** Except where preservatives with an insecticidal role are used, chickens must not come into contact with toxic fumes or surfaces, for example, from paints, wood preservatives or disinfectants.
- E 2.9** All electrical installations at mains voltage must be:
- inaccessible to the chickens
 - well insulated
 - safeguarded from rodents
 - properly earthed
 - tested at least annually by a qualified or competent person (the outcome of this test must be recorded)
 - in good working order.

i **Electrical installations must be tested every 3 years to meet legal requirements relating to electrical safety. However, at least once a year, the 'trip switch' should be tested to ensure it is in correct working order.**

- E 2.10** The apron must be approximately level and even to facilitate the loading of birds at the time of placement and depopulation.
- E 2.11** The apron immediately surrounding the outside of the house must:
- be kept clean and tidy
 - not offer shelter to wild birds or rodents
 - be well-managed, with vegetation kept short.

i **Where possible, the apron should be concrete to ensure effective disinfection once the building has been emptied and cleaned.**

Floor and litter

- E 3.1** Chicken house flooring must allow for effective cleansing and disinfection, preventing a significant build-up of parasites and other pathogens.

i Where possible, the house floor should be concrete that is well maintained.

- E 3.2** Internal house floors must not become wet, or be likely to become wet, from rising moisture.

i For example, in relation to E 3.2, concrete floors should have a damp-proof membrane.

- E 3.3** The floor of the house must be completely covered in litter.

- E 3.4** The litter must:

- a) be of a good quality
- b) be stored hygienically and kept dry
- c) be of a suitable material and particle size with no large clumps
- d) be managed to maintain it in a dry, friable (loose and free flowing) condition (and replaced where necessary)
- e) be an average minimum depth of 5cm to allow for the dilution of faeces
- f) allow birds to dust bathe
- g) be topped up daily, if necessary, with fresh litter
- h) be managed hygienically.

i Wood shavings are the preferred substrate.

- * **i** Litter moisture content can be approximated by taking a large handful of litter and squeezing it: if the litter clumps and stays in a ball then it is too wet; if it instantly falls apart into fine particles then it may be too dry; if it initially clumps and then starts to fall apart gradually, it is probably about right.

Source: Marshall, K. 2014. Keeping the litter dry to make a profit. World Poultry, Volume 30, no.9.

- i** The requirement to keep litter in a dry, friable condition is detailed in law (Welfare of Farmed Animals (England) Regulations 2007 (as amended)) and the Defra Code of Recommendations for the Welfare of Livestock: Meat chickens and breeding chickens.

A poultry flock kept on well maintained litter is healthier and more profitable than one kept on poor quality litter. Lesions such as pododermatitis (foot pad burn, see Appendix 5), hock burn and breast blisters can all be a consequence of poor litter and can cause unnecessary suffering. There is evidence to suggest that such lesions can cause pain, act as a gateway for bacterial infection, and be positively correlated with lameness. Such lesions can also result in downgrading of the end product at the slaughterhouse.

Litter moisture is a key cause of these litter related problems and can be affected by drinker design and management; air change rate; litter material and depth; stocking density and rate; diet (i.e. raw material quality and formulation) and flock health.

A lot of the water and all of the fat and nitrogen found in the litter (which increases the rapidity in which the lesions develop) is excreted from the birds as faeces. Therefore the higher the stocking rate the more of these factors the litter has to absorb. Also, the rate of evaporation of moisture from the litter falls as stocking rate increases.

The humidity of the poultry house environment is affected by the number and size of the birds and therefore by their respiratory output and also, of course, by the relative humidity of the air entering the house. When the relative humidity in the house exceeds 70%, the moisture content of the litter tends to increase, leading to poorer conditions. The aim should be to maintain a relative humidity level in the house of between 50 and 70% by supplying sufficient air and added heat when necessary.

Finally, not all hock or foot pad burns are simply a result of poor litter quality. If birds spend excessive amounts of time in contact with the litter, due to disease or skeletal abnormality that reduces the birds' mobility, they will be more likely to suffer from these lesions regardless of litter condition.

Primary source: Department for Environment, Food & Rural Affairs (Defra). 2004. Poultry Litter Management. Defra, London.

- i** Poor litter management which results in litter becoming wet may also lead to:
- excess ammonia, as bacterial growth may increase in damp conditions
 - damage to the respiratory system by ammonia and consequent predisposition to infection, which may lead to poor performance
 - increased risk of coccidiosis*, as coccidial eggs mature more rapidly in damp conditions
 - infection and lower performance.

**Coccidiosis is a parasitic infection of the intestines that can lead to gut damage and, in severe infestations, death of birds. More commonly, poor control of subclinical infection reduces feed conversion. Peak parasitic oocyst (egg) output and hence, challenge, occurs at around 28 days old. All treatment/vaccination strategies should be supported with effective biosecurity. The use of a disinfectant with proven efficacy against coccidial oocysts will reduce challenge pressure. Maintenance of good friable litter will reduce oocyst build up.*

E 3.5 Chickens must have access to the litter area at all times.

Lighting

i The introduction of natural light into chicken houses is likely to be beneficial to bird welfare by, for example, enriching the birds environment, as natural light can provide a range of illuminance levels in different areas within the house, which changes throughout the day, and is spectrally different to artificial sources. Also producers have reported that the birds display more natural behaviour and are more active compared to birds not exposed to natural light.

i Research has shown that chickens prefer different light intensities for the performance of different activities. Dimly lit areas provide the opportunity to rest, whilst brighter lit areas provide the opportunity to perform more active behaviours. Perches should be positioned in the dimly lit areas.

E 4.0 Adequate lighting, whether fixed or portable, must be available to enable the chickens to be thoroughly inspected at any time.

E 4.1 In each 24 hour period, chickens must be provided with:

- a) a minimum period of 8 hours continuous light
- b) a minimum period of 6 hours and a maximum of 12 hours continuous darkness, except:
 - i. for birds up to a maximum of 7 days of age and 3 days prior to slaughter, when the minimum period of continuous darkness must be at least 2 hours
 - ii. where natural light is provided and the natural period of darkness is shorter than 6 hours.

E 4.2 Lighting patterns in all houses must be recorded.

i Where possible, the lighting pattern should be recorded automatically.

E 4.3 Natural daylight must be provided:

- a) at all times during the natural daylight period
- b) through all the required openings (see E 4.5).

E 4.4 No area of the house must be lit at less than 20 lux.

E 4.4.1 E 4.4 must be achieved by natural daylight alone, except on dark days when artificial lighting can be used.

i The minimum 20 lux light level is to be achieved on a day when the natural daylight level is neither excessively bright (i.e. through direct sunlight entering the shed) or dark (i.e. an overcast/stormy day).

i Chickens have well-developed colour vision. The report on '*The Welfare of Chickens Kept for Meat Production*' by the Scientific Committee for Animal Health and Animal Welfare's (2000, p. 62) concluded that brighter lighting is important to stimulate activity. Increased activity can help reduce the incidence of leg disorders and contact dermatitis, such as hock and foot pad burn.

i The installation of light sensors within the buildings to automatically turn artificial lights on/off and ensure the minimum light level of 20 lux is achieved at all times during the light period should be considered.

E 4.4.2 Measures of illuminance must be taken at bird eye level.

E 4.5 The natural light openings in the house must correspond to at least 3.0% of the total floor area of the house.

i The greater the proportion of window area to floor area achieved, the more natural daylight will enter the shed and consequently the less likely artificial lights will have to be turned on to achieve the minimum lighting level of 20 lux on darker days.

i It is important that a sufficient number and size of light inlets are provided to ensure the lighting requirements can be achieved at all times. Installing light openings down both sides of a house can allow greater control over the light entering the building. For example, if the shutters on one side of the house have to be closed to block out direct sunlight then daylight can still enter the building through the inlets on the opposite side. Similarly, more than the required amount of total window space for a building should be provided.

E 4.6 * All the light openings required to achieve E 4.5 must be no smaller than 0.56m² (e.g. 0.75 x 0.75m or 1.0 x 0.56m).

E 4.6.1 * For houses built before 1st January 2018: where it can be clearly demonstrated that standard E 4.6 is not practically possible to achieve, as many light openings of the required size must be installed as is practically possible.

***** **i** In relation to E 4.6.1, accepted examples of ‘not practically possible to achieve’, include: where it can be demonstrated that the structural integrity of the house would be compromised; where building design, e.g. the presence of a door, will not permit such a window size to be installed.

E 4.6.2 * Light openings must be of a sufficient size to ensure that streams of daylight (except direct sunlight) do not cause patches of bright light on the floor of the house.

***** **i** Patches of bright light on the floor of the house, for example, when windows are not evenly distributed around the house, when windows are not of a similar size or when windows are too small, can attract birds to these areas. An unequal distribution of birds around the house, with increased activity in localised areas, could adversely affect litter quality and bird welfare.

To ensure compliance with E 4.6.2, observations should take place on bright days, at different times during the day, and with any artificial lights turned off.

E 4.7 Where glass windows are used, these must be constructed of safety/toughened glass.

(i) Windows constructed from two sheets of 2-ply polycarbonate (the same material and specification as that used for home conservatory construction) have been shown to work well in practice. Polycarbonate windows also appear to be better at diffusing direct sunlight within the house, helping to avoid patches/streams of sunlight.

(i) The use of transparent windows that allow birds to see out of the building may be beneficial by providing an additional level of enrichment to their environment. Transparent glass windows provide good light distribution, with minimal filtering and distortion, and do not discolour with time.

(i) The installation of toughened, double-glazed windows, are strongly encouraged.

E 4.8 Birds must be exposed to dawn and dusk periods.

(i) This can be achieved through natural or artificial means (see E 4.8.1).

E 4.8.1 If used outside the natural daylight period, e.g. to extend the light period, artificial lights must be switched on and off:

- a) in a stepped or gradual manner
- b) over a period of at least 15 minutes.

(i) Turning artificial lights on/off gradually allows time for the birds to prepare for daytime or darkness. Before the dark period, research has shown that it promotes natural settling behaviour and stimulates birds to have a last meal, which can help improve feed conversion efficiency.

The Scientific Committee for Animal Health and Animal Welfare's report on The Welfare of Chickens Kept for Meat Production (2000, p. 61) recommends that changes in illuminance should take place over about 30 minutes, to allow chickens sufficient time to prepare for the light and dark period. The RSPCA intends to move towards the 30 minute recommendation in the near future.

E 4.9* Where there are areas of different light intensity across the floor of the house there must be a gradual change in light intensity between each area.

- E 4.10** It must be possible to readily control the amount of daylight entering the building to the extent that darkness can be achieved.

i Installing shutters, for example, can control the amount of light entering through the light opening. Shutters are especially important to control the ingress of direct sunlight, which can increase the risk of heat stress. The shutters can be used to block light entering the house, which is useful during catching and also at night where events outside the house could cause birds to panic. To have the greatest amount of control over the light entering the house it should be possible to open/close the shutters by varying degrees, which could be achieved manually or mechanically.

i The provision of daylight – particularly via windows - can increase environmental temperature within the house. Therefore it is important to consider the capacity of the ventilation system and the positioning of the ventilation inlets so that good ventilation and correct house temperature can be achieved. In the event of excessive heat, shutters can be used to block out direct sunlight. The shutters, especially if insulated, can also help keep the building warm during cold weather, which is important during the brooding phase.

- E 4.11** Windows must be properly sealed, so correct airflow within the house can be maintained and draughts avoided.

Space requirements and flock size

i As a guide, flock sizes should not exceed 30,000 birds for indoor systems and 15,000 for free-range systems. This is based on what is currently considered best practice in relation to preventing and managing diseases and their transmission, minimising the impact of emergencies on bird welfare, and helping ensure effective inspection and management practices.

A smaller flock size for free-range systems is considered necessary so as to:

- a) improve bird access to the range from within the building
- b) encourage birds onto the range
- c) encourage birds to make use of the whole range area (a larger flock size would mean a larger range area is required, the perimeter of which may not be used by the birds due to its distance from the building)
- d) make the range area more manageable and, in particular, reduce the impact on the range area immediately surrounding the building
- e) aid the management of disease, especially as free-range birds can present a greater biosecurity risk.

NB a flock refers to birds occupying the same building, and sharing the same air space and/or feed, water, light, and ventilation facilities and/or, in the case of free-range chickens, range area.

The RSPCA Farm Animals Department will review maximum flock sizes in light of scientific and practical information regarding the welfare of chickens, and may amend this information box accordingly with a view to upgrading to a standard.

E 5.1 For chickens reared in the following systems, the stocking rate and density must never exceed, or be likely to exceed, the figures shown in the table below.

System of production		Indoor area		Minimum range area (m ² of available range area/bird)
		No. chickens/m ² of available floor space	kg/m ² of available floor space	
Indoor		19	30.0	-
Free-range ^a		13	27.5	1
Organic ^a	fixed housing	10	21.0	4
	Mobile housing	16 ^b	30.0	2.5 ^c

^aThe figures shown are those required by law, as set-out under either the Marketing standards for poultry meat Commission Regulation (EC) No. 543/2008 for free-range or the organic production of agricultural products European Council Regulation (EEC) No. 2092/91, as amended, for organic.

^bOnly in the case of mobile housing not exceeding 150m² floor space which remain open at night.

^cProvided that the limit of 170kg of N/ha/year is not exceeded.

(i) For RSPCA Assured members, E 5.1 not only applies to the current flock, but also to the previous three RSPCA Assured approved flocks, where applicable.

The stocking density for the current flock will be based on predicted outcomes using data from the records listed in M 1.3 d).

The stocking rate (i.e. number of chickens/m² of available floor space) applies to the placement of day old chicks.

(i) Exceeding 20 birds/m² is likely to increase competition for floor space, feed and water. Research also indicates that birds placed at above 19/m² have higher 7d mortality, a higher number of daily leg culls, and are more behaviourally restricted. In addition, good ventilation and litter control becomes more essential as stocking density increases.

E 5.1.1 The minimum range area, as shown in the table of E 5.1, must be provided to birds in free-range/organic systems, as applicable.

E 5.2 The number of birds placed in a building must be no more than the number required to rear all the birds to the maximum stocking density once, which is to be at depopulation, hence the practice of thinning is not permitted.

E 5.3 Records must be kept that enable the stocking density for each house to be easily verified at any time (see M 1.3).

Air quality and thermal environment

i A variety of viruses can attack the respiratory tract of broilers and cause damage to the windpipe and lungs, which can lead to invasion with bacteria, such as E coli. Such infection can cause widespread air sacculitis, septicaemia and death.

Respiratory viruses can also reduce the efficiency of the respiratory tract to take oxygen from the air to the tissues and thus contribute to a condition known as ascites. Although ascites is the end result of congestive heart failure, it is neither an infectious nor a contagious disease. It is predominantly a winter condition related to a broiler's requirement for oxygen.

The effects of these diseases are greatly exacerbated by air quality parameters – humidity, and dust, ammonia, carbon dioxide and oxygen concentrations.

Effective control of these diseases requires an understanding of ventilation, together with strategic vaccination against viruses known to be a risk in a particular area.

E 6.1 Provision must be made to ensure that aerial contaminants do not reach a level at which they are noticeably unpleasant to a human observer (see information box under E 6.2.3).

E 6.2 Ammonia and dust levels must be assessed according to standard E 6.2.2 when the birds are no older than:

- a) 14 days of age for dust, and
- b) 21 days of age for ammonia.

E 6.2.1 Ammonia and dust levels must be assessed and recorded:

- a) at least once each day
- b) using calibrated meters, testing tubes or sensory evaluation.

E 6.2.2 If using sensory evaluation, the standardised protocol shown in the information box below must be used.

* **i** Whilst the use of calibrated meters is encouraged, sensory evaluation, using the following air quality assessment protocol, can be used instead:

Step 1: Using the chart below, assess ammonia and dust levels immediately upon entering the house.

Step 2: Just prior to leaving the house during that flock inspection, assess the air quality once again.

Step 3: Record the highest score from the two assessments.

Score	Description
0	Zero/weak: odour and dust not/hardly noticeable; easy to breathe.
1	Moderate: odour and dust distinct; experience watery eyes and/or coughing.
2	Strong: odour and dust irritating; experience stinging eyes and/or mouth, and/or excessive coughing/sneezing.

- E 6.2.3 *** When using sensory evaluation to assess air quality, scores of 1 and 2 indicate that ammonia and dust are excessive and air quality must be improved without delay.
- E 6.3** Ventilation systems, natural or forced, must be constructed, maintained and operated in such a way that:
- a) the concentration of ammonia (NH₃) does not exceed 20 ppm
 - b) the concentration of carbon dioxide (CO₂) does not exceed 3,000 ppm
 - c) the average relative humidity measured inside the house during 48 hours does not exceed 70% when the outside temperature is below 10°C.
- i** **Averaged over an 8 hour period:**

 - a) **inhalable dust should not exceed 10mg/m³**
 - b) **carbon monoxide should not exceed 50ppm.**
- E 6.4** Provision must be made to ensure chickens have access to a thermally comfortable environment at all times.
- i** **A chicken functions most effectively at a body temperature of about 41°C. Any deviations from this will have increasingly severe consequences to its welfare: a rise in body temperature of only 4 to 5°C is invariably fatal.**

The thermal comfort zone of a chicken in an open space away from other birds is 8 to 30°C: varying primarily according to bodyweight, relative humidity and air speed.
- E 6.5** The design of buildings must be such that risks of overheating are minimised; for example, by installation of an evaporative cooling system and/or roof insulation.
- E 6.6** For controlled environment housing, the ventilation system must be able to control the temperature of the building to within ±3°C of the ambient temperature.
- E 6.7** House temperature, humidity and air quality parameters must be measured at the level of the chickens' heads.
- E 6.7.1** Maximum and minimum temperatures must be recorded daily.
- E 6.8** Alarm systems must be installed where there is any risk of failure of ventilation equipment.
- E 6.9** An alarm system must alert the stock-keeper if the building temperature exceeds ±3°C of the target temperature to allow for appropriate action to be taken.
- E 6.10** Stock-keepers must:
- a) have access to a copy of the Defra booklet, '*Heat Stress in Poultry: Solving the Problem*' (PB 10543, 2005)
 - b) be familiar with its content
 - c) adopt its recommendations.

Environmental enrichment

i The inclusion of environmental enrichment, such as straw bales, perches, pecking objects, scattering of whole grain and the provision of brassicas have been shown to improve bird health and welfare by encouraging birds to be more active, thereby promoting improved leg health.

E 7.1 Environmental enrichment provisions must be:

- a) made available to the chickens as soon as possible, and certainly no later than from 7 days of age
- b) maintained/replaced throughout the rearing period, as necessary.

E 7.2 For every 1,000 birds, the following provisions must be provided as a minimum:

- a) 1.5 standard sized, long chopped straw bales,
- b) 2m of perch space, and
- c) one pecking object, e.g. peck-a-blocks, brassicas (e.g. cabbage, cauliflower, sprouts, broccoli), hanging wooden blocks.

i The use of additional items is strongly encouraged to promote greater bird activity.

i Straw bales should be ordered from a supplier in advance to ensure sufficient numbers are available to satisfy the specified provisions throughout the year.

i Where enrichment items are introduced into a unit, consideration should be given to the risk of disease entry and methods of ensuring that reusable items can be effectively cleaned between flocks.

When purchasing straw bales it should be ensured that they are of a suitable quality, have come from a trusted source and have been stored in conditions that do not pose an increased bio-security risk.

i Allowing birds to perch on top of drinker or feeder lines will not satisfy standard E 7.2 b). Birds perching on drinker lines could:

- a) contaminate drinker cups with faecal material and/or dirt from their feet
- b) restrict other birds from accessing the feeders/drinkers
- c) defecate on birds that are feeding/drinking.

i Scatter feeding can also be an effective form of enrichment as it encourages birds to perform their natural foraging behaviour. When scatter feeding, it is important to ensure a good quality feed pellet is used to prevent the pellet breaking up. Whole grain could also be used. Crumb feed should not be used, as this is likely to be difficult for the birds to find in the litter.

E 7.3

Perches must:

- a) be fit for purpose
- b) be designed to avoid damage/injury to the bird
- c) be accessible and easily seen by the birds
- d) be elevated
- e) support the whole of the bird's foot allowing the bird to curl its toes around the object without obstruction to express its normal perching behaviour
- f) be deep enough so that the chickens cannot puncture their own footpads by curling their toenails around the bottom of the perch.

- i** As a guide, scientific research/practical experience has shown that:
- a) chickens prefer to perch on lengths of rectangular, wooden baton with rounded edges and not on metal poles
 - b) perch height should be between 10 to 30cm from the floor depending on the size and breed of the chickens
 - c) chickens prefer a perch width of between 4 and 6cm
 - d) a perching space of 15 to 20cm per bird should be provided.

Approximately 20% of birds may choose to perch at any one time (this is important for calculating perch space per bird, i.e. based on 20% usage, 1000 birds will require 40m of perching space to achieve 20cm per bird)

Source: Wiers, W.J, Kiezenbrink, M & Middelkoop, K.V (2001) Slow growers are more active. World Poultry. V17, No. 8. Pp 28 - 29.

- i** Perches should be positioned at a height to facilitate perching at an early age. It is recommended that perches are made visible by, for example, painting them white or using brightly coloured adhesive strips, to help birds negotiate them during the dark period.

- i** With regards to E 7.3 a), crates and straw bales, for example, will not count towards the perching space requirement.

E 7.4

Where perches are aligned adjacent to each other there must be a gap of no less than 1.5cm between them to allow the chicken to grip the perch without risk of trapping its feet.

E 7.5

For adjacent perches to be counted as separate perch space they must be spaced at least 30cm apart.

E 7.6

When a perch runs parallel to a wall, the distance between them must be at least 20cm.

E 7.7

Perches must be positioned to minimise the fouling of any birds perching below.

Climate change and animal welfare

i The issues relating to climate change have the potential to significantly affect the welfare of farm animals. The RSPCA believes that it is now appropriate to react to, think ahead, and consider what can reasonably be done to mitigate any negative effects that adverse weather conditions may have/be having on the welfare of farm animals now and in the future.

Examples of important considerations include:

- The need to ensure that the farm buildings can withstand more severe weather conditions will become more necessary.
- Ensuring that ventilation systems are working efficiently will be even more important, particularly as poultry are vulnerable to adverse temperature changes.
- There may be reduced water availability for drinking, so ensuring that drinking water systems are working efficiently will be even more important.

The range

Where range is provided, the following standards are to be implemented in addition to all other relevant standards in the other sections of this document.

i See standard E 5.1 for space requirements.

- R 1.1** Producers must demonstrate that every effort has been made when applying for building planning permission to ensure the building has been positioned to enable the birds to make the most efficient utilisation of the range area.

i Due consideration should be given to the shape of the range and where the house is positioned on the range, as this can affect how well the birds use the total range area. For a long, narrow range, birds have to travel further to utilise the full range area. Also, a building that is positioned near to the range boundary would require birds to travel a greater distance to make full use of the range area than a building that is positioned within the centre of the range. Therefore, in this respect, the house should be positioned as near to the centre of the range as possible.

- R 1.2** Provisions must be made to prevent the area surrounding the building from flooding during wet weather.

- R 1.3** The outdoor area in free-range systems must:

- a) consist of pasture mainly covered by living vegetation
- b) be designed and managed in ways which ensure that the area around the house does not become poached.

i Managing the range area around the house, an area which can be heavily used by the birds, is particularly important, especially in helping prevent excessive wear and poaching. Examples of materials that could be used to help prevent poaching, and can also help to clean the birds' feet, include gravel (stones of at least 13mm in diameter, as smaller stones can become quickly capped), bark and slats/mesh that do not have the potential to damage the birds' feet. However, materials such as gravel and bark can be difficult to clean. Alternatively, concrete, which is easier to clean down, could be laid with plastic slats positioned on top. A combination of concrete and the other materials, e.g. gravel, could also be considered. The distance from the house that should be protected will depend on the individual unit, but as a guide should be at least 2m. Appropriate drainage from the roof and the amount of overhang should also be considered. The use of verandas may also help maintain this area. In addition, management of shade/shelters, natural cover and range enrichment should encourage birds to use the full range area and spend less time directly outside the popholes.

- R 1.4** Chickens with access to range must have access to a well-drained area for resting whilst outside the building.

- R 1.5** If birds have access to any commercial arable crop then:
- a) the crop may only be planted outside the perimeter of the range, to allow birds uninterrupted access to all parts of the range,
 - b) the crop must not be detrimental to bird welfare, and
 - c) birds must not be exposed to any crop management practice that may cause them harm, e.g. spraying, pesticide use, sowing, cropping etc.

i **Commercial arable crops are not regarded as acceptable vegetation and will be excluded from calculations for range stocking density.**

- R 1.6** Where there is a risk of a build-up of parasites or disease on free-range land, rotational grazing or other disease control measures must be applied.

- R 1.7** The range area must be actively managed to:
- a) encourage birds outside, away from the building, and to use the range area fully
 - b) prevent and/or manage muddy/worn areas
 - c) minimise any build up of parasites or other disease causing organisms.

i **The aims of active range management are to encourage birds to use all of the range (as they can be fearful of exposed areas), help maintain vegetation quality (including areas under shelters/cover) and offer protection and shelter. In addition to the existing standards, ways of satisfying R 1.7 may include:**

- further provision and appropriate distribution of natural cover such as trees, bushes and hedgerows
- provision of a variety of types of both natural and artificial shade/shelters
- additional provision of well-managed areas of natural enrichment, which may include suitable feed crops, herbs, trees and fruit bushes
- managing muddy/worn areas to aid recovery and prevent it reoccurring in the same area, e.g. improving drainage and rotation of any artificial shade/shelters.

Taking individual flock behaviour into account: some flocks may be reluctant to range and therefore need further encouragement by, for example, providing a ‘corridor’ of shade/shelter and natural cover from the house out onto the further reaches of the range.

- R 1.8** A contingency plan must be in place detailing how birds will be managed if they have to be housed for extended periods of time, for example during an outbreak of a contagious disease, such as Avian Influenza.

Access to the range

- R 2.0** Birds must be provided with access to the range for at least half their lifetime and, in the case of:
- birds to be labelled free-range, this must be no later than 28 days of age.
 - birds to be labelled organic, this must be no later than 35 days of age.

i Standard R 2.0 a) is based on the legal requirement for free-range chickens to be slaughtered at a minimum of 56 days of age and be provided with access to the range for at least half their lifetime¹. Similar legal requirements exist for organic chickens, but organic birds must live for a longer period (minimum 81 days), unless slower growing breeds are used, and be provided with access to the range for at least one third of their lives². Although there is no legal minimum slaughter age for slower growing breeds, such breeds tend to be slaughtered at around 70 days of age. Therefore, as organic birds live for a longer period compared to free-range birds, they are typically smaller, lighter and less well feathered at 28 days of age. Because of this, organic birds can be less able to cope with environmental factors, such as cold and adverse weather, and may require a slightly longer period indoors, especially during the colder winter months, where environmental factors can be carefully controlled. As such, some producers may not provide organic birds with access to range until approximately 35 days of age. This age is constant year-round due to the common practice of brood-and-move operations. However, it is strongly encouraged to provide birds with access to the range as early as possible.

¹Commission Regulation (EC) No 543/2008.

²Commission Regulation (EC) No 889/2008.

- R 2.1** Chickens kept in free-range systems must have continuous daytime access to the range.

R 2.2 The maximum distance travelled by a chicken within a building to reach a pophole leading onto the range must not exceed 14m.

i It is a legal requirement to provide free range birds with 4m of pophole space per 100m² of the building's floor space. As a result, the maximum width of a building is unlikely to exceed 25m, otherwise the amount of pophole space would occupy more than 50% of each side of the building or 100% of one side of the building. Therefore, realistically, birds would not have to walk more than 12.5m from the centre to the side of the house. As popholes are required to be approximately evenly distributed along the side of a building, a bird may have to travel more than 12.5m if they are not directly in front of a pophole when standing in the centre of the shed, i.e. they would have to travel diagonally across the shed to reach the nearest pophole. Hence a maximum distance of 14m has been set to allow for this.

i Based on a combination of practical experience, advice from producers and current practice the maximum distance travelled by a chicken to reach a pophole to access the range should not exceed 6m.

The distance a chicken has to travel to a pophole may influence both its ability and willingness to access the range. Popholes should be easily accessible to encourage chickens onto the range. If birds have to cover a large distance, potentially circumventing a number of obstacles including other birds, they may be discouraged from using the range.

The RSPCA Farm Animals Department will review the maximum distance travelled to a pophole in light of scientific and practical information regarding the welfare of chickens, and may amend this standard accordingly in the future.

R 2.3 The following minimum pophole numbers must apply:

Number of birds	Number of popholes
Up to 600	2
More than 600	1 per 700 birds (minimum of 2)

i It is strongly recommended that more than the minimum number of popholes are installed to allow for adjustment during unfavourable weather conditions. For example, to remain compliant on a windy day, some popholes could be closed to help maintain good conditions within the building if there are a sufficient number installed.

Similarly, it is strongly advised that birds are able to access the range from both sides of the building. Installing popholes down both sides of a house can allow greater control over environmental conditions within the house. For example, if driving wind/rain is affecting one side of the building then the popholes on this side can be closed whilst the popholes on the opposite side remain open. In addition, installing popholes down both sides of the building can help reduce the impact on the range area immediately surrounding the house.

R 2.4 The total length of the popholes must be at least 4m per 100m² of the surface of the house.

R 2.5 Each pophole must be no smaller than:

- a) 45cm high, and
- b) 50cm wide.

- R 2.6** Popholes must:
- a) be approximately evenly distributed along the entire length of the building where access to the range is possible
 - b) ensure birds have ready access to the range
 - c) ensure birds can access the range/building unhindered.
- R 2.7** Where there is a step at the base of a pophole, such as a concrete plinth, that hinders the birds' ability to easily access the range/building, ramps must be provided that run along the entire length of the pophole.
- R 2.8** Chickens must have a clear view of the range from within the building when adopting a normal standing position at the pophole.
- R 2.9** All the required popholes must be kept open to satisfy R 2.1 except when this is precluded by inclement weather conditions that will adversely affect the thermal comfort of the birds if some/all of the popholes were to be kept open.

Verandas

- R 3.0** The total floor area occupied by the veranda on either side of the house must occupy no less than 20% of the calculated floor area within the house.
- R 3.1** The construction of the veranda must allow for effective cleaning and disinfection.
- R 3.2** The sides of the veranda must be of solid, waterproof material from ground level to at least the top of the pophole.
- R 3.3** Where gale breakers or mesh-type material is used, any damage must be repaired promptly.
- R 3.4** The roof of the veranda must be entirely waterproof and insulated.
- R 3.5** Where provided, popholes leading from the house to the veranda must comply with standards R 2.3 to R 2.7.
- R 3.6** Popholes leading from the house to the veranda (where provided) and from the veranda to the range must be placed so as to avoid uneven air movement within the building.
- R 3.7** Litter must be provided in the veranda to satisfy standards E 3.3 and E 3.4.

Shade and shelter

R 4.1 Overhead shade and shelter (natural and/or artificial) must:

- a) be of sound construction, secure and not pose any welfare risks, including injury, to the birds
- b) be of sufficient height to ensure all birds can adopt a normal standing position under it, with sufficient head space
- c) offer adequate protection from inclement weather and overhead predators
- d) be provided at an area of at least 8m² per 1,000 birds
- e) be available at all times, including from when the birds first have access to the range
- f) be distributed appropriately to encourage full use of the range
- g) be positioned at varying distances from the house.

(i) Free-range chickens should have access to areas of shelter to not only offer cover from adverse weather conditions but also offer regions of variation and enrichment and encourage them to use the range. Both natural and artificial shelter is recommended. Research has demonstrated that chickens prefer taller vegetation. Natural shelter could include the planting of trees and shrubs or tall growing, semi-permanent vegetation that can be easily established and removed, such as artichoke and kale. Artificial shelter could include the erection of sun parasols, the provision of trailers and simple shelters constructed of four downward posts and a solid roof.

The amount of total shelter provision (calculated in m²) should be calculated on the basis of the formula: $m^2 = ((N \times 0.3)W) / 38$ where N is the number of birds in the flock, W is the expected average bird live weight at depopulation and 38 is the recommended stocking density for shelter provision. For example, 1000 birds reared to 2.2kg and stocked at 38kg/m² will require a minimum total shelter area of 17.4m² (i.e. $m^2 = ((1000 \times 0.3)2.2) / 38$). This could take the form of 2 x 8.7m² areas, for example.

(i) Calculation of the overhead shade/shelter area referred to in R 4.1 is based on the actual and accessible amount of cover provided underneath. For example, hedgerows may be included if they can provide shade at all times of day and there is enough room underneath for birds to access. Where trees are deciduous or immature, other forms of shade/shelters will need to be provided during the period in which they do not provide sufficient cover. Trailers and simple constructions of four vertical posts with a solid roof can provide acceptable forms of artificial shelter.

R 4.1.1 Some of the shade and shelter provisions must be positioned within 20 metres of the house.

(i) Trees should be positioned far enough apart to allow good growth of ground cover.

- R 4.2** Natural cover must be present in the form of existing or newly planted trees/shrubs/other vegetation at an area equal to at least 5% of the total range area (this may include natural cover meeting the requirements of R 4.1).

i Research and experience has shown the potential of natural cover to help encourage birds to use the range more fully. The requirements of R 4.2 differ to those of R 4.1 in that 'natural cover' focuses on enrichment of the range, while 'shade and shelter' must offer actual overhead protection at all times. For any newly planted natural cover, the area that the vegetation is expected to cover when mature will be taken into account for calculating compliance.

- R 4.2.1** Additional facilities, or designated existing natural elements, must be provided for dustbathing and exploration:

- a) in at least 1 area per 2,000 birds
- b) in at least 2 areas.

i Well managed and positioned brushings from trees and covered sand areas are examples of facilities that can help to provide extra opportunity for chickens to carry out exploration and dustbathing and can also help to encourage the whole range area to be used.

Management

A high degree of caring and responsible management and stockmanship is vital to ensure good animal welfare. Managers and stock-keepers need to be thoroughly trained, skilled and competent in animal husbandry and welfare, and have a good working knowledge of their system and the livestock under their care.

- M 1.0** All records and other documentation that the '*RSPCA welfare standards for meat chickens*' require the producer to keep and maintain, must be made available to the RSPCA Assured field staff and RSPCA Farm Animals Department staff on request.

Managers

- M 1.1** Managers must ensure that all stock-keepers:
- a) have access to a copy of the current version of the '*RSPCA welfare standards for meat chickens*'
 - b) are familiar with its content
 - c) understand and apply its content in their specific areas of responsibility.
- M 1.2** All farm managers and assistant farm managers must have undertaken or be working towards suitable recognised validated poultry training.
- M 1.3** Managers must:
- a) ensure all stock-keepers have completed relevant and adequate training and can satisfy the RSPCA Assured Assessor and RSPCA Farm Livestock Officer of their competence in practical circumstances
 - b) develop and implement plans and precautions to prevent and cope with emergencies such as fire, flood, breakdown of environmental control systems or interruption of supplies, e.g. food, water, electricity
 - * c) provide an emergency action board, sited in a prominent position that is visible to all farm staff and the emergency services, highlighting the procedures to be followed by those discovering an emergency (e.g. a fire, flood, power failure): the location of water sources for use by the fire brigade; a map grid reference, GPS co-ordinates and a postcode for the location of the unit
 - d) maintain records of production data for each house, which include documentation on:
 - i. the breed/s of chicken being reared
 - ii. details of the number of birds placed
 - iii. incoming and outgoing stock
 - iv. the daily mortality (the cause of death must be stated where this can be identified)
 - v. the number culled (including reasons for culling)
 - vi. details of the number of birds removed for slaughter
 - vii. the average weight of birds removed for slaughter
 - viii. feed consumption
 - ix. daily water consumption (see FW 2.10)
 - x. maximum and minimum temperatures
 - xi. relative humidity
 - xii. ventilation (including settings and any necessary changes)
 - xiii. any medication provided.
 - e) develop and implement a transport plan to RSPCA Assured approved abattoirs which minimises waiting time for the birds.

Stock-keepers

- M 2.0** For existing or new equipment which is used in management, e.g. heaters, lighting, ventilation, stock-keepers must be able to:
- demonstrate an ability to operate the equipment competently
 - demonstrate the ability to carry out routine maintenance
 - recognise common signs of malfunction
 - demonstrate knowledge of action to be carried out in event of malfunction.
- M 2.1** Prior to being given responsibility for the welfare of livestock, stock-keepers must be properly trained and competent to:
- recognise signs of common diseases
 - know the appropriate actions for treatment of common diseases
 - recognise signs of normal behaviours, abnormal behaviour and fear
 - understand the concept of stress and the signs that indicate good health and welfare
 - understand the environmental requirements for chickens, including their drinking and feeding needs
 - treat chickens in a positive and compassionate manner
 - recognise a potential welfare problem in its earliest stages, enabling them to identify the cause and put matters right immediately.
- M 2.2** Stock-keepers must:
- be able to demonstrate their proficiency in procedures that have the potential to cause suffering, e.g. culling
 - be aware of the welfare problems associated with poor litter management, e.g. hockburn, foot pad lesions and breast blemishes (see Appendix 4, 5 and 6)
 - understand the factors that affect litter condition.
- M 2.3** Training relating to M 2.1 must be validated.

i Acceptable validated forms of training include that offered by a recognised training provider to at least NVQ/SVQ level or equivalent, or a formal in-house training programme.

It is strongly recommended that producers adopt the Poultrymeat Training Initiative – Poultry Passport – as the formal route for industry training and training recognition. This may become mandatory in the next standard review.

- M 2.4** All training must be recorded.

Inspection

- M 3.1** Birds, and the facilities on which birds depend, must be inspected a minimum of 3 times daily.
- M 3.1.1** At least one of the inspections relating to M 3.1 must be sufficiently thorough to identify any bird that is showing signs of poor health or injury.
- M 3.2** The records of inspection must be dated, signed and the time of inspection noted.
- M 3.3** On completion of inspection, records must be kept of ill and injured birds, including the causes.

M 3.4 Any welfare problems seen during an inspection must be dealt with appropriately and without delay.

(i) Welfare problems of sufficient severity that they should have been noticed on previous inspections and dealt with, shall be taken by the RSPCA Assured Assessor or RSPCA Farm Livestock Officer as evidence of negligence of duties by the stock-keeper.

M 3.5 Work routines and practices must be developed, and where necessary modified, to ensure that chickens do not become fearful and are not frightened in avoidable ways.

M 3.6 All movement throughout the unit must be slow and deliberate, both to alleviate fear and reduce possible injury to birds.

Independent welfare audits

(i) Independent welfare audits are a good way of helping ensure that on-farm standards, particularly those that have a direct impact on bird welfare and can change during the lifetime of a flock, are being implemented and maintained at all times throughout the year and between any formalised farm assurance scheme assessment visits.

(i) For clarity, these independent welfare audits, termed 'welfare audits,' do not include those conducted by either RSPCA Assured or the RSPCA as part of the RSPCA Assured certification process.

(i) The welfare audit does not have to include an assessment of all the '*RSPCA welfare standards for meat chickens*', such as those relating to the presence and upkeep of paperwork. However, the audit is to focus specifically on those standards that have a direct impact on bird welfare and can change on a frequent basis during the lifetime of a flock, including an assessment of stock-keeper ability, performance and competence. See Appendix 1 for a full list of standards to be included within the welfare audit.

M 4.1 Producers must ensure that a welfare audit is carried out:

- a) to include an assessment of all the standards listed in Appendix 1
- b) by a welfare auditor (see standard M 4.4)
- c) on all houses where the '*RSPCA welfare standards for meat chickens*' are being implemented
- d) on a regular basis and in any case at least twice per year.

M 4.2 The welfare audits must be approximately evenly distributed throughout the year.

M 4.3 At least one of the welfare audits must take place in the last 10 days prior to slaughter of the flock.

M 4.4 The welfare auditor, who conducts the welfare audits, must be:

- a) independent from the direct management of the farm
- b) suitably qualified and/or experienced to conduct the audit.

i A suitable person to conduct the welfare audit would be the company Fieldsman (or, if the company does not have a Fieldsman, someone with an equivalent role within the company); a qualified vet; or an independent consultant with a good knowledge of chicken production.

M 4.5 Welfare audits must be unannounced.

i For welfare audits to be most effective, the producer should not be given any advance warning of the visit. However, it is accepted that in some circumstances the producer may need to be contacted on the day of the welfare audit to arrange a suitable time for the visit.

M 4.6 For each house, a record of the welfare audit must be kept, which shows:

- a) the date of the audit
- b) the name of the person who undertook the audit
- c) the age of the flock at the time of the visit
- d) the outcome of the audit including a list of all the standards not being fully met
- e) the action to be taken to rectify each standard not being fully met (if relevant)
- f) verification that the audit was unannounced (if the producer was given any advance warning of the visit this must be stated)
- g) the signature of the person undertaking the audit
- h) the signature of the stock-keeper/farm manager.

i Appendix 1 provides a template for the audit process.

M 4.7 Any welfare problems identified during a welfare audit must be dealt with appropriately and without delay to rectify the problem.

M 4.8 There must be a process in place to:

- a) ensure that all standards raised as not being fully met during the welfare audit are rectified
- b) prevent the same standards being raised as not being fully met at future welfare audits.

Equipment

* **i** In relation to artificial ventilation systems and their alarms, the Welfare of Farmed Animals (England) Regulations 2007 (SI 2007 No.2078), Schedule 1, paragraphs 20-21, states:

Paragraph 20. Where the health and well-being of the animals is dependent on an artificial ventilation system:

- a) provision must be made for an appropriate back-up system to guarantee sufficient air renewal to preserve the health and well-being of the animals in the event of failure of the system; and
- b) an alarm system (which will operate even if the principal electricity supply to it has failed) must be provided to give warning of any failure of the system.

Paragraph 21. The back-up system referred to in paragraph 20(a) must be thoroughly inspected and the alarm system referred to in paragraph 20(b) tested at least once every seven days in order to check that there is no defect, and, if any defect is found at any time, it must be rectified immediately.

- M 5.1** Stock-keepers must inspect the equipment, including the automatic equipment, upon which chickens depend, at least once daily to check that there are no defects.
- M 5.2** Where a defect relating to M 5.1 is found it must be rectified immediately.
- M 5.2.1** If M 5.2 is impracticable, such measures as are required to safeguard the birds from suffering unnecessary pain or distress as a result of the defect must:
- a) be taken without delay
 - b) be maintained until the defect is rectified.
- M 5.3** Alarms fitted to automatic equipment on which birds depend, i.e. feeders, drinkers and ventilation, must not be deactivated or turned onto silent when birds are occupying the house.
- M 5.4** The alarms must be checked daily to ensure they are in correct working order.
- M 5.4.1*** Where buildings rely totally or partially on automatic ventilation systems they must have an alarm system that:
- a) responds to a failure in the:
 - i. power supply to the equipment
 - ii. equipment to maintain control of the house temperature
 - b) alerts a responsible and competent stock person to address the issue.

* **i** Suitable alarm systems include: a bell or other audible alarm if someone is permanently based on site, and/or a pager, an alarm attached to a telephone or similar, to alert personnel off site.

- M 5.5** Additional equipment or means of ventilation must be available (whether automatic or not) which, in the event of such a failure of the ventilation system, will provide adequate ventilation so as to prevent the birds from suffering unnecessary distress as a result of the failure.
- M 5.6** An auxiliary power supply which is capable of providing instant start and power to the house and all equipment within the house for a 24 hour period must be situated on site.
- M 5.6.1** The power supply must be tested once weekly and the outcome of the test recorded.

Protection from other animals

- M 6.1*** A written Wild Animal Control Plan (WACP) must be:
- in place, and
 - implemented on farm.
- M 6.2*** Levels of potentially harmful wild animals (e.g. rodents and birds) must be managed humanely to avoid:
- the risk of disease spread to livestock
 - damage to livestock buildings and the services on which livestock depend
 - contamination and spoilage of feed.

*  In England and Wales, the following legislation applies to the management of wildlife:

- **Wildlife and Countryside Act 1981**
- **Animal Welfare Act 2006**
- **The Conservation of Habitats and Species Regulations 2010**
- **Protection of Badgers Act 1992**
- **Pests Act 1954**
- **The Spring Traps Approval (England) Order 2012**
- **The Spring Traps Approval (Wales) Order 2012**
- **The Small Ground Vermin Traps Order 1958**
- **Food and Environment Protection Act 1985**
- **The Control of Pesticides Regulations 1986**
- **Animals (Cruel Poisons) Act 1962**

Equivalent legislation applies in Scotland and Northern Ireland.

- M 6.3*** The primary means of protecting livestock from wild animals, as documented in the WACP, must be by:
- physical exclusion methods
 - the removal of elements in the vicinity that might encourage the presence of wild animals
 - maintaining units in a clean and tidy condition to minimise the risk of wild animals gaining access to the unit.

* **(i)** Physical exclusion measures are the most humane and effective methods of providing protection from wild animals.

Measures should only be applied after the area has been checked and cleared of elements that could encourage the presence of wild animals, as applying some measures can interfere with rodent behaviour and encourage them to spread to other areas. Humane methods of protecting livestock from other animals include:

- construction/maintenance of fencing appropriate for excluding the wild animals in question
- removal of shelter/cover (e.g. weeds, heaps of rubble, broken equipment etc) in the area surrounding livestock buildings
- removal/protection of obvious food sources
- maintenance of drains
- maintenance/proofing of buildings against wild animals
- storing bedding away from livestock.

In free range systems it is appreciated that elements, such as natural cover, are provided in order to encourage birds on to the range. Some of the methods listed above are intended to remove unnecessary and unintended harbourage sites, as opposed to elements specifically provided for other purposes.

* **(i)** Rodents are less likely to inhabit an area if there is no cover or food supply. Reduced food availability will also increase the likelihood of rodents consuming bait, where applied. When stores or livestock buildings are empty, the opportunity should be taken to clean spaces and introduce any necessary controls before restocking.

M 6.4* Where any method of lethal control is being considered, a site survey of the unit must be carried out before applying the control, i.e. bait or traps, identifying:

- a) the type, level and extent of the problem species
- b) any non-target animals likely to be present (including pets and children)
- c) any maintenance and proofing issues.

M 6.5* Where any lethal method of control is used, its use must have taken into account the results of the site survey (see M 6.4).

M 6.6* The WACP must include provisions that specifically exclude the following methods of control:

- a) snaring
- b) gassing
- c) vertebrate glue traps.

M 6.7* Long-term baiting must not be used as a routine rodent control measure.

* **i** In relation to M 6.7, site plans should therefore highlight potential high risk areas for wild animal activity (rather than permanent baiting locations).

Long-term baiting should not be necessary if bait traps are applied effectively.

Long-term baiting can also contribute to bait resistance in rodents.

* **i** The RSPCA is opposed to the use of poisons that cause animal suffering and it is important not to rely solely on the use of rodenticide. The RSPCA is concerned about the welfare of all animals that have the capacity to suffer, and therefore all alternative forms of deterrent and humane control should be exhausted before resorting to the use of poisons for rodents.

* **i** Any baiting programme should be considered carefully and justified in risk assessments for each location where used. Consideration should be given to using non-toxic baits in order to ascertain the presence of rodents, which may necessitate the use of rodenticide.

M 6.8* When bait and/or traps are used, record of their use must be kept and:

- a) state the location of the bait/traps
- b) state what bait/traps were used
- c) state the volume/number of bait/traps placed
- d) state the name of the person who placed the bait/trap
- e) be retained for at least two years.

M 6.9* Bait and traps must:

- a) be placed in suitable positions, and
- b) be sufficiently protected to avoid harming non-target animals.

M 6.10* Bait must be used according to the manufacturer's instruction for:

- a) storage
- b) usage, including areas of use and replenishment
- c) disposal.

M 6.11* Traps must be:

- a) used according to the manufacturer's guidelines
- b) maintained in good order
- c) disposed of appropriately if no longer fit for purpose, e.g. have broken
- d) stored safely and securely.

M 6.12* Bait points must:

- a) be monitored regularly, and
- b) records of monitoring must be kept, including:
 - i. levels of any activity at each bait point
 - ii. any missing or disturbed bait
 - iii. the name of the person responsible for monitoring the bait points.

- M 6.13*** Trap points must:
- a) be monitored at least twice a day, ideally at dawn and dusk, and
 - b) records of monitoring must be kept, including:
 - i. levels of any activity at each trap
 - ii. any missing or disturbed traps
 - iii. the name of the person responsible for monitoring the traps.

M 6.14* Any injured, sick or dying wild animals found – that have been targeted for control – must be humanely dispatched immediately to prevent further suffering.

* **i** **Regular replenishment of bait will help to prevent sub-lethal doses, which can result in a build-up of resistance to the active ingredient.**

M 6.15* Where bait is used, dead animals must be disposed of safely, in line with the manufacturer's product label.

* **i** **Safe disposal of wild animals that have died as a result of poisoning reduces the risk of secondary poisoning in non-target species, such as domestic and other wild animals (including birds), that may consume the carcasses.**

- M 6.16*** Once treatment is complete, all traps and traces of bait must be:
- a) removed
 - b) disposed of/stored according to the manufacturer's instructions.

M 6.17* Wild animal control methods must be covered by the farm COSHH assessment, where required.

- M 6.18*** Managers must ensure that all stock-keepers:
- a) have access to a copy of the Campaign for Responsible Rodenticide Use '*UK Code of Best Practice: Best Practice and Guidance for Rodent Control and the Safe Use of Rodenticides*'
 - b) are familiar with its content
 - c) understand and apply its content.

* **i** **Producers are strongly encouraged to complete the free, self-study training course on rodent control available at: <http://rodentcontrolonfarms.co.uk/login/index.php>. The content of the course is based on a LANTRA course and is approved by the Campaign for Responsible Rodenticide Use. Further information is available in the AHDB document '*Rodent Control on Farms: A practical guide to effective and responsible use of bait and rodenticides*'.**

M 6.19* Domestic animals must not have access to the unit, other than farm dogs and cats.

M 6.20* Farm dogs and cats must not be permitted in the chicken house.

- M 6.21*** Farm dogs and cats must be:
- a) in a healthy condition
 - b) regularly wormed (record to be kept in the medicine book or VHWP).

Health

The environment in which livestock are housed needs to be conducive to good health.

Health and welfare monitoring

i The objective of health and welfare monitoring is to implement a process that optimises the welfare, including the health, of the birds on the farm.

The Veterinary Health and Welfare Plan (VHWP) should be aimed at reducing the risk of disease challenges and maximising the health and welfare of the flock.

H 1.1 Provisions must be in place to ensure the welfare requirements of the chickens are met at all times.

i Evidence that birds are exhibiting signs of injury, discomfort or distress caused by inadequate facilities or stockmanship will be taken as a non-compliance with standard H 1.1.

H 1.2 Chickens must be under the routine care of a named veterinary surgeon/practice.

H 1.3 There must be a written Veterinary Health and Welfare Plan (VHWP) in place that is:

- a) specifically tailored to the individual farm
- b) available as a single document.

i The template proposed in Appendix 2 can be adopted to satisfy H 1.3.

H 1.4 All documentation and information contained within the VHWP must be developed, reviewed, modified and updated:

- a) regularly and in any case at least annually, and
- b) in consultation with, and approved by, the veterinary surgeon.

i Proof of compliance with standard H 1.4 will be demonstrated by the VHWP being signed and dated by the veterinary surgeon and the producer.

i During each visit the veterinary surgeon should cover the following areas:

- health of the current flock
- health of the previous flock (from examination of health and performance records)
- vaccination programmes
- antibiotic and other medication use
- review of management and husbandry practices.

H 1.5 Within the VHWP, the producer must:

- * a) identify and list all the health and welfare conditions currently affecting and likely to affect the birds on the farm (see H 1.6)
- b) document (i) how (ii) where and (iii) when, including how often, each condition will be assessed (see H 1.8). Where these parameters have been specified within this document they must be adopted (see Health monitoring at the processing plant section)
- * c) for each condition, develop and implement a plan of action – a Welfare Action Plan (WAP) – which clearly sets out the measures that will be taken to prevent any increase in, and/or reduce the level of that condition on the farm
- d) for each condition, set a trigger level - data arising from H 1.7 must be used to inform and justify the level set.

i A trigger level is a maximum figure set for a condition that if exceeded requires action to be taken to reduce the level of that condition back below the level set.

For some conditions, the trigger levels to be used are specified within this document.

If the health and welfare monitoring process is successful, then there should be a gradual reduction in the trigger levels set for each condition over time, as the prevalence of that condition should be reducing.

H 1.5.1 If a trigger level is exceeded for a condition, the producer must:

- a) inform the veterinary surgeon, and
- b) review and modify the WAP so that the measures implemented reduce the level of the condition below the trigger level set (this action must be recorded within the VHWP).

H 1.6 The following health and welfare conditions must be included under H 1.5 a):

- a) lameness
- b) those conditions listed under S 4.1
- c) any health and welfare conditions that have been identified as causes for concern by the veterinary surgeon or Farm Assurance scheme personnel (where applicable)
- d) emaciation (i.e. emaciated birds found on-farm)
- e) runts.

i In relation to H 1.6 b), the following conditions listed under S 4.1 do not need to be included:

- leg damage,
- wing damage,
- DOA's.

H 1.7 The level of each condition listed in H 1.5 a) must be:

- a) recorded for each flock, and
- b) monitored for the farm.

i Some conditions, such as hock burn, pododermatitis and breast blisters, will be monitored at the processing plant (see S 4.1) and this data can be used for the purpose of H 1.7 a).

H 1.8 Each health and welfare condition must be recorded at the times that will provide the best indication for the level of that condition for the flock.

- H 1.9** Where the severity of a health and welfare condition can be objectively scored and assessed, producers must:
- a) develop/adopt a score/scale based guide (an assessment guide) to assess the different levels of severity for the condition
 - b) state at what level of severity a bird will be recorded as having the condition (e.g. at what score).

 **For some conditions, the assessment guides to be used are presented within this document.**

- H 1.9.1** Assessment guides must:
- a) be objective
 - b) clearly differentiate between different levels of severity for the condition, e.g. minor, mild and severe
 - c) provide consistent results within and between observers
 - d) provide reliable and accurate data for the level of the condition for the flock.
- H 1.10** All staff who have responsibility for the birds must be trained and competent to:
- a) use the assessment guides
 - b) observe the clinical conditions
 - c) record the clinical conditions
 - d) implement the WAPs.
- H 1.11** Flock performance data, including mortality, culls and water consumption must be monitored daily for signs of disease and production disorders.
- H 1.11.1** Growth rate must be recorded weekly.
- H 1.11.2** Flock performance and growth rate data must be compared with expected results/targets for indications of disease or production disorders.

- H 1.12** The following documentation for the farm must also be included within the VHWP:
- a) an infectious disease and vaccination plan with details of any vaccines required to be used and boosters required
 - b) a salmonella control programme
 - c) a parasite control plan that specifies strategies and worming programmes, including medicines to be used
 - d) a general poultry house hygiene policy to include cleaning, disinfection and 'turn around' (between flock) period and procedures
 - e) an infectious disease control policy for controlling the spread of infectious disease between flocks, which must include the management of infected birds and possible options for humane emergency killing
 - f) procedures for the management of birds that are in poor health or injured including responsibilities and methods for humane culling
 - g) a general site hygiene and biosecurity policy.

- i** The vaccination plan should ensure that birds are protected from the following:
- i. diseases known to be active on the farm
 - ii. disease active on premises in the vicinity
 - iii. other disease from which the birds might reasonably be expected to be protected, (e.g. Gumboro disease, infectious bronchitis, avian pneumovirus).

Chicks should only be derived from breeders vaccinated effectively to ensure high and consistent maternal antibodies to certain diseases, e.g. Gumboro disease.

- i** Disease agents can be introduced to a farm via birds, people, equipment and vehicles. Control over visitors entering the farm will help to eliminate the likelihood of transmission of disease to a unit.

Preventative and control measures include records of site traffic and visitors - including where they have travelled from, visits to other poultry sites and any illness which could introduce a disease challenge.

Any vehicles entering the site should be subject to wheel spray disinfection and all necessary visitors should be provided with adequate protective clothing and boots. A visitors' book should be well maintained and used by all visitors.

H 1.13 The VHWP must be made available as appropriate to all staff who have responsibility for the birds.

H 1.14 WAPs and documentation relating to H 1.12 must:

- a) be practically implemented on the farm
- b) be adhered to by all staff who have responsibility for the birds and other relevant farm staff and visitors
- c) have review dates that have been agreed with the veterinary surgeon at the time of development/review.

H 1.15 If there is a substantial change to the system, its management or a husbandry practice that is likely to have an impact on the welfare of the birds then an additional visit from the vet and review of the relevant VHWP documents must be considered.

- H 1.16** All records, including those relating to previous flocks, must be:
- a) accurate, and
 - b) presented in an ordered and up-to-date fashion.
- H 1.17*** The manager must ensure that during veterinary visits, the veterinarian is satisfied that the overall welfare of the flock is satisfactory.

Health and welfare

- H 2.0** Any mutilation of chickens is prohibited.
- H 2.1** Birds must be humanely killed without delay if they:
- are in severe pain that is uncontrollable
 - are injured, ailing or distressed to such an extent that they should be segregated from the flock, or
 - have difficulty walking or reaching food or water, or
 - have a gait score of 3 or more (as defined in the information box below)
 - are runts.

i A bird's level of lameness can be determined by assessing its walking ability. The following scoring system is based on the University of Bristol's Gait Scoring Guide:

Score 0 - The bird displays smooth, fluid locomotion

Typically the foot is picked up and put down smoothly and each foot is brought under the bird's centre of gravity as it walks (rather than the bird swaying). Often, the toes are partially curled while the foot is in the air.

Score 1 - The bird has a slight defect in its gait that is difficult to define precisely

The bird may take unduly large strides, be unsteady or wobble when it walks, which produces an uneven gait, but the problem leg is unclear/cannot be easily identified.

Score 2 - The bird has a definite and identifiable gait abnormality, but this does not affect its ability to move

The bird may make short, quick, unsteady steps with one leg, but is not sufficiently lame to seriously compromise its ability to move, i.e. manoeuvre, accelerate and run.

Score 3 - The bird has an obvious gait defect that affects its ability to move (bird welfare is compromised)

The bird may have a limp, jerky or unsteady strut, or splay one leg as it moves. The bird often prefers to squat when not coerced to move, and will not run.

Score 4 - The bird has a severe gait defect

The bird is capable of walking, but only with difficulty and when driven or strongly motivated. Otherwise it squats down at the first available opportunity.

Score 5 - The bird is incapable of sustained walking on its feet

Although it may be able to stand, the bird cannot walk except with the assistance of the wings or by crawling on the shanks.

N.B. Not all the attributes of a score are necessarily identified in a bird.

Where it is difficult to determine between scores 2, 3 and 4 using the Bristol Gait Scoring Guide, the following assessment criteria, developed by the University of California, can be used as an additional tool to aid assessment:

Score 2 - The bird will stand for longer than 15 seconds when undisturbed

Score 3 - The bird will not stand for 15 seconds or longer when undisturbed. The bird will also stand on both feet within 5 seconds of being encouraged (i.e. gentle nudging by the observer)

Score 4 - The bird will not stand on both feet within 5 seconds of being encouraged (i.e. gentle nudging by the observer)

The University of California assessment criteria is to be used to supplement the Bristol Gait Scoring Guide.

H 2.2 There must not be any overtly lame birds (Bristol gait score 4 or above).

i **Good leg health promotes optimal growth and good bird welfare. The causes of poor leg health are many and varied. Some relate to abnormal bone development while there are also nutritional and infectious factors involved. However, whatever the cause, lameness can be a serious welfare problem. Research has concluded that welfare is unduly compromised in birds with gait scores of 3 or more (as defined in the information box on gait scoring below H 2.1), as birds with such gait scores are likely to experience pain and discomfort. Anatomical evidence has shown that joint pathologies are likely to be painful in chickens in a similar way to humans.**

H 2.3 Where the level at a leg abnormality cull is greater than 3% to 42 days of age, this must be the subject of investigation (this investigation including the outcome, must be recorded).

H 2.4 When an outbreak of abnormal behaviour occurs, it must be tackled immediately by appropriate changes in the system of management.

H 2.5 There must be no recurring injuries of a similar nature seen on a number of birds attributable to physical features of their environment or handling procedures.

H 2.5.1 If recurring injuries are found, a programme of preventative action must be specified in the VHWP (see H 1.3).

i **Recurring injuries are those seen on a number of birds, with sufficient similarity to suggest they have a common cause. Injury is described as damage severe enough for the formation of granular scar tissue or defective bones or joints, and to an extent significantly greater than would be caused by accidental bumps or scratches.**

H 2.6 If the mortality level within a house is in excess of 0.3% in 24 hours, a veterinary investigation must be made.

Breed

- i** It is a legal requirement that: no animals shall be kept for farming purposes unless it can reasonably be expected, on the basis of their genotype or phenotype, that they can be kept without detrimental effect on their health or welfare (Schedule 1, paragraph 29, of the Welfare of Farmed Animals (England) Regulations 2000, as amended 2007).

H 3.0 Any chicken breed/s used must be accepted for use by the RSPCA.

- i** In order to ascertain whether a breed is accepted for use under the standards, please contact the RSPCA Farm Animals Department with the relevant breed details (see page (iv)).

Breeding companies/producers that wish to have a breed accepted should contact the RSPCA Farm Animals Department.

Decisions regarding breed acceptability will be based on defined criteria relating to the welfare of the breed. For such a decision to be made, data regarding the genetic growth rate and welfare of a breed may be requested from the breeding company and/or the breed may be required to be independently assessed according to the RSPCA Broiler Welfare Assessment Protocol. This protocol includes assessment of a number of key welfare parameters including growth rate, mortality and leg health. The full protocol can be viewed at www.rspca.org.uk/sciencegroup/faranimals/standards/chickens.

- i** The RSPCA is concerned about the practice of deliberately slowing the growth rate of fast growing broilers by adjusting either the quality or quantity of their feed to delay the time taken to reach slaughter weight, as can be the case when rearing fast growing broilers in free-range systems. For example, slowing the growth rate of a fast growing broiler to reach typical slaughter weight at 81 instead of 49 days of age.

Broilers should be fed a diet that allows them to achieve their genetic growth rate potential. Therefore, when selecting broilers, their genetic growth rate potential should be as closely matched as possible to the time required to reach the desired weight at the time of slaughter. For example, if a slaughter weight of 2.2kg is to be achieved at 81 days of age, then those breeds that have a complementary genetic growth rate potential, i.e. would reach 2.2kg at 81 days when fed a non-limiting diet that is freely available at all times, should be selected.

On-farm casualty killing/slaughter (culling)

H 4.1 Each farm must have provisions for the humane killing/slaughter of casualty chickens without delay.

H 4.1.1 Casualty killing/slaughter must be carried out by either:

- a) a named, trained, competent member of staff, or
- b) a licensed slaughterman, or
- c) a veterinary surgeon.

i It is not illegal to slaughter a bird to prevent further severe suffering if a method of humane slaughter is available on the premises and there is someone competent to undertake the procedure.

i The Humane Slaughter Association (HSA) has produced a booklet 'Practical Slaughter of Poultry: A Guide for the Small Producer'. Producers should obtain a copy of this booklet, from HSA, The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN.

H 4.2 The only permitted methods of on-farm casualty slaughter/killing are:

- a) hand held electrical stunning, immediately followed by neck cutting (see Manual Head Only Electrical Stunning section)
- b) neck dislocation
- c) captive-bolt (see standard H 4.8 a) to k)).

i Although the captive bolt device has been designed to effectively kill poultry, under current legislation it must be followed by neck dislocation or bleeding, except when used for emergency culling or during disease control operations.

H 4.2.1 Neck dislocation must involve stretching the neck to sever the spinal cord and cause extensive damage to the major blood vessels.

H 4.3 Equipment that crushes the neck (e.g. killing pliers) must not be used.

i Equipment that crushes the neck is neither quick nor humane.

H 4.3.1 Where it is necessary to restrain a bird prior to slaughter/killing the bird must not be shackled.

i Appropriate methods of restraint include the use of a bleeding cone or held manually by an assistant.

H 4.4 If there is any doubt as to how to proceed, the veterinary surgeon must be called at an early stage to advise whether treatment is possible or whether humane killing/slaughter is required to prevent suffering.

H 4.5 Where any bird is killed/slaughtered, it must be checked thoroughly to ensure it is dead.

H 4.6 All carcasses must be disposed of strictly according to current regional legislation.

H 4.7 A record must be kept of how and where all carcasses are disposed of.

H 4.8 Where a captive bolt device is being used:

- a) it must be maintained according to the manufacturer's guidelines
- b) it must be tested at least once per week
- c) it must be tested on each day of use, prior to being used
- d) birds must be restrained appropriately to enable accurate positioning of the device
- e) the muzzle of the device must be placed on the highest point of the head, on the midline, with the bolt aimed straight down
- f) the flat or convex head, which is suitable for broilers, must be used
- g) Cash Powerload 'E'.22 cartridges must be used, for cartridge powered devices
- h) if using the flat head, the air pressure must be at least 110psi, for compressed air devices
- i) if using the convex head, the air pressure must be at least 120psi, for compressed air devices
- j) the operator must check that the birds show signs indicating they have been properly stunned/killed
- k) if there are any signs that a bird has not been properly stunned/killed, it must be immediately re-stunned and killed using a back-up method.

i The bolt velocity should be tested using testing equipment supplied by the manufacturer. If this is not available, the condition of the components of the stunner must be thoroughly checked, with particular attention given to the state of the recuperator sleeves and the breech area.

i If in doubt, unconsciousness can be checked by the absence of a blink reflex when the cornea (the surface of the eyeball) is lightly touched. Presence of a blink reflex must be acted upon immediately: it does not necessarily indicate full consciousness but the return of this reflex after stunning is a sign of some brain function returning and indicates the possibility that consciousness may also be returning.

Medication

- H 5.1** Any medication used must:
- a) be legal for use in the UK
 - b) administered in accordance with UK and EU legislation.

i It is recommended that producers obtain, read and where appropriate, apply the advice contained within the latest version of the:

- ‘Guidelines on responsible use of antimicrobials in poultry production’, issued by the Responsible Use of Medicines in Agriculture (RUMA) alliance (RUMA, Acorn House, 25 Mardley Hill, Welwyn, Hertfordshire, AL6 0TT; www.ruma.org.uk).
- ‘Code of practice on the responsible use of animal medicines on the farm’, issued by the Veterinary Medicine Directorate
- ‘Veterinary Medicines: safe use by farmers and other handlers’, issued by the Health and Safety Executive.

i The use of antibiotics as feed additives has been legally prohibited since 1st January 2006. It is only legally permissible to use antibiotics therapeutically, i.e. for medicinal purposes.

- H 5.2** All medication given to birds must:
- a) only be used under the direction of a veterinary surgeon
 - b) be recorded in the VHWP (see H 1.3).
- H 5.3** All personnel involved in the administration of animal medicines must be competent to do so.
- H 5.4** A nominated person must:
- a) be responsible for the management of the medicine store
 - b) keep appropriate records for stock control purposes.
- H 5.4.1** Medicine administration records must include the following information:
- a) identity of medicine or therapy
 - b) batch numbers
 - c) quantity of medicine or therapy administered
 - d) identification of the bird or group of birds to which administered
 - e) the number of birds treated
 - f) date of administration
 - g) date treatment finished (if multiple treatment)
 - h) name of person administering the medicine or therapy
 - i) reason for treatment.
- H 5.5** Medicines must be:
- a) clearly labelled, stored and used in accordance with the label instructions
 - b) kept in a secure, lockable store that is:
 - i. safe from animals, children and birds, and
 - ii. separate from food producing areas.

- H 5.6** Written procedures must be in place, and must be followed at all times, for the safe disposal of pharmaceutical waste, needles and other sharps.

Biosecurity

- H 6.0** A record of all visitors to the farm must be maintained.
- H 6.0.1** The visitor record must include the following details of the visitor:
- a) name
 - b) organisation
 - c) date and time of arrival
 - d) recent visits to poultry sites and farms
 - e) certification that they are not suffering with any enteric illness.
- H 6.1** Where there is an identifiable and significant risk of visitors compromising the health and welfare of the birds they must not be allowed onto the site.
- H 6.2** The wheels of all vehicles entering and leaving the farm must be disinfected.
- H 6.3** Farm dedicated protective clothing must be supplied to all visitors.
- H 6.4*** Protective clothing must be washed or discarded between flocks.
- H 6.5*** On each occasion on entering/leaving a poultry house, all farm personnel and visitors must dip footwear.
- H 6.6*** A physical barrier footwear system, with dedicated footwear, must be provided at the entrance to each bird area.
- H 6.7*** The physical barrier must:
- a) be no less than 30cm high
 - b) be removable for washing or, if fixed, there must be appropriate drainage to allow effective cleansing of the barrier area.
- H 6.8*** Separate footwear must be worn on each side of the barrier.
- H 6.9*** On entry into a bird area, all staff and visitors must change into dedicated boots or use new disposable overshoes.
- H 6.10*** Hand sanitisers or hand wash facilities must be:
- a) present within reach of the physical barrier
 - b) used before entering and after exiting the bird area.
- H 6.11*** Toilets and hand washing facilities must be available and must consist of a basin with running water, anti-bacterial soap, and disposable towels or hand dryers.
- H 6.12** Defra approved disinfectants must be used.

i Producers should contact Defra for information on Defra approved disinfectants. Contact details can be found on the Defra website: www.gov.uk/government/organisations/department-for-environment-food-rural-affairs

- H 6.13** All disinfectants must be used in accordance with manufacturer's instructions.
- H 6.14*** Permanent standing water must not accumulate on the farm.
- H 6.15** The house must operate a period free of all livestock between flock cycles.

* Welfare Outcome Assessment

Welfare standards for farm animals are primarily based on 'inputs', i.e they describe what must be provided to the animals in terms of certain resources, such as housing, space, feed, veterinary care and management practices. However, it is important to know what effect these inputs are having on the welfare of the animals and therefore look at the 'outcomes' of these inputs, i.e. the impact of these inputs on the health, physical condition and behaviour of the animals themselves. This practice is known as 'Welfare Outcome Assessment'.

- * **i** RSPCA Welfare Outcome Assessment¹ has been developed for meat chickens and offers a practical and scientifically informed method to provide a more objective, animal-focused picture of the level of welfare being achieved on-farm for certain key welfare measures.

¹RSPCA Welfare Outcome Assessments are informed by AssureWel, a collaborative project led by the RSPCA, Soil Association and University of Bristol with a primary aim of developing farm animal welfare outcome assessments for use within farm assurance schemes.

- * **i** The following information is applicable to RSPCA Assured Scheme members only:
- Members of the RSPCA Assured scheme will receive a Welfare Outcome Assessment as part of their RSPCA Assured farm assessment visits. Additional Welfare Outcome Assessments may also be undertaken by RSPCA staff, such as Farm Livestock Officers.

WA 1.1* It must be ensured that a Welfare Outcome Assessment is conducted:

- a) according to the protocol in Appendix 8;
- b) using the assessment form in Appendix 8, or in the case of RSPCA Assured scheme members, the scheme's equivalent current Welfare Outcome Assessment form must be used;
- c) on a regular basis or, for RSPCA Assured scheme members, during each scheme assessment visit;
- d) i. by a suitably competent person that is independent from the direct management of the farm and,
 - ii. in the case of RSPCA Assured scheme members, by the relevant scheme personnel.

- * **i** With reference to WA 1.1 c), Welfare Outcome Assessments should ideally be carried out at least every 12 months.

- * **i** With reference to WA 1.1 d) i., a suitable person to conduct the assessment would be a qualified veterinary surgeon, an independent consultant with an adequate knowledge of chicken welfare and production; a Farm Assurance Scheme Assessor; the farm's company fieldsman, or a person with an equivalent role.

WA 1.2 * Copies of the completed Welfare Outcome Assessment forms (WA 1.1 b)) must be kept:

- a) on the farm where carried out
- b) for a minimum of five years.

WA 1.3 * With regard to WA 1.2, the document must include the following information:

- a) the date of the audit
- b) the house/s or flock/s assessed
- c) the name, job title and organisation of the person who carried out the assessment
- d) the age and weight of the flock at the time of assessment
- e) any responsive action to be taken
- f) any signature of the person undertaking the assessment.

WA 1.4 * Any health/welfare issue identified as an area of concern by the Welfare Outcome Assessment (WA 1.1) must be included within the VHWP (see standards H 1.1 to H 1.16)

*



The Welfare Outcome Assessment will not always provide a definitive farm level prevalence of welfare for the measures assessed. The assessment has been designed to identify areas of welfare concern that are likely to be more wide-spread on the farm and therefore warrant further investigation and careful monitoring. Welfare Outcome Assessments can also indicate areas where welfare is being safeguarded.

Transport

Animal transport systems need to be designed and managed to ensure livestock are not caused unnecessary distress or discomfort. The transport and handling of livestock needs to be kept to an absolute minimum. Personnel involved in transport need to be thoroughly trained and competent to carry out the tasks required of them.

Management

T 1.0 All birds must be caught under the direct supervision of a senior member of the catching team, e.g. foreman, gang leader, who has been approved by RSPCA Assured.

i The producer/farm manager may have their own team approved by RSPCA Assured if organising catching themselves.

T 1.1 All personnel involved in the catching and transportation of birds must be:

- a) properly trained, and
- b) competent to carry out their duties.

i Where possible, training relating to T 1.1 should be validated.

i Anyone involved in the catching and handling of poultry has a legal obligation to 'avoid injury and unnecessary suffering and to ensure the safety of the birds during transport, loading and unloading' (Regulation (EC) No 1/2005).

T 1.1.1 Inexperienced catchers must be closely supervised by an experienced operator.

T 1.2 Catching team leaders must:

- a) be familiar with the content of the Humane Slaughter Association DVD '*Poultry Welfare – Taking Responsibility*'
- b) convey the relevant content to other members of the catching team
- c) ensure that the recommendations are applied where appropriate.

i Where possible all members of the catching team should be familiar with the content of the Humane Slaughter Association DVD '*Poultry Welfare – Taking Responsibility*'.

T 1.3 Managers must prepare full and detailed written instructions, with regards to the catching and handling of the birds, for the catching staff.

i The instructions referred to in T 1.3 should include the information from standards T 2.5 to T 2.21.

- T 1.4** All catching staff must:
- a) have a copy of instructions relating to T 1.3
 - b) be aware of their duties.
- T 1.5** It must be the farm manager's, or named supervisor's, responsibility to ensure:
- a) the welfare of the birds throughout the catching process
 - b) that all catchers work in accordance with the '*RSPCA welfare standards for chickens*'.
- T 1.6** At least one nominated senior member of the catching team must be made responsible for:
- a) supervising, monitoring and maintaining RSPCA welfare standards throughout the catching process, including loading of birds onto the transport vehicle.
 - b) inspecting transport modules to ensure they are intact to eliminate the risk of injury to the birds during loading and transport.
- T 1.7** Procedures must be in place to ensure that any concerns of the catching team/farm personnel regarding the welfare of the birds during catching are:
- a) recorded
 - b) raised with the appropriate farm personnel/catching team leader (as appropriate).
- T 1.7.1** Any concerns raised must be dealt with appropriately to prevent the same concern/s being raised for subsequent flocks.

Catching

- T 2.1** No bird must be deprived of food for more than 10 hours prior to slaughter.
- T 2.2** Birds must have access to water up to the time of catching.
- T 2.3** Birds which are visibly unfit before loading must:
- a) not be transported
 - b) be humanely culled without delay (see H 4.1 to H 4.8).
- T 2.3.1** If catching teams are to be responsible for culling birds when necessary, at least one member of the catching team must be nominated to be responsible for the humane culling of any bird that is deemed unfit for travel (casualty birds).
- T 2.3.2** The nominated person referred to in T 2.3.1 must be trained and competent to cull birds humanely in accordance with standards H 4.2 (permitted methods) to H 4.5 (bird assessment) and H 4.8 (captive bolt requirements).
- T 2.4** Catching must take place in low or blue lighting to minimise fear reactions of the birds.

- T 2.5*** Where a proportion of birds are being removed from a house prior to depopulation, i.e. where it is not practicable to depopulate the house on the same day:
- a) the catching process must be managed sympathetically to minimise any detrimental impact on the welfare of those birds remaining in the house (see information box below), and
 - b) those birds remaining in the house must be provided with feed and water immediately after catching.

i The removal of a proportion of birds from a house for slaughter can compromise the wellbeing of those birds not being caught. For example, those birds to remain in the house after catching can be affected by:

- setting up the house for catching
- temporary withdrawal of feed and water
- noise and disruption from the catching process
- forklift operation in the house
- the condition of the house after catching
- the disturbance caused by returning the house to its condition prior to catching
- thermal discomfort from rapid temperature changes
- compromises in biosecurity, e.g. the introduction of modules and a forklift, which may not have been cleaned properly thus introducing infectious agents, such as campylobacter.

The catching process should be managed sympathetically to minimise the above.

i The use of a partition, such as curtains or straw bales, to separate caught birds from those remaining in the shed, is strongly recommended.

The partition should:

- be erected at a suitable time prior to catching to allow birds time to settle
- provide protection from noise, dust and disruption from the catching team during the catching operation
- help control the thermal environment by, for example, preventing drafts
- not reduce the floor area available to those birds not being caught to such an extent that the maximum stocking density of 30kg/m² is exceeded.

Where possible, those birds not being caught should have access to food and water during the catching operation.

- T 2.6** There must be measures in place, such as daylight screens or curtains across the shed entrance, to help control the thermal environment of the birds and prevent draughts.
- T 2.7** Noise levels from all sources must be minimised during catching and loading.
- T 2.8** The vehicle transporting the birds to the processing plant must be positioned to allow easy loading of the modules.
- T 2.9** Birds must be approached calmly and quietly to avoid stress.
- T 2.10** During catching, actions must be taken to prevent chickens from crowding together.
- T 2.11** Where crowding occurs, the light level within the house must be increased, the birds spread out calmly and quietly, then allowed to settle before catching is resumed.
- T 2.12** Birds must be treated gently and with care.

- T 2.13** Chickens must be caught individually by grasping:
- a) both legs, just above the feet, or
 - b) around the body using both hands to hold the wings against the body.

i When carrying by the legs, resting of the bird's breast against the catcher's leg during carrying can help keep the bird calm.

i Using both legs to lift birds has been shown to reduce the frequency and severity of haemorrhaging in the thigh and reduce the number of broken bones sustained (European Food Safety Authority (EFSA). 2004. The Welfare of Animals During Transport. The EFSA Journal, 44: p42.)

- T 2.14** Chickens must be carried either:
- a) (i) by both legs, and
(ii) with no more than 3 birds in one hand, or
 - b) around the body using both hands to hold the wings against the body.

i It is strongly encouraged that birds be both caught and carried individually by the body using both hands to hold the wings against the body so that the birds are not inverted.

T 2.15 Carrying distances must be kept to a minimum.

T 2.16 Chickens must be put in transport trays in the house.

T 2.17 Only carriers of the tray type with completely open tops and with a depth of not less than 220mm must be used.

T 2.18 Transport modules must be loaded from the top draw downwards, i.e. the top draw loaded first and the bottom draw loaded last.

T 2.19 Each transport draw container must be closed carefully to ensure that no part of a bird's body is trapped in any way.

T 2.20 The stocking density in each tray must not exceed 57kg of birds/m² of tray floor area (also see C 2.11.1).

T 2.21 Stocking densities relating to T 2.20 must be reduced when birds are being transported during hot (>25°C) weather.

i The mechanical harvesting of birds has been shown to offer some welfare advantages compared with manual catching. Units considering using such a system should liaise with the RSPCA Farm Livestock Officer or a member of the RSPCA Farm Animals Department.

Transport

- T 3.0** All birds must be transported by an RSPCA Assured approved haulier.
- T 3.1** Personnel in charge of chicken transporters must have:
- a) completed an approved training course
 - b) be able to demonstrate their competence in handling chickens when loading and unloading them and while in transit.
- T 3.1.1** The farmer/farm manager/catching foreman must ensure that all birds are fit to travel.
- T 3.1.2** The haulier must ensure that the welfare of birds are safeguarded from the time they are loaded onto the vehicle until they are unloaded from the vehicle.
- T 3.2** All hauliers must have a written 'Standard Operating and Emergency Procedure' to implement during transportation (see Appendix 3).
- T 3.3** Transport containers must be:
- a) fit for purpose
 - b) thoroughly cleaned before each use
 - c) well maintained, e.g. free from sharp edges and protrusions
 - d) not cause injury to the birds.
- T 3.4** Transport vehicles must be thoroughly cleaned before each use.
- T 3.5** All birds must be slaughtered within 8 hours of loading the first bird into a module.
- T 3.6** The time from when the birds leave the farm to arriving at the processing plant must be no longer than 4 hours.

i It is a legal requirement to ensure that journey times are kept to a minimum.

- T 3.7** Every effort must be made to ensure:
- a) journeys are completed without unnecessary delays
 - b) drivers are aware of any potential traffic problems and plan their journey accordingly.
- T 3.8** The person supervising the catching and loading of birds must liaise closely with the abattoir to minimise the time birds spend waiting on the vehicle.
- T 3.9** Measures must be taken so as to avoid wetting and chilling, such as equipping the vehicle with suitable curtains.

i The RSPCA endorses the concerns and recommendations highlighted in the European Food Safety Authority (EFSA) report (2004) on the Welfare of Animals During Transport. In particular, this report highlights that when wetting occurs under cold conditions (i.e. 8°C or less), this will induce a substantial degree of hypothermia.

T 3.10 Plans must be made in advance, and appropriate action taken, to reduce the risk of heat stress including the daily receipt of meteorological forecasts of predicted temperatures.

(i) At times of high ambient temperature or when high humidity poses a threat to the birds, catching, loading and transportation create particular risks of heat stress.

(i) A major cause of poor welfare and mortality during transport is heat stress, due to inadequate ventilation on passively ventilated vehicles (even in relatively temperate climatic conditions). Similarly, cold stress in transported broilers can also be a major cause for concern. For example, the wetting of birds at passive air inlets under cold conditions (8°C or less) will induce substantial degrees of hypothermia

Mechanically ventilated vehicles, using fan-mediated extraction ventilation, should be introduced to improve the welfare of poultry in transit by facilitating greater control of the on-board thermal micro-environment throughout the whole vehicle load. Ventilation should be effective in all transport containers.

For conventional poultry transporters, it has been shown that a ventilation rate of 0.6m³/s per tonne live weight of birds results in lower mortality than less good ventilation rates. Also, chickens being transported to slaughter should be carried on vehicles where the ventilation system is capable of maintaining the temperature within the transport container below 26°C accompanied by a relative humidity of less than 75%.

The RSPCA encourages the use of such technology and will monitor its development and review its use for future inclusion within the standards.

T 3.11 In periods of hot weather (in excess of 25°C) chickens must be transported at night or in the coolest parts of the day.

T 3.12 Noise levels, from all sources, must be minimised during transport.

Slaughter/killing

All slaughter/killing systems need to be designed and managed to ensure livestock are not caused unnecessary distress or discomfort. The pre-slaughter handling of livestock needs to be kept to an absolute minimum. Personnel involved in the slaughter need to be thoroughly trained and competent to carry out the tasks required of them.

i The RSPCA recognises the shortcomings of the electrical waterbath stunning process in terms of its actual and potential detrimental impacts on bird welfare. For example, it is necessary to handle, invert and hang live birds and use a constant voltage to stun the birds. The RSPCA is considering the phasing-out of such systems and would therefore strongly encourage producers to adopt gas killing systems or seek modifications to their electrical waterbath systems to address the key areas of concern affecting bird welfare.

In addition to offering improved bird welfare, gas killing systems have been reported to provide economic advantages over electrical waterbath stunning and therefore may also be of a commercial benefit.

i Where possible, gas killing systems should be used to kill birds.

- S 1.0** For those seeking RSPCA Assured approval, the standards relating to the slaughter/killing of chickens (standards with the 'S' prefix) must be assessed by the RSPCA's Farm Animals Department, prior to approval.
- S 1.1** Chickens must be slaughtered/killed as close as possible to the point of production.
- S 1.2** Any novel system of slaughter/killing must be referred to the RSPCA Farm Animals Department for review and decision before it can be used by prospective/current RSPCA Assured scheme members.

Management

- S 2.0** Contingency plans must be in place to deal with occasions when unavoidable delays may occur and it is not possible to process the birds.
- S 2.1** Managers must develop and implement an animal welfare policy which must include:
- written procedures with regard to maintaining animal welfare in the abattoir
 - the responsibilities and duties of staff
 - emergency procedures.
- S 2.2** The animal welfare policy (see S 2.1) must be regularly reviewed and updated.
- S 2.3** Managers must appoint at least one trained Poultry Welfare Officer (PWO) who is responsible for the implementation of the animal welfare policy.

i Where possible, the PWO should have attended a recognised, validated training course, e.g. the University of Bristol Poultry Welfare Officer training programme.

S 2.4 Managers, in conjunction with the PWO, must:

- a) develop and implement a training programme for all staff handling and slaughtering/killing birds
- b) ensure that staff are properly trained to carry out their duties and be competent to perform them.

i Where possible, training relating to S 2.4 should be validated.

i It is strongly recommended that all staff involved in the handling and slaughter/killing of chickens undertake the 'Fundamentals of Chicken Welfare at Slaughter, Incorporating Key RSPCA Welfare Standards' online training course, which can be accessed at: www.rfundamentals.com.

S 2.5 PWOs must:

- a) be familiar with the content of the current Humane Slaughter Association's '*Best Practice Guidelines for the Welfare of Broilers and Hens in Processing Plants*'
- b) be familiar with the content of the Humane Slaughter Association '*Poultry Welfare – Taking Responsibility*' DVD
- c) convey the relevant content of the publications listed in a) and b) to other members of the slaughter team
- d) ensure that the recommendations given in the publications listed in a) and b) are applied where appropriate.

i Where possible all members of the slaughter team should be familiar with the content of the publications listed in S 2.5 a) and b).

S 2.5.1 The PWO must make frequent checks throughout the day to ensure that birds are being effectively stunned/killed and are insensible throughout the slaughter operation.

S 2.6 Where birds are not being effectively stunned/killed, the PWO must take immediate remedial action.

Closed Circuit Television (CCTV)

i The use of Closed Circuit Television (CCTV) in areas where live animals are present can assist those responsible for monitoring and enforcing animal welfare within the abattoir in ensuring that standards are maintained. It is strongly recommended that CCTV footage is also used for in-house training programmes and to provide an additional level of security at the abattoir.

- S 3.1** A functional CCTV system must be installed and operational to monitor animals undergoing the following processes at the abattoir (as applicable):
- a) unloading from vehicles into the lairage
 - b) shackling, including the shackling of birds following gas killing
 - c) stunning, including exiting the electrical waterbath
 - d) neck cutting
 - * e) entering a gas killing system.
- S 3.2** CCTV cameras must be positioned to ensure a clear view of the processes being monitored is achieved at all times.
- S 3.3** It must be possible to observe clearly the view from each camera at all times via one or more monitors.
- S 3.4** CCTV footage must be recorded at all times where animals are undergoing any of the processes listed under standard S 3.1.
- S 3.5** The recorded CCTV footage must be:
- a) retained by the abattoir for a period of at least three months, and
 - b) available for viewing on site by RSPCA Assured field staff and RSPCA Farm Animals Department staff on request.

i Where possible it may be useful for managers to retain CCTV footage for longer than the three months specified in standard S 3.5, for their own monitoring and security purposes.

Health monitoring at the processing plant

- S 4.1** The level (%) of the following must be recorded for each flock:
- hock burn (classified as score 1 and 2 in Appendix 4)
 - foot pad burn
 - breast blisters
 - back scratches
 - dirty feathers (classified as a score 1 or above in Appendix 6)
 - emaciation
 - ascites/oedema
 - leg damage (caused prior to slaughter)
 - wing damage (caused prior to slaughter)
 - dead on arrivals (DOAs)
 - cellulitis and dermatitis
 - joint lesions
 - septicaemia/respiratory conditions.

i In addition to those parameters listed in S 4.1, the following should also be recorded:

- damaged legs and wings
- carcasses condemned, including reasons
- emaciated carcasses.

i The term 'flock' refers to a group of chickens which are placed in a house of holding and present in this house at the same time together.

- S 4.2** The method used to score each condition outlined in S 4.1 must:
- be objective
 - clearly differentiate between minor, mild and severe conditions
 - provide consistent results within and between observers
 - provide reliable and accurate data for the level of a condition within a flock.

i Data for the following parameters can be collected from existing meat hygiene inspection process to fulfil the requirement listed under standard S 4.2:

- emaciation,
- ascites/oedema,
- DOA's,
- cellulitis & dermatitis, and
- joint lesions.

i If there is an absence of severe foot pad/hock burns, but a lot of class 1 lesions are observed in a flock, then this should be seen as not necessarily a major welfare problem in itself, but as an indication that things can rapidly get worse and that remedial action should be taken.

i The feet should be clean prior to assessment and should be individually examined under good light.

i Assessing birds for dirty feathers should take place on the farm during catching. This will avoid scoring birds that may have become dirty during transport and therefore provide a better picture of on-farm conditions. The stock-keeper and/or catching foreman should assess the birds.

- S 4.2.1** In relation to the assessment of foot pad burn:
- for each transport load of birds delivered to the slaughter plant, a minimum of 100 feet from different birds, or 5% of the load (whichever is the greater), must be assessed, and
 - the proportion (%) of feet in each category 0, 1 & 2 must be recorded (see Appendix 5).
- S 4.2.2** For each transport load of birds delivered to the slaughter plant, a minimum of 100 hocks from different birds, or 5% of the load (whichever is the greater), must be assessed for hock burn.
- S 4.2.3** All birds must be assessed for the presence of breast blisters.
- S 4.3** Data relating to S 4.1 must be reported back to the producing farm.
- S 4.4** Data relating to the following parameters listed under S 4.1 must be reported back to the catching team:
- leg damage,
 - wing damage,
 - DOA's.

Lairage

- S 5.1** On arrival at the slaughterhouse, chickens must be placed in an environmentally controlled lairage or slaughtered immediately.
- S 5.2** All birds must be slaughtered as soon as possible on arrival at the processing plant and in any case within 4 hours.
- S 5.3** The vehicle transporting the birds to the processing plant must be positioned to allow easy unloading of the modules.
- S 5.4** Noise levels, from all sources, must be minimised during unloading.
- S 5.5** The lairage must be designed to minimise any distress caused to the birds.

i The design of the lairage includes aspects such as flooring. Uneven flooring can cause physical discomfort to birds when moving them through the lairage in modules.

- S 5.6** In the lairage where chickens are held the following must be provided:
- protection from direct rays of sun and from adverse weather, i.e. wind, rain, hail, snow, etc.
 - adequate ventilation
 - be kept within their thermal comfort ('safe') zone, as indicated within the Defra sponsored document entitled '*Guide to Alleviation of Thermal Stress in Poultry in Lairage*' (PB 3724)
 - reduced or blue lighting.

- S 5.7** Temperature and humidity in the lairage must be regularly monitored and controlled.
- S 5.7.1** There must be a contingency plan in place to state what action will be taken in the event of heat stress occurring.
- S 5.8** All transport containers must be examined on arrival at the slaughterhouse to identify any birds suffering from injury, heat or cold stress.
- S 5.9** Any bird identified as suffering from injury, heat or cold stress must be slaughtered immediately and humanely.
- S 5.10** Where causes of mortality have been identified, prompt action must be taken to prevent further deaths, injury or suffering occurring.
- S 5.11** If on any day mortality exceeds 0.25% for a single load of chickens during transport:
- the level of mortality must be recorded
 - there must be an investigation, that is recorded, to establish the cause/s of death
 - effective preventative measures must be put in place without delay to remedy the problem.
- S 5.12** All deaths and injuries must be recorded and reported to:
- the driver
 - the haulier
 - the PWO
 - the farm manager
 - before the next consignment from the same source is collected.
- S 5.13** Once chickens have arrived at the premises at which they are intended to be slaughtered/killed, they must not be moved on to other premises for slaughter/killing.
- S 5.14** Standby equipment, e.g. a generator, must be available for emergency breakdowns.

Shackling/restraining

- S 6.1** The shackling of conscious birds is only permitted:
- Where:
 - birds are slaughtered/killed on the farm where they were reared for finishing, and
 - birds are not subjected to any transport by vehicle to the place of slaughter/killing, and
 - the only commercially/practically viable option available is to slaughter/kill the birds using a system that requires shackling, and
 - written permission has been sought from and granted by the RSPCA Farm Animals Department.
 - In the event of an emergency and when the most humane and only available alternative is to slaughter/kill the birds using a system that requires shackling.

i With respect to S 6.2 a), the RSPCA will phase out inverted shackling of conscious birds as soon as a commercially viable and more humane alternative method of slaughter/killing is available and suitable for use on-farm.

i For the purposes of S 6.2 b), emergency situations include: culling in the event of notifiable disease outbreaks; and, as a 'back-up' in the event of failure of the usual, permitted killing/slaughter system.

S 6.2 Shackles must be of a size and type, and the slaughter line run at a speed, which permits chickens to be hung on without causing unnecessary pain or distress.

S 6.3 Small birds (e.g. runts) that could miss entering a stunbath must:

- a) not be shackled
- b) be humanely culled without delay.

S 6.4 Shackling teams must be trained and competent to handle the birds in such a way so as to avoid unnecessary pain and distress.

S 6.4.1 The shackler must use a handling technique that calms the bird as it is being shackled.

i Gently running the hands down the legs and body of the bird after shackling has been shown to reduce the incidence of wing flapping. Keeping hold of the bird's legs for ½ second after shackling has been reported to have a similar effect.

S 6.5 Birds must be hung on by both legs.

S 6.6 From the point of shackling to entry into an electrical waterbath there must be a:

- a) breast comforter to prevent wing flapping and birds raising their heads
- b) reduction in noise level
- c) maximum light level of 5 lux (to be measured at bird eye level)
- d) no unevenness in the line causing the shackles to jolt.

i The provision of a breast comforter and a reduction in noise and light levels all help to calm the bird and prevent it raising its head, vocalising and wing flapping, which can all be behavioural indicators of discomfort. Wing flapping can cause the occurrence of red wing tips which, as well as being a welfare issue, can result in downgrading of the chicken carcass, detract from the overall appearance of the carcass and lead to loss of total carcass weight if the wings require trimming.

i Breast comforters should be constructed from firm rubber or plastic curtain and extend below the eye level of the bird.

i There should be no bends in the shackle line from the point of shackling to entry into the stunbath.

S 6.7* Chickens must not be suspended in cones or on shackle lines for more than 30 seconds before being stunned (see also S 6.8).

i **Shackling a bird can cause discomfort and pain, so it is important to reduce the shackling period to a minimum. However, for an effective stun, it is necessary for the bird to be shackled for a short period, to allow it time to relax and stop wing flapping. Therefore, live chickens should not be suspended for more time than is necessary for wing flapping to cease, which has been shown to be around 15 seconds on average.**

S 6.8 Where the shackling of conscious birds is permitted on farm (see S 6.1), birds must only be suspended for the shortest time necessary to undertake the killing/slaughter humanely and in any case for no more than 20 seconds before they are stunned.

S 6.9 All crates must be checked to ensure that no chickens are left inside them.

S 6.10 Care must be taken to ensure that birds cannot:

- a) escape from the holding area
- b) fall from the shackle line.

S 6.11 Where loose birds are found they must:

- a) be taken immediately to the hanging on area, or
- b) if injured, be immediately and humanely slaughtered/killed away from the line.

Electrical stunning

S 7.0* All birds must be stunned prior to bleeding.

S 7.1 The following types of stunning equipment are permitted:

- a) electrical waterbath
- b) dry stunner incorporating an electrically-live metal grid or bar
- c) hand operated stunner.

S 7.2 All stunning and bleeding equipment must be:

- a) properly maintained
- b) regularly cleaned
- c) checked daily to ensure that it is in full and proper working order.

S 7.3 Any problems must be:

- a) reported to the PWO
- b) rectified immediately.

S 7.4 Unstunned birds must be screened from dead birds.

S 7.5 All birds must be checked immediately post-stunning to ensure they have been effectively stunned or killed.

S 7.6 * Birds which fail to be properly stunned must be humanely killed or re-stunned without delay using a permissible back-up method before the neck is cut.

S 7.7 Relevant staff must be trained and competent to recognise the signs of an effective stun.

- i** The most reliable indicator that a bird is stunned by the low voltage method is the electroplectic fit. The characteristics of this condition are:
- no rhythmic breathing
 - neck arched with head directed vertically
 - open eyes
 - absence of a third eyelid (nictitating membrane) reflex^a
 - wings held close to the body
 - rigidly extended legs and constant rapid body tremors.

The physical conditions of the electroplectic fit are shorter lasting and less pronounced when cardiac arrest is induced at stunning. They are followed by:

- completely limp carcass
- no breathing
- loss of nictitating membrane reflex^a
- dilated pupil.

^aUnconsciousness can be checked by the absence of a blink reflex when the cornea (the surface of the eyeball) is lightly touched. Presence of a blink must be acted upon immediately: it does not necessarily indicate full consciousness but the return of this reflex after stunning is a sign of some brain function returning and it indicates the possibility that consciousness may also be returning.

Waterbath stunning

S 8.1 Where an electrical waterbath is used:

- a) the electrode which is immersed in the water must extend the length of the waterbath
- b) it must be fitted with an ammeter to accurately monitor current flow through the bath when loaded with birds
- c) it must be designed and set up to prevent birds receiving pre-stun shocks
- d) it must be set at a height appropriate for the size and number of birds
- e) the height must be set such that the heads of all birds are fully immersed in the water
- f) the water level must be of sufficient depth to cover the heads of the birds
- g) the water must not overflow at the entrance to the bath
- h) it must operate at a frequency of 50Hz with a sinusoidal (AC) waveform (stunning using a DC waveform is prohibited)
- i) it must deliver an average minimum current of 120mA per bird
- j) the current must never go below 105mA per bird
- k) each bird must be in contact with the current for a minimum of 4 seconds
- l) the shackle – at the point where it meets the chicken's legs – must be wet prior to the chicken entering the stunbath.

i Ideally, the shackle should be wet prior to the bird being hung.

i 50Hz sine wave (AC) is the optimum frequency and waveform for inducing cardiac arrest. The heart muscle is particularly sensitive to this frequency and when sufficient current is applied to the heart it ceases to beat normally and pump blood around the body. Therefore, an effective stun-to-kill can be achieved when using this frequency, which is the most preferred outcome to achieve good welfare during slaughter.

i There is mixed opinion from researchers as to the effectiveness of using a DC waveform for stunning chickens. In particular, there are concerns over whether a bird is effectively stunned when subjected to a DC waveform. Current literature on this subject states that DC stunning raises serious welfare concerns and that the use of DC stunning should be actively discouraged. Therefore, the use of DC stunning is prohibited under the scheme until there is further, unequivocal research in this area to suggest that DC stunning would offer at least a welfare neutral alternative to AC stunning.

i A steeply inclined flat ramp bolted on to the entrance of the waterbath can be effective in avoiding pre-stun shocks. The ramp should extend over the water so the birds get drawn up the ramp by the shackle line and then swing down into the water in one smooth movement. This results in the bird's head and wing entering the water together and the bird is stunned immediately

Care is needed to ensure birds do not receive pre-stun shocks from the ramp itself. This may occur if the ramp is electrically live because of water flowing from the bath onto the ramp, or if it is not isolated from the rest of the stunner.

Source: Humane Slaughter Association (HSA). 2006. 'HSA Technical Note 16: Prevention of Pre-Stun Shocks in Electrical Waterbaths'. HSA, Wheathampstead, Herts., UK (www.hsa.org.uk).

i 1A = 1000mA. Therefore, 105mA = 0.105A.

i Contact between the bird's foot and the shackle is critical for good stunning, but tight fitting shackles can cause pain and discomfort to the bird. However, it has been reported that a continuous mist spray along the length of the waterbath allows for looser fitting shackles to be used without compromising the level of stun the bird receives.

S 8.2 If the slaughter line is stopped for longer than 60 seconds, birds between the point of shackling and the killer must be humanely killed immediately.

* **Manual head-only electrical stunning**

S 9.1* Birds must be restrained appropriately to enable accurate positioning of the electrodes.

* **i** Birds should be restrained in a cone.

S 9.2* Electrical stunning equipment must be tested daily to ensure it is delivering an adequate current.

S 9.3* A meter that tests current flow through a model that stimulates the resistance of a bird's head must be used to test the stunning equipment.

S 9.4* The electrodes must be clean.

* **i** Resistance to current flow may vary, depending on the condition of the electrodes. The efficiency of current flow can be improved by regular decarbonising and cleaning of the electrodes (when dry) with a wire brush.

Electrodes should be cleaned at least after every 25-50 birds stunned, according to the amount of dirt build-up.

S 9.5* The electrodes must:

- a) be checked to ensure they are the correct size to fit across the head of the bird
- b) make good contact with the skin
- c) be positioned on each side of the head, midway between the eye and ear, so that they span the brain.

* **i** Electrodes placed across the neck can cause paralysis whilst the bird remains fully conscious and able to feel pain.

S 9.6* The current level must be between 300-400mA.

* **i** To achieve the required current level, a minimum output voltage of 110V is required.

S 9.7* Once electrodes have been applied to the head of the bird, contact must be maintained in the same position to deliver the stunning current:

- a) without interruption
- b) for at least seven seconds and until the bird's legs extend and become rigid and initial wing flapping stops.

S 9.8* If there are signs that a bird has not been properly stunned, the electrodes must be re-applied immediately to give another stun.

S 9.9* When not in use, the stun tongs must be stored in a dry environment with the electrodes protected from damage.

S 9.10* Voltmeters and ammeters must be easy to read and must be visible to the stunning operator whilst stunning.

S 9.11* Birds which fail to be properly stunned must be humanely killed or re-stunned without delay using a permitted:

- a) back-up set of electrodes, or
- b) captive-bolt (see H 4.8).

Bleeding

i The following standards do not apply to gas killing systems, whereby the birds are killed within the system.

- S 10.0** There must be sufficient time after stunning and prior to decapitation to assess the effectiveness of the stun.
- S 10.1** No more than 10 seconds must elapse between stunning and decapitation.
- S 10.2** After stunning each bird must:
- a) be decapitated (the head removed), and
 - b) the head macerated immediately following decapitation.
- S 10.3** Where the head of the bird is cut off manually, a sharp knife, at least 12cm long, must be used.
- S 10.4** Where an automatic neck cutter is used, the cut must be checked by the appointed member of staff who must be given sufficient time to remove the head manually, if necessary.
- S 10.4.1** If the automatic neck cutter is not working effectively:
- a) the affected bird/s must be slaughtered without delay
 - b) the shackling of birds must be stopped without delay until the problem has been rectified.

* Gas killing

* **i** The use of gas under controlled conditions as a means of killing birds can provide many welfare benefits over conventional waterbath stunning, such as reduced manual handling, avoiding the need to invert and shackle live birds and a more consistent killing process.

The use of fully enclosed gas systems, whereby the gas is introduced to the birds, can offer a greater level of control and uniformity over the killing process and are therefore strongly encouraged.

Inert gases, inert gases with carbon dioxide, and carbon dioxide gas only, are all permitted for use under these standards (see S 11.3 for more detail). However, unlike carbon dioxide, inert gases, such as argon and nitrogen, have been reported to be non-aversive to poultry and can therefore offer a more humane induction to unconsciousness.

Where carbon dioxide gas only is being used, exposing birds to a controlled, gradually increasing concentration of carbon dioxide results in a smoother transition to unconsciousness and is strongly encouraged. Initial exposure to a concentration around, or increasing up to, 20% carbon dioxide for a period of approximately 60 seconds, followed by exposure to a higher concentration of around 28%, until birds have lost consciousness, has been shown to work well in practice.

S 11.1* For processors choosing to use carbon dioxide gas only, new systems installed from 1st January 2018 must be designed and operated to expose birds to a gradually increasing concentration of carbon dioxide until the birds have lost consciousness.

* **i** Please contact the RSPCA Farm Animals Department to discuss what systems would be considered acceptable to comply with S 11.1.

S 11.2* Nominated persons responsible for the operation of the system during the killing of birds must be properly instructed as to:

- a) the method of operation of the system
- b) the procedures for flushing the system with atmospheric air
- c) the procedures for emergency evacuation of birds from the system
- d) the criteria for assessing an effective stun and kill.

S 11.3* The following gas mixtures are permitted for use:

- a) argon, nitrogen or other inert gases, or any mixture of these gases, in atmospheric air with a maximum of 2% oxygen by volume; or
- b) any mixture of argon, nitrogen, or other inert gases with atmospheric air and carbon dioxide, provided that the carbon dioxide concentration does not exceed a maximum of 30% by volume and the oxygen concentration does not exceed 2% by volume; or
- c) carbon dioxide (delivered in two phases) which does not exceed,
 - i. an *average* maximum concentration of 30%, and
 - ii. a maximum concentration of 33%, until birds have lost consciousness (Phase 1).

* **i** In relation to S 11.3, the maximum concentration of carbon dioxide conscious birds are exposed to should not exceed 30%. However, due to the nature of gas injection systems, it is acknowledged that there will be some variability in the concentration of carbon dioxide within the system. Therefore a 10% tolerance on this concentration has been applied, i.e. permitting a maximum concentration of 33% carbon dioxide.

Further, following loss of consciousness by exposure to carbon dioxide gas only, it is a legal requirement to expose the birds to a concentration of carbon dioxide above 40% until death, which is classified as Phase 2.

S 11.4* Where applicable to the gas system being used, Standard Operating Procedures must clearly describe any adjustments required to the system to account for:

- a) birds of different weights/ages
- b) birds from different production systems, i.e. indoor and free range, including organic
- c) any other factors likely to affect the operation/management of the system, such as:
 - i. bird feather condition
 - ii. bird cleanliness
 - iii. wind speed and direction
 - iv. air humidity
 - v. environmental temperature
 - vi. transport crate stocking density.

S 11.5* Where pre-filled gas systems are used, there must be a written procedure that clearly explains how the correct gas concentration gradient is:

- a) achieved within the system prior to birds entering, and
- b) consistently maintained at all times during the gas killing process.

S 11.6* A contingency plan must be in place that details what action is to be taken to help safeguard the welfare of the birds if a system failure occurs while birds are in the system.

- S 11.7*** In the case of a system failure:
- a) there must be a permitted back-up killing method available and ready for use at all times that is capable of dealing with all birds awaiting killing (see S. 7.1)
 - b) where the permitted back-up method is used, the following must be recorded:
 - i. the date and time of the failure
 - ii. the reason/s for the failure
 - iii. the time taken to evacuate the birds from the system (where required)
 - iv. the time the failure was rectified and normal gas killing resumed.
- S 11.8*** There must be a means of flushing the system with atmospheric air with the minimum of delay.
- S 11.9*** Prior to the commencement of processing birds each day, checks must ensure there is a sufficient supply of gas to kill all the birds to be received.
- S 11.10*** Where more than one type of gas is used, the gases must be mixed thoroughly prior to supply in the system.
- S 11.11*** Live birds must remain in their transport containers throughout the gas killing process.
- S 11.12*** There must be a means of access to any bird within the system with the minimum of delay.
- S 11.13*** There must be a diagram readily available on site that clearly and accurately shows the location of all the gas concentration monitoring sensors.

* **i** Gas sensors should be positioned to accurately report the gas concentration/s being experienced by the birds. For example, in tunnel systems, the sensors should be positioned at bird head height.

- S 11.14*** Birds must not be subjected to the gas prior to entry into the system.
- S 11.15*** For pre-filled gas systems, birds must not enter the system until the correct gas concentration throughout the system has been achieved.
- S 11.16*** Once birds have entered the system they must be subjected to the correct gas concentration without delay.
- S 11.17*** For systems using inert gases, birds must be exposed to the *maximum* concentration of the gas mixture within a maximum of 10 seconds after entry into the system.
- S 11.18*** There must be a means of clearly visually monitoring in real time the birds throughout the gas killing process, i.e. from start/point of entry to finish/exit.

* **i** For tunnel systems, the installation of appropriately positioned windows at regular intervals along the entire length of the system can be sufficient to satisfy S 11.18. However, the use of windows in such systems to clearly assess the effect of the gas on birds can be difficult. Therefore, ideally, cameras should be installed, either to follow the birds through the system or at critical monitoring points.

* **i** Where windows are used to monitor birds, it may be necessary for them to be cleaned regularly to ensure visibility of the birds is maintained and thus the requirement of S 11.18 is met at all times.

- S 11.19*** For tunnel and pit type systems:
- there must be suitable equipment available on site and ready for use at all times that can clearly record the behaviour of a group of birds continuously as they progress through the system to the point of losing consciousness, and
 - it must be possible to view the footage in real time and/or promptly after it has been recorded.

* **i** A suitable mobile digital camera with a recording function mounted within a suitable container, e.g. a wire cage, that can be placed in with the birds in their transport container could be used to satisfy S 11.19. NB. It may be necessary to provide additional light, e.g. a torch, within the container.

- S 11.20*** The movement of the transport crates through the system must minimise any disturbance caused to the birds.

- S 11.21*** The induction to unconsciousness must be calm, i.e. birds must not show any avoidable signs of fear or excitement, such as wing flapping or escape behaviour.

* **i** When a bird loses posture and neck tension, this is likely to indicate the bird is unconscious.
During exposure to carbon dioxide, birds perform some headshaking, deep breathing and gasping prior to the loss of consciousness. If these behaviours are performed at a high frequency or vigorously then this is a welfare concern.

- S 11.22*** Bird behaviour during induction to unconsciousness must be assessed, and the outcome recorded, at the following times to ensure the induction to unconsciousness is calm:

- at the start of each day's kill, i.e. the first birds to enter the system that day
- at least every hour
- immediately following any break in processing
- immediately following any change in processing that could adversely affect bird welfare during induction to unconsciousness, e.g. alterations to the setup or operation of the system (S 11.4).

- S 11.23*** If birds show avoidable signs of fear or excitement (see S 11.21), then:

- action must be taken without delay to investigate the cause/s
- the cause/s of the issue must be rectified prior to more birds entering the system
- a record of the cause/s and action/s taken to rectify the issue must be kept.

- S 11.24*** After loss of consciousness, birds must remain unconscious until death.


- S 11.25*** Birds must be dead on exit from the system.

- S 11.26*** For carbon dioxide gas only systems, minimum dwell times to achieve i. loss of consciousness prior to exposure to a gas concentration exceeding 33% and ii. death on exit from the system must be:

- established
- documented
- adhered to at all times.

- S 11.26.1*** In relation to S 11.26, if dwell times vary according to various factors, such as bird weight, then separate dwell times must be established for each factor.

- S 11.27*** For carbon dioxide only gas killing systems, time to loss of consciousness – from entry into the system/start of the gas killing process – must be recorded:
- hourly, and
 - following any change in processing that could affect the time to loss of consciousness, e.g. alterations to the setup or operation of the system (see S 11.4).


*  **The time to loss of consciousness should be recorded at the point when it appears that all birds in a crate have lost consciousness.**

- S 11.28*** Where inert gases are used:
- birds must be exposed to the gas mixture for no less than three minutes
 - the total amount of time birds are exposed to the gas, i.e. the dwell time, must be
 - recorded at least hourly,
 - measured continuously, displayed and recorded, by no later than December 2019.

- S 11.29*** For tunnel and pit type systems, the following must be recorded hourly:
- the transport crate throughput per minute
 - the average weight of the birds being processed.

- S 11.30*** There must be sufficient time and space after exiting the system and prior to any other procedure to assess the effectiveness of the kill.

- S 11.31*** On exiting the system, all birds must be checked as soon as practically possible to:
- ensure they are dead
 - identify any signs of damage or injury that could have been caused in the system prior to them losing consciousness.

*  **Reliable indicators that a bird is dead include:**

- **completely limp carcass**
- **no breathing**
- **loss of nictitating membrane response**
- **dilated pupil and absence of papillary response, i.e. no constriction of the pupil in response to a bright light shone into the eye from a distance of 5cm.**

- S 11.32*** Any birds that are not dead after exiting the system must be humanely killed without delay.

- S 11.33*** During the gas killing process, the concentration by volume of each gas used must be continuously:
- measured
 - displayed
 - recorded by December 2019 at the latest.

- S 11.34*** The correct gas concentration/s must be maintained at all times during the killing process.

- S 11.35*** It must be demonstrated that the correct gas concentration gradient/profile is being maintained throughout the system consistently.

* **i** With regards to Standard S 11.35, it will be necessary to provide recent (within the last 12 months) real time graphical outputs of the actual gas concentration profile birds are exposed to throughout the killing process, i.e. printed or electronic graphical outputs showing gas concentration continuously over time as birds undergo gas killing. This will need to be for at least three separate runs.

The gas concentration gradient/profile should be continuously monitored and recorded throughout the system at all times.

S 11.36* Gas sensors must be linked to an audible and visual alarm system, which is automatically triggered:

- when the maximum residual oxygen level is above 2% where inert gases are used
- when the concentration by volume of carbon dioxide rises/is likely to rise above the maximum permitted level (see S 11.3).

S 11.37* Birds must not enter the system at any time when:

- the audible and visible warning signals have been activated (see S 11.36)
- there is any defect in the operation of the system.

S 11.38* The temperature of the gas must:

- be continuously monitored either within the system or immediately prior to entry into the system
- be sufficient to achieve an air temperature within the system equivalent to the current ambient temperature, i.e. the air temperature within the vicinity of the system at the time of processing
- be continuously recorded or recorded at least hourly.

* **i** Air temperature within the system should be continuously monitored, displayed and recorded throughout the system at all times.

S 11.39* Records showing the air relative humidity within the system prior to birds losing consciousness during killing must be available on request (records must be no more than 12 months old).

* **i** S 11.39 can be achieved by providing an independent report that has measured this parameter within the last 12 months.

* **i** Air relative humidity should be continuously monitored, displayed and recorded throughout the system at all times.

It is a legal requirement to ensure the humidity within the system does not adversely affect bird welfare by being too low. EFSA (2004)¹ have stated that controlling humidity (and temperature) of gas mixtures could help to alleviate any physical discomfort and distress caused by inhalation of the gas mixtures and therefore improve bird welfare.

Ideally, air relative humidity should be above 60%; air relative humidity levels below 60% may cause a more painful stimulus of the bird's respiratory tract².

¹EFSA (2004) Welfare aspects of animal stunning and killing methods: Scientific report of the Scientific Panel for Animal Health and Welfare on a request from the Commission related to welfare aspects of animal stunning and killing methods. Italy, [Online] EFSA. Available from: <https://www.efsa.europa.eu/en/efsajournal/pub/45> (Accessed 12/07/2016).

²Gerritzen, M. A., Remiert, H. G. M., Hindle, V. A M., Verhoeven, T. W., and Veerkamp, W. B. (2013) Multistage carbon dioxide gas stunning of broilers. Poultry Science, 92:41-50.

- S 11.40*** Gas sensors must be calibrated:
- a) at regular intervals
 - b) according to the manufacturer's procedures and recommendations.
- S 11.40.1*** A verifiable record of calibration must be kept.
- S 11.41*** Gas systems must:
- a) not cause injury to conscious birds
 - b) be well maintained
 - c) be cleaned according to the manufacturer's instructions.
- S 11.42*** Records of birds recovering consciousness after exposure to gas mixtures must be maintained.
- S 11.43*** Where signs of damage or injury to conscious birds are identified:
- a) this must be thoroughly investigated to ascertain where and how this may have occurred
 - b) immediate action must be taken to rectify the problem
 - c) this must be recorded, including the results of the investigation into the cause and the outcome of the action taken to rectify the problem.
- S 11.44*** If any bird escapes from its transport crate within the system then:
- a) this must be recorded, and
 - b) preventative measures must be put in place to prevent this reoccurring
 - c) any preventative measures employed must be recorded.
- S 11.45*** All records relating to this section of the standards (Gas Killing) must be kept for at least 12 months and made available to RSPCA Assured and RSPCA staff on request.

Appendix 1

Welfare audit form example (relating to standards M 4.1 – 4.8)

Standards to be included as part of the welfare audit (see standards M 4.1 to M 4.8) and an example of a suitable Welfare Audit form.

Date		Unannounced	Yes / No
Auditor			
Producer			
Flock age			
Comments			

Standard reference	Summarised standard	Check	Comments
---------------------------	----------------------------	--------------	-----------------

Food & water			
FW 1.1	Feed provided: a) is appropriate b) maintains birds in good health c) satisfies nutritional needs d) is available at all times.		
FW 1.5	Food not contaminated/stale.		
FW 2.1	Water is clean & fresh & adequate supply available.		
FW 2.3	Water not contaminated/stale.		
FW 2.8	All drinkers: a) at correct height b) in good working order c) allow birds to drink freely from them.		

Environment			
E 1.3	Outside environmental factors, e.g. noise, atmospheric pollution, adverse weather conditions, & other animals, are not compromising, or likely to compromise, bird welfare.		
E 2.4	There's nothing in the environment that could cause unavoidable injury/distress.		
E 2.11	Area around the house: a) is clean & tidy b) does not offer shelter to wild animals c) is well maintained - with any vegetation kept short.		
*E 6.2.4	When using sensory evaluation to assess air quality, scores of 1 and 2 indicate that ammonia and dust are excessive and air quality must be improved without delay.		

Litter			
E 3.4	The litter: a) is of good quality b) is stored hygienically and kept dry c) is of a suitable material & particle size – no large clumps d) is in a dry & friable condition (being replaced where necessary) e) is at least 5cm deep f) allows birds to dust bathe		

Lighting			
C 2.4	Birds exposed to natural daylight no later than 7d of age.		
E 4.1	In each 24h: a) min 8h continuous light, & b) min 6h & max 12h continuous darkness, except first 7d & last 3d before slaughter, where have min 2h continuous darkness, and where natural light is provided & natural period of darkness is less than 6h.		
E 4.3	Natural daylight provided at all times during natural daylight period, through all required openings.		
E 4.4	No area lit at less than 20 lux & is achieved using natural daylight.		
E 4.8	Birds exposed to dawn & dusk periods.		
E 4.8.1	When used outside natural daylight period, e.g. to extend the light period, artificial lights switched on/off in stepped/gradual manner over a period of at least 15 mins.		

Space requirements & environment			
E 5.1	Stocking density & rate are within required limits.		
E 6.1	Aerial contaminants not noticeably unpleasant.		
E 6.4	The birds have thermally comfortable environment.		
E 7.1	Enrichment items were provided from 7d of age.		
E 7.2	For every 1,000 birds, there is at least: a) 1.5 standard sized, long chopped straw bales, b) 2m of perch space, & c) one pecking object.		

Free-range			
R 1.3	The range: a) consist of pasture mainly covered with living vegetation b) surrounding the house is not poached.		
R 1.7	The range is being managed to provide the most suitable conditions to encourage the birds to roam.		
R 2.0	Birds are given access to range from at least 28d old.		
R 2.1	Birds have continuous daytime access to the range.		
R 4.1 d)	There is a min. 8m ² of overhead shade & shelter per 1,000 birds.		
R 4.1 f)	Shade & shelter facilities are appropriately distributed to encourage full use of range.		

Stock-keepers & management			
M 2.2 a)	Stock-keepers can demonstrate their proficiency in procedures that have the potential to cause suffering, e.g. culling.		
M 3.1 & M 3.1.1	Birds are inspected a min 3x/d & 1x inspection identifies sick/injured birds.		
M 3.4	Welfare problems seen during inspections are dealt with appropriately & without delay.		
M 3.5	Work routines & practices do not frightened birds.		
M 5.1	Equipment, upon which chickens depend, is inspected min 1x/d.		
M 5.3 & M 5.4	Alarms fitted to automatic equipment on which birds depend are checked daily, are activated & not turned onto silent.		

Health			
H 1.5.1	If any health and welfare condition exceeded the trigger level identified in the VHWP (see H 1.3 & 1.5): a) the vet was informed b) the WAP was revised to include a programme of action that corrected the problem/s.		
H 1.7	Health, welfare conditions are being recorded and monitored.		
H 1.14	WAPs are being implemented by all relevant staff.		
H 2.1	Good culling practice being adopted - no birds that require culling are present in the flock.		
H 2.2	There are no birds with a gait score of 4 or higher.		

Action			
Standard number	Action required & comments	Date to be actioned	*Date actioned and signature

Signature auditor: _____

Signature producer: _____

Appendix 2

Veterinary Health and Welfare Plan (VHWP) example (relating to standards H 1.1 to H 1.16)

Farm

Farm manager: _____

Farm name & address: _____

Signed (farm manager): _____ Date: _____

Veterinary Surgeon (H 1.2 & H 1.4 b))

Name: _____

Practice: _____

Signed: _____ Date: _____

Previous VHWP review date: _____

Next VHWP review date (H 1.4 a)): _____

Health and welfare conditions affecting the flock (standard H 1.5 a) & H 1.6):

1. Lameness
2. Hock burn (foot pad dermatitis)
3. Breast blisters
4. Back scratches
5. Dirty feathers, etc...

1. Welfare Action Plan: [add condition e.g. lameness] (standard H 1.5 c))

Person(s) responsible for implementing this plan: _____

Where flock records kept (H 1.7 a): _____

Where farm monitoring records kept (H 1.7 b): _____

Trigger level (H 1.5 d): _____

Previous trigger levels & dates (H 1.5.1 b): _____

Assessment (H 1.5 b):

(NOTE: state how, where, when and how often the condition will be monitored)

--	--

Assessment guide (H 1.9, H 1.9.1):

(NOTE: e.g. for lameness, see information box under H 2.1)

--	--

Programme of action (H 1.5 c):

(NOTE: list the measures to be taken for prevention and control of the condition)

--	--

Other comments (e.g. H 1.5.1, H 1.15):

--	--

Date: _____ Review date (H 1.14 c): _____

Vet signature: _____

Appendix 3

Transport – standard operating and emergency procedure (relating to standard T 3.2)

Items to be included

1. Out of hours telephone numbers and 'emergency procedure'
2. Accident procedure
3. Certificate of motor insurance and MOT
4. Tyres – punctures Code of Practice
5. Procedures for use of mobile phones or other communication equipment
6. Guidelines on maintaining correct environmental conditions for the birds during the journey, depending on length of journey and ambient temperature
7. RSPCA welfare standards relating to transport of chickens
8. Procedure for loading/unloading of poultry transporters
9. Procedure for delivery of poultry to customer sites
- * 10. FTA – 'The Driver's Handbook' (2015) including Tachograph Regulations
11. Fire extinguisher
12. Operating procedures for roadside checks

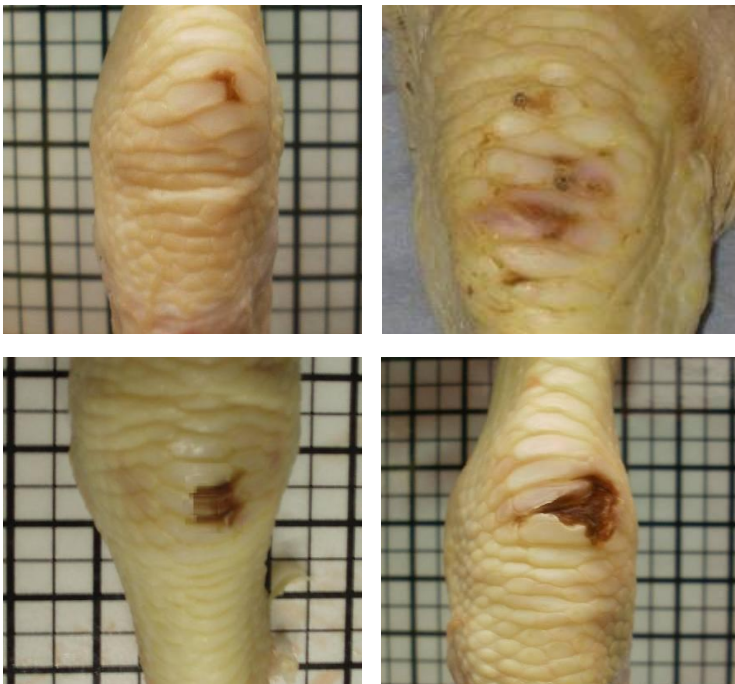
Appendix 4

Hock burn assessment guide (relating to standard S 4.1)

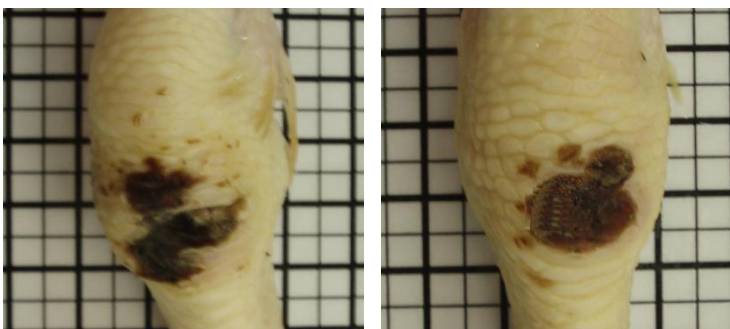
Score 0 (none/minor): No lesion/s or very small (<1 mm) and superficial, slight discolouration in a limited area, mild hyperkeratosis.



Score 1 (mild): Area affected does not extend over hock, substantial discolouration, dark papillae, superficial lesion, no ulceration.



Score 2 (severe): Greater surface of hock usually affected. Deeper lesion/s with ulceration, sometimes haemorrhage, scabs of significant size, severely swollen area.



Appendix 5

Foot pad burn assessment guide (relating to standard S 4.1)

A number of factors have been shown to influence the occurrence of FPD such as litter type and quality, litter depth, water drinker design, ventilation and drinker management, and feed quality.

Score 0 (none/minor): No lesion/s or very small and superficial (1-2mm), slight discolouration in a limited area, mild hyperkeratosis.



Score 1 (mild): Area affected does not extend over entire plantar pad, substantial discolouration, dark papillae, superficial lesion, no ulceration.



Score 2 (severe): Greater surface of plantar pad usually affected, sometimes with lesions on toes. Deeper lesion/s with ulceration, sometimes haemorrhage, scabs of significant size, severely swollen foot pad.



(Pictures supplied courtesy of Dr Lotta Berg, Swedish Board of Agriculture 2008)

Appendix 6

Dirty feather assessment guide (relating to standard S 4.1)

Feathers keep birds warm and help protect them from moisture, dirt and skin infections. Birds will spend a lot of time keeping their feathers in good condition, i.e. 'preened'. If their feathers become wet or soiled with litter (bedding), faeces or dirt then they can lose their protective properties and this can negatively affect bird welfare.

Front

Score 0: not dirty/minor (light)



Score 1: mild (medium)



Score 2: severe (heavy)



Back

Score 0: not dirty/minor (light)



Score 1: mild (medium)



Score 2: severe (heavy)



(Pictures supplied courtesy of 2 Sisters Food Group)

Appendix 7

Documents required

On-farm:

The following publications are required by producers/stock-keepers to have access to on-farm:

- Defra booklet, *'Heat Stress in Poultry: Solving the Problem'* (PB 10543, 2005) (E 6.10)
- *RSPCA welfare standards for chickens* (M 1.1)

It is also recommended that producers obtain, read and where appropriate, apply the advice contained within the latest version of:

- *'Practical Slaughter of Poultry: A Guide for the Small Producer'* by the Humane Slaughter Association (HSA) (information box below H 4.1.1)
- *'Guidelines on responsible use of antimicrobials in poultry and game production'*, issued by the Responsible Use of Medicines in Agriculture (RUMA) alliance (RUMA, Acorn House, 25 Mardley Hill, Welwyn, Hertfordshire, AL6 0TT; www.ruma.org.uk) (information box below H 5.1)
- *'Code of practice on the responsible use of animal medicines on the farm'*, issued by the Veterinary Medicine Directorate (information box below H 5.1)
- *'Veterinary Medicines: safe use by farmers and other handlers'*, issued by the Health and Safety Executive (information box below H 5.1)

Transport:

Catching team leaders must be familiar with the contents of the:

- Humane Slaughter Association DVD *'Poultry Welfare – Taking Responsibility'* (T 1.2)

Where possible all members of the catching team should be familiar with the content of:

- Humane Slaughter Association DVD *'Poultry Welfare – Taking Responsibility'* (information box below T 1.2)

For drivers please see Appendix 3.

Slaughter/killing:

Poultry welfare officers (PWOs) must be familiar with the content of:

- Humane Slaughter Association's *'Best Practice Guidelines for the Welfare of Broilers and Hens in Processing Plants'* (S 2.5)
- Humane Slaughter Association *'Poultry Welfare – Taking Responsibility'* DVD (S 2.5)

Where possible all members of the slaughter team should be familiar with the content of:

- Humane Slaughter Association's *'Best Practice Guidelines for the Welfare of Broilers and Hens in Processing Plants'* (information box below S 2.5)
- Humane Slaughter Association *'Poultry Welfare – Taking Responsibility'* DVD (information box below S 2.5)

Meat Chicken Assessment Protocol: instructions

- **Age:** Assessments must be carried out as close to slaughter age as possible and certainly within the flock's **last 7 days of life**. However, if this is not possible, assess the oldest birds.
- **System:** The assessment has been designed for use on indoor as well as free-range systems. For free-range systems, the assessment procedure followed will depend on whether the site being assessed has static or mobile houses, which are defined as follows:
 - *Static houses:* large, free-range static houses and larger mobile houses with a floor area exceeding 150m².
 - *Mobile houses:* are the typical free-range mobile houses with around 500 birds and larger houses with a floor area up to 150m².
- **House selection:**
 - *Indoor systems & free-range static house sites:* Select **one house** that has the **oldest birds**. If there are multiple houses with birds of the same age then choose one house at random. **All parts of the assessment will take place in this one house.**

Note: When conducting free-range assessments, the majority of the birds need to be in the house. If the majority of birds are **not** in the house, another house should be selected at random where possible. If this is not possible, e.g. there is only one house, then conduct the assessment and make a note of the approximate proportion of the birds within the house.

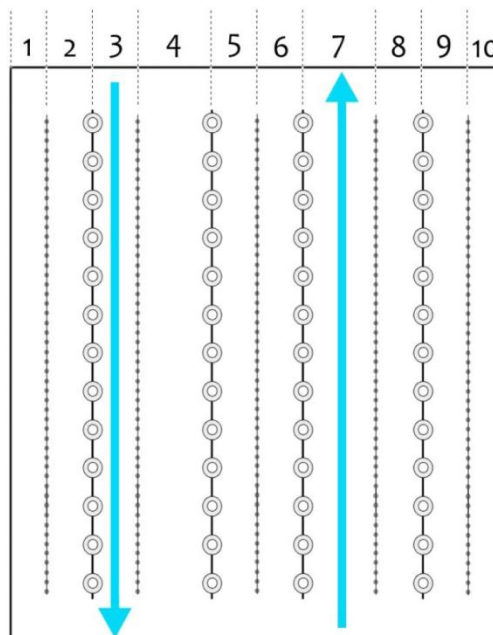
- *Mobile house sites:* First **select a site: a 'site' is defined as a number of houses where the birds from those houses share the same range**. If there are a number of 'sites' on one farm, then select the site with the oldest birds or, if the birds are the same age, select a site at random. For the purposes of this assessment, all the birds on a 'site' are regarded as a flock.
- **Assessment procedure**
- The assessment consists of four parts, which must take place in the following order:
- A. **Whole flock assessment:** when you first enter the house, stand at the top of the house and initially assess the *whole flock* for 5 parameters (see Section A). *For mobile house sites, you must assess all these parameters in all the houses on the site.*
 - B. **Defined walk:** after the whole flock assessment, conduct a defined walk around the house (described below) and observe *all birds within your path* for 5 parameters (see Section B). Also, examine litter condition. *For mobile house sites, only conduct this part of the assessment in the houses within your 20% sample.*
 - C. **Individual measures:** after conducting the defined walk, select a group of 25 birds at random within the house and pen them to assess each bird for 2 parameters (see Section C). *For mobile house sites, just select one house for this assessment: this can be a house within your 20% sample or from any other house on the site being assessed.*
 - D. **On-farm records:** finally, look at the house records to record data for 3 areas (see Section D). **Post – slaughter records for the current flock will need to be collected once data from the slaughter plant is ready.** *For mobile house sites, examine records for the site assessed, if site specific records are not available then record data for the whole farm.*

- **The defined walk:** The defined walk within the house must take place as described below. Your walking speed should be dictated by the speed of the bird's movement and how long it takes to observe the birds for the appropriate measures – don't rush. Allow additional time for the birds to clear the corners/ends of house without them becoming distressed or overly crowded.

Indoor systems & free-range static houses:

To identify the path you need to walk:

1. Use the feeder and drinker lines to divide the house into paths (e.g. 10 paths as in Fig. 1). NB if no feeder or drinker lines are present, then an arm span is approximately the width of a path, so divide the house according to the number of arm spans instead.
2. Calculate how many paths equal 20% of the total number of paths available (e.g. in Fig.1 $10 \times 0.2 = 2$ paths). If 20% is not a whole number, round up the number of paths to the next whole number. This is the number of paths that need to be walked for the assessment.
3. Select the paths to be walked at random.
4. Start walking the paths in alternate directions, (e.g. 7 & 3 in Fig.1), to observe all the birds in your path. Observe birds that were in your path but moved from the path under the feeders and drinkers on either side.



NB This scientifically validated method enables a large number of individual birds to be observed - sampling approximately 20% of the flock

Fig. 1. Path to walk for indoor systems / static houses

Mobile houses:

1. Select **20% of the houses** on that site that have the **oldest birds**, e.g. if there are 10 houses then select 2 of them. If all birds on the site are the same age then select the houses at random. Where 20% of houses is not a whole number, e.g. if there are 12 mobile houses ($20\% = 2.4$), then round up the number of houses to be assessed to the nearest whole number, i.e. 3 houses.
2. Start by walking the inside perimeter of the house, as shown in Fig. 2, and observe all the birds in your path that fall within your arm span. NB an arm span is approximately half the width of a typical mobile house. Birds that leave through the pop-holes during the defined walk will be sampled in step 3.
3. When you reach the point where you entered the house to start the walk then exit the house and walk the outside perimeter of the house to observe all the birds outside that can be adequately assessed.

This method should enable the majority of the birds within a house to be observed.

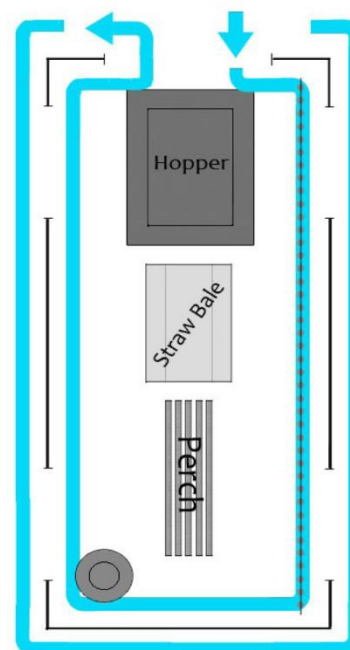


Fig. 2. Path to walk for mobile houses



A. Whole flock assessment: parameters to assess on entry into the house

On immediate entry into the house, assess the **whole flock** for the following parameters from the top of the house, as described. *Note: For sites with mobile houses, you must assess all these parameters in all the houses on the site where those birds from those houses share a common range area.*

Bird Distribution	Part A
Score how the birds are distributed as follows:	
<ul style="list-style-type: none"> 0. Approximately even distribution across the house floor. 1. Irregular distribution across the house floor, no uniform density to the flock. 2. Uneven distribution across the house floor with empty areas, birds are grouped/huddled with spaces between. 	
<p>If score 2: note the location of the birds, e.g. in the centre of the house, around the perimeter of the house, or in groups around the house; and what the possible cause/s could be. For example, possible causes could include patches of wet litter or bright sunlight, or draughty areas, or house too cold or too hot.</p>	
<p><i>For mobile house sites: record the score for each house and then note the most common score, i.e. the score that was attained by most of the houses. If there is no most common score, i.e. the number of houses is the same for two or more of the scores, then note the higher score (0-2) attained.</i></p>	

Air Quality: ammonia & dust	Part A
Using sensory evaluation, assess and score the ammonia and dust levels as follows. NB repeat this assessment during the defined walk and again just before leaving the house and record the highest score from the assessments. If available, use a calibrated meter to assess ammonia and note the result.	
<ul style="list-style-type: none"> 0. None/Weak: Odour/dust not/hardly noticeable; easy to breathe / can breathe without effort. 1. Moderate: Odour/dust distinct; experience watery eyes and/or coughing. 2. Strong: Odour/dust irritating; experience stinging eyes and/or mouth, and/or excessive coughing/sneezing. 	
<p><i>For mobile house sites: record the score for each house and then note the highest score attained (0-2) and the number of houses with that score.</i></p>	

Panting in house	Part A
<ul style="list-style-type: none"> 0. No panting – panting is not observed > 10% of the flock 1. Some panting – slow panting is observed in > 10% of the flock. 2. Severe panting – panting is observed in > 10% of the flock. 	
<p><i>In indoor and static houses: review your score once you have conducted the defined walk and amend if necessary.</i></p>	
<p><i>For mobile house sites: record the score for each house and then note the most common score, i.e. the score that was attained by most of the houses. If there is no most common score, i.e. the number of houses is the same for two or more of the scores, then note the higher score (0-2) attained.</i></p>	



Dirtiness	Part A
<p><i>In indoor and static houses:</i> record the score that's affecting the majority (>50%) of the birds within the house. Review your score once you have conducted the defined walk and amend if necessary.</p> <p><i>For mobile house sites:</i> record the score for each house and then note the most common score, i.e. the score that was attained by most of the houses. If there is no most common score, i.e. the number of houses is the same for two or more of the scores, then note the higher score (0-2) attained.</p>	
<ul style="list-style-type: none"> 0. None/Minor – overall plumage is not significantly dirty, only feathers on breast are lightly stained/soiled, no clumping of feathers 1. Mild – overall plumage is mildly dirty, feathers on breast moderately stained/soiled, this can extend onto the wings, some clumping of feathers evident. 2. Severe – overall plumage is dirty, feathers heavily soiled/stained on breast and wings, and can also include dirty feathers on the belly/vent area, considerable clumping of feathers evident. 	

Enrichment	Part A
<p>Record the level of engagement with the enrichment items provided. Observe the flock and score what the birds are doing in general:</p> <p>Engaging with Enrichment:</p> <ul style="list-style-type: none"> 0. Yes there is interaction: in general birds are observed interacting with the enrichment items provided. 1. No / low interaction: in general, there is no or limited interaction with the enrichment items provided. 2. No enrichment provided. <p>Observation Comments: In the comments box , note down the likely reasons for low/no engagement with the enrichment items provided, or, if there is a high level of interaction, then note down the enrichments items used. N.B. only record engagement with intended environmental enrichment items, e.g. straw bales, pecking objects, etc. and note that this does not include litter/substrate or items of furniture that serve another primary function, including painted down posts.</p> <p>For mobile house sites, record the scores for each house assessed and give an overall score for all the houses based on the most frequent score.</p>	

B. Defined walk: parameters to assess during the walk

During the walk, observe all birds within your path for the following parameters as described. *For mobile house sites:* combine the scores for all houses within your 20% sample.

Walking ability	Part B
<p>Watch the birds walk.</p> <p>Record the number of birds with a score 3 and the number of birds with a score of 4 or 5.</p> <ul style="list-style-type: none"> 3. An obvious gait defect that affects the bird's ability to move: the bird may have a limp, jerky or unsteady strut, or splay one leg as it moves. Will prefer to squat, and will not run. 4/5. Severe gait defect, capable of walking but only with difficulty and will squat at first opportunity, or the bird is incapable of sustained walking. <p><i>Birds that do not rise should be encouraged to stand and walk so they can be assessed.</i> Video guides to help assess walking ability can be found here: www.assurewel.org/broilers/walkingability</p>	

Birds requiring culling	Part B
<p>Record the number of sick and injured birds that should be culled. If possible, record the reason why they should be culled. Do not include severely lame birds as these will be recorded under the walking ability measure.</p>	
Runts and dead birds	Part B
<p>Record the number of runts and the number of dead birds found.</p>	
Behaviour	Part B
<p>On at least two occasions when walking each full length of the house, turn around, crouch and score the behaviour of the in the space behind you. Look no more than 3 metres behind you, for a duration of approximately 20 seconds on each occasion. From your scores, assign an overall score for the house, based on the most common score recorded. If no frequent score, record the highest score attained:</p> <ol style="list-style-type: none"> 0. More than half the birds display active/interactive behaviour: for example running, sparring, wing flapping. 1. Less than half the birds display active/interactive behaviour: for example running, sparring, wing flapping. 2. Limited space created – birds mainly inactive, space created extends less than 3 metres and birds close the space only to predominately sit soon after being disturbed. <p>Further, note whether the flock could be best described as calm, cautious or flighty.</p> <ol style="list-style-type: none"> 0. Calm - In general, the birds appear undisturbed by your presence or actively approach you 1. Cautious - In general, bird behaviour is disturbed by your presence but birds do not appear actively alarmed 2. Flighty - The birds appear actively alarmed by your presence <p><i>For mobile house sites: this assessment may be done after exiting the house rather than during the walk. Record the scores for each house assessed and then give an overall score for all houses based on the most frequent behaviours observed.</i></p>	

C. Individual measures: parameters to assess on individual birds

Select a group of 25 birds at random within the house and pen them to assess each bird for the following parameters as described. If you pen more than 25 birds then select 25 birds at random for assessment.

For mobile house sites: pen 25 birds from just one house selected at random: this could be a house from your 20% sample or another house on the site.

Hock burn	Part C
<p>Assess the hocks of the birds and record the number of birds that fall within each score.</p> <ol style="list-style-type: none"> 0. None: no lesion/s or very small and superficial (<1mm), slight discolouration in a limited area, mild hyperkeratosis (thickening of the skin). 1. Mild: area affected does not extend over hock, substantial discolouration, dark papillae, superficial lesion, no ulceration. 2. Severe: greater surface of hock affected. Deeper lesion/s with ulceration, sometimes haemorrhage, scabs of significant size, severely swollen area. 	

Pododermatitis	Part C
Assess the food pads of the birds and record the number of birds that fall within each score.	
<ul style="list-style-type: none"> 0. None: no lesion/s or very small superficial lesions (1-2mm), slight discolouration in a limited area, mild hyperkeratosis. 1. Mild: area affected does not extend over the entire plantar pad, substantial discolouration, dark papillae, superficial lesion, and no ulceration. 2. Severe: greater surface of plantar pad usually affected, sometimes with lesions on toes. Deeper lesion/s with ulceration, sometimes haemorrhage, scabs of significant size, severely swollen foot pad. 	

D. On-farm records: information to collect from house records

Look at the records for the house/s assessed to record the following data for the **current flock** as described: *For mobile house sites: for each measure, record values for the site assessed as a whole. If site specific information is not available then record data for the whole farm (tick the appropriate box on the form to indicate the source of the data).*

Antibiotic use	Part D
<ul style="list-style-type: none"> - AB used. - The number of treatments used. - Number of days use for each treatment. - Predominant reason/s for use. <p><i>In-feed antibiotics should be included.</i></p>	

Mortality	Part D
<ul style="list-style-type: none"> - First week mortality, including culls (%). - Mortality to date - dead birds only, i.e. not including culls (%). - Culls to date, not including leg culls (%). - Leg culls to date - leg culls only (%). <p><i>Also record this information for the previous flock. If possible, record predominant cause/s of mortality and culls.</i></p>	

Post-slaughter information:

DOA's, rejects, breast blisters, wing and leg damage, Hock burn, and pododermatitis	Part D
After the assessment, contact the farm manager post-slaughter to record the following for the house/site that was assessed:	
<ul style="list-style-type: none"> - Dead on arrivals (%) - Total slaughter rejects (%) - Total farm rejects (%) - Breast blisters (%) - Wing damage (%) - Leg damage (%) - Hock burn: the proportion of birds with each score (as for 'individual measures', above). - Pododermatitis: the proportion of birds with each score (as for 'individual measures', above). <p>Note the name of the processing plant where the birds were slaughtered. Also, note the number of birds sent to slaughter and the average slaughter weight of the birds. And, record hock burn and pododermatitis for the previous flock.</p>	

AssureWel Broiler Pilots: INDOOR & STATIC FREE RANGE houses

Flock information: (circle where appropriate)

Assessor		Age (d)	
Date		Breed	
Membership number		Sex	M / F / AH
House ID		Avg. bird weight (kg)	
Production type	Indoor / Free-range / Organic	Growth rate (g/d)	
No. houses on site		Target weight (kg)	
No. birds placed in house		Planned age for slaughter	
No. birds on site		Age of parent flock (wks)	
Date birds placed		Thinned date	
Age onto range (d)		Depopulation date	
House type	Indoor / Static FR / Large Mobile	Aerial Perching in House	≤ 2m/1000 birds / ≥ 2m/1000 birds / None
House construction		Temp. in house (°c)	
House floor area (m2)		Temp. on range (°C)	
Stocking density (kg/m2)		House humidity (%)	
Drinker type	Nipple / Bell / Nipple & cups	Ventilation rate (m/s)	
Popholes	One side / Both sides / Open / Closed	Heating system	Biomass / Gas / Other:
Windows	One side / Both sides / Open / Closed	Roof insulated	Yes / No
% of birds within the house		Shed preheated	Yes / No
Weather conditions	Still / Windy / Sunny / Overcast	Litter type	
Dry / Wet / Raining	Other:	Birds are brood & move	Yes / No / Move Date:

A. Initial assessment: parameters to be assessed on entry to the house (can be reassessed on exit)

Bird distribution (Circle one)

0 Even	1 Irregular	2 Uneven
--------	-------------	----------

If Score 2: note location of birds (e.g. centre/perimeter of house, in groups around house) and possible causes:

Air quality (Circle one)

Ammonia:	0 None/Weak	1 Moderate	2 Strong
Dust:	0 None/Weak	1 Moderate	2 Strong

Ammonia level (automated reading):

Panting: circle the highest score if being performed by >10% of the flock

0 None	1 Slow	2 Severe
--------	--------	----------

Dirtiness: (Circle one)

0 None/Minor	1 Moderate	2 Severe
--------------	------------	----------

Enrichment:

0 Yes there is interaction	Observation comments:
1 No/Low interaction	
2 No enrichment provided	

B. Defined walk: tally the number of birds seen for each parameter during the walk

Totals

Walking ability Score 3: Identifiable abnormality that impairs function		
Walking ability 4 & 5: Severe impairment of function but still capable of walking with difficulty OR incapable of sustained walking		
Birds requiring culling / further care: (not including lame birds): Reasons for culling:		
Runts		
Dead birds		

Behaviour (Circle one)

0	<50% of birds display active/interactive behaviour, e.g. running, sparring, wing flapping
1	>50% of birds display active/interactive behaviour, e.g. Running, sparring, wing flapping
2	Limited space created – birds mainly inactive and sit soon after being disturbed.

Behaviour (Circle one)

1	Calm
2	Cautious
3	Flighty

Litter

Overall score (1 - 6)		
score and estimate proportion of any problem areas identified		
	% house	M ²
4	Largely capped and dry with few friable areas	
5	Capped and wet areas	
6	Wet/Soggy areas	

C. Individual assessment - assessed on 25 penned birds

	Hock burn	Total	Foot pad dermatitis	Total
0 None				
1 Mild				
2 Severe				

D. On-farm records

Antibiotic use (current flock only)

Tick if birds are currently receiving antibiotic treatment

Antibiotic	No. of days treated	Reason for treatment

Post-slaughter information:

Processing Plant: _____

Mortality

Previous flock slaughter date:	Previous flock	Current flock
First week mortality - inc. culls (%)		
Mortality to date - not inc. culls (%)		
Culls to date - not inc. leg culls (%)		
Leg culls to date - leg culls only (%)		
Record 'predominant' reason/s for mortality & culls (current flock only):		
For brood & move only: Does data include brooding phase		Y / N

Please provide results for FPD and Hock burn, including % of birds falling into each score (This could be presence/absence, 3 point or 5 point scale)

Post Slaughter Data to be collected for flock under current assessment

Score	Previous flock		Current flock	
	FPD	Hocks	FPD	Hocks

Current flock only:			
Total birds sent to slaughter		Breast blisters (%)	
Average bird weight at slaughter (Kg)		Total farm rejects (%)	
Dead on arrival (%)		Wing damage (%)	
Total slaughter rejects (%)		Leg damage (%)	

Post slaughter information is: (tick one)

House specific data

Whole farm data

What changes to improve welfare have you made in the last 12 months? (e.g. resources / management / livestock) _____

What changes to improve welfare would you like to make in the next 12 months? (e.g. resources / management / livestock) _____

Comments on general health:

Good activity	Y / N	Good appearance	Y / N
Good sound	Y / N	Good respiration	Y / N

Please expand if 'N': _____

General Comments:

Further Advice and Support

Your RSPCA Assured Assessor can provide help and advice. The RSPCA can provide additional advice, support and training in self assessment or to discuss any aspect of your welfare outcome assessment. Tick if producer would like to be contacted to discuss welfare outcome results:

Producer's preferred contact details: _____

In accordance with the RSPCA Welfare Standards for Meat Chickens (see standard WA 1.2) this form must be kept (a) on the farm where this assessment was carried out (b) for a minimum of five years. Please keep this form with your records, it will be required at future RSPCA Assured assessments and RSPCA monitoring visits.

Carried out and Signed by: _____

Title & Affiliation: _____

AssureWel Broiler Pilots: MOBILE houses



Flock information: (circle where appropriate & use averaged data where appropriate for all houses on site)

Assessor			Age (d)		
Date			Breed		
Membership Number			Sex	M / F / AH	
Site ID			Avg. bird weight (kg)		
Production type	Free-range / Organic		Growth rate (g/d)		
No. houses on:	Farm:	Site assessed:	Target weight (kg)		
No. birds on:	Farm:	Site assessed:	Planned age for slaughter		
Age onto range (d)			Age of parent flock (wks)		
Date placed			Depopulation date		
No. birds placed p. house			Litter type		
Aerial Perching in House	≤ 2m/1000 birds / ≥ 2m/1000 birds / None				
House construction			Temp. in house (°C)		
House floor area (m2)			Temp. on range (°C)		
Stocking density (kg/m2)			House humidity (%)		
Drinker types	Nipple / Bell / Nipple & cups		Windows	One side / Both sides	Open / Closed
Popholes	One side / Both sides	Open / Closed	Roof insulated	Yes / No	
Weather conditions	Still / Windy	Sunny / Overcast	% of birds within the house		
Dry / Wet / Raining	Other:		Birds are brood & move	Yes / No	Move date:

A. Initial assessment: parameters to be assessed on entry to ALL houses on site.

Bird distribution (Tally)

0 Even		If Score 2: note location (e.g. centre/perimeter of house, in groups around house) and possible cause/s:	Most common score: (highest if equal)
1 Irregular			
2 Uneven			

Air Quality note score for each house, tally & note highest score & number of houses affected (NB if automated reading)

Ammonia	0 None/Weak		Highest score 0-2:	Number houses:	Dust	0 None/Weak		Highest score 0-2:	Number houses:
	1 Moderate					1 Moderate			
	2 Strong					2 Strong			

Panting: note the highest score if performed by <10% of the birds in each house

Panting	0 None		Most common score: (highest if equal)
	1 Slow		
	2 Severe		

Dirtyness: note the score that's affecting the majority of birds in each house

Dirtyness	0 None/Minor		Most common score: (highest if equal)
	1 Moderate		
	2 Substantial		

Enrichment: note the score of how the bird's are interacting with enrichment (tally)

Enrichment	0 Yes there is interaction		Most common score: (highest if equal)	Observation comments:
	1 No/Low interaction			
	2 No enrichment provided			

B. Defined walk: tally total number of birds seen for each parameter within the 20% sample

	Totals
Walking ability Score 3: Identifiable abnormality that impairs function	
Walking ability 4 & 5: Severe impairment of function but still capable of walking with difficulty OR incapable of sustained walking	
Birds requiring culling (not including lame birds): Reasons for culling:	
Runts	
Dead birds	

Behaviour: score each house within 20% sample.

0	<50% of birds display active/interactive behaviour, e.g. running, sparring, wing flapping	0
1	>50% of birds display active/interactive behaviour, e.g. Running, sparring, wing flapping	1
2	Limited space created – birds mainly inactive and sit soon after being disturbed.	2

Circle most frequently observed score (Circle One)

1	Calm	1
2	Cautious	2
3	Flighty	3

Litter: score each house within 20% sample.

Circle most freq. Obsv. score (Circle One)

1	Completely dry & friable, i.e. breaks apart easily when pressed in the hand	1
2	Small moist/capped areas only by drikers / pop holes, otherwise as score 1	2
3	Large capped areas but dry and still areas to dust bathe.	3
4	Largely capped and dry with few friable areas	4
5	Capped and wet areas	5
6	Wet/Soggy areas	6

C. Individual assessment - assessed on 25 penned birds from one house

	Hock burn	Total	Foot pad dermatitis	Total
0 None				
1 Mild				
2 Severe				

D. On-farm records: averages for all houses on site

Antibiotic use (current flock only)

Tick if birds are currently receiving antibiotic treatment

Antibiotic	No. of days treated	Reason for treatment

Post-slaughter information:

Processing Plant: _____

Mortality

Previous flock slaughter date: _____

	Previous flock	Current flock
First week mortality - inc. culls (%)		
Mortality to date - not inc. culls (%)		
Culls to date - not inc. leg culls (%)		
Leg culls to date - leg culls only (%)		
Record 'predominant' reason/s for mortality & culls (current flock only): _____		
Data includes brooding phase (brood & move only)		Y / N

Please provide results for FPD and Hock burn, including % of birds falling into each score (This could be presence/absence, 3 point or 5 point scale)

Post Slaughter Data to be collected for flock under current assessment

Score	Previous flock		Current flock	
	FPD	Hocks	FPD	Hocks

Total birds sent to slaughter		Breast blisters (%)	
Average bird weight at slaughter (Kg)		Total farm rejects (%)	
Dead on arrival (%)		Wing damage (%)	
Total slaughter rejects (%)		Leg damage (%)	

Post slaughter information is:

- Site specific data
 Whole farm data

What changes to improve welfare have you made in the last 12 months? (e.g. resources / management / livestock) _____

What changes to improve welfare would you like to make in the next 12 months? (e.g. resources / management / livestock) _____

Comments on general health:

Good activity	Y / N	Good appearance	Y / N
Good sound	Y / N	Good respiration	Y / N

Please expand if 'N': _____

General Comments:

Further Advice and Support

Your RSPCA Assured Assessor can provide help and advice. The RSPCA can provide additional advice, support and training in self assessment or to discuss any aspect of your welfare outcome assessment.

Tick if producer would like to be contacted to discuss welfare outcome results:

Producer's preferred contact details: _____

In accordance with the RSPCA Welfare Standards for Meat Chickens (see standard WA 1.2) this form must be kept (a) on the farm where this assessment was carried out (b) for a minimum of five years. Please keep this form with your records, it will be required at future RSPCA Assured assessments and RSPCA monitoring visits.

Carried out and Signed by: _____

Title & Affiliation: _____

Index

Subject	Page	Subject	Page
Access to range		Casualty killing/slaughter	
R 2.0, R 2.1	22	H 1.12	39
R 2.2 to R 2.5	23	H 2.1	41
R 2.6 to R 2.9	24	H 4.1 to H 4.6	44
Air quality		H 4.7, H 4.8	45
C 2.3	1	T 2.3 to T 2.3.2	50
E 2.3	6	Catching	
E 6.1 to E 6.2.2	15	C 2.11.1	2
E 6.2.3 to E 6.3, E 6.7	16	E 2.2	6
Ammonia		E 2.10	7
E 6.1 to E 6.2.2	15	E 5.2	14
E 6.2.3 to E 6.3	16	T 1.0 to T 1.3	51
Assessment guides		T 1.4 to T 1.7.1, T 2.1 to T 2.4	52
<i>Foot pad burn</i>		T 2.5 to T 2.12	53
S 4.1, S 4.2	60	T 2.13 to T 2.21	54
S 4.2.1, S 4.3	61	T 3.8	55
<i>Dirty feathers</i>		S 4.4	61
S 4.1, S 4.2	60	Chicks – specific provisions	
S 4.3	61	C 1.1 to C 2.5	1
<i>Hock burn</i>		C 2.6 to C 2.11.1	2
S 4.1, S 4.2	60	Depopulation	
S 4.2.2, S 4.3	61	<i>see Catching</i>	
Biosecurity		Dirty feathers	
H 6.0 to H 6.12	47	S 4.1, S 4.2	60
H 6.13 to H 6.15	48	Disease	
Bleeding		C 2.1	1
S 7.2	64	R 1.6 to R 1.8	21
S 10.0 to S 10.4.1	68	M 2.1	28
Brood and move		M 6.2	32
C 2.11, C 2.11.1	2	H 1.11, H 1.11.2	38
Buildings		H 1.12	39
E 1.1, E 1.2, E 2.0 to E 2.3	6	Disinfectants/Disinfection	
E 2.4 to E 2.11	7	C 2.1	1
E 6.5	16	E 2.8	7
M 6.2	32	E 3.1	8
Carbon dioxide		R 3.1	24
E 6.3	16	H 1.12	39
S 11.1, S 11.3	69	H 6.2, H 6.12	47
S 11.26	71	H 6.13	48
S 11.27	72	Drinkers	
Carbon monoxide		C 2.3	1
C 2.8	2	C 2.8 to C 2.10, C 2.11.1	2
E 6.3	16	FW 2.6	4
Carcass disposal		FW 2.7 to FW 2.12	5
H 4.6	44	E 2.3	6
H 4.7	45	M 5.3	31

Subject	Page	Subject	Page
Dust		Free-range	
E 6.2 to E 6.2.2	15	C 2.11	2
E 6.2.3, E 6.3	16	E1.3	6
Dustbathing		E 5.1, E 5.1.1	14
E 3.4	8	R 1.1 to R 1.4	20
R 4.2.1	26	R 1.5 to R 1.8	21
Electrical installations		R 2.0, R 2.1	22
E 2.9	7	R 2.2 to R 2.5	23
Emergency procedures		R 2.6 to R 3.7	24
E 2.3	6	R 4.1, R 4.1.1	25
M 1.3	27	R 4.2, R 4.2.1	26
T 3.2	55	S 11.4	69
S 2.1, S 2.2	57	Gas killing	
S 5.14, S 6.1	62	S 3.1	59
Environmental enrichment		S 11.1 to S 11.5	69
E 7.1, E 7.2	17	S 11.6 to S 11.18	70
E 7.3 to E 7.7	18	S 11.19 to S 11.26.1	71
Feeders		S 11.27 to S 11.35	72
C 2.3	1	S 11.36 to S 11.39	73
C 2.8 to C 2.10, C 2.11.1	2	S 11.40 to S 11.45	74
FW 1.6 to FW 1.10	3	Growth rate	
FW 1.12, FW 1.13	4	H 1.11.1, H 1.11.2	38
M 5.3	31	H 3.0	43
Feeding space		Health monitoring	
FW 1.8, FW 1.9	3	H 1.1 to H 1.4	36
Flock size		H 1.5 to H 1.8	37
E 5.1 to E 5.3	14	H 1.9 to H 1.11.2	38
Flooring		H 1.12 to H 1.15	39
E 3.1 to E 3.3	8	H 1.16, H 1.17	40
S 5.5	61	S 4.1, S 4.2	60
Food		S 4.2.1 to S 4.4	61
C 2.11.1	2	Heat stress	
FW 1.1 to FW 1.11	3	C 2.5	1
FW 1.12, FW 1.13	4	E 4.11	13
M 1.3	27	E 6.4 to E 6.10	16
M 6.2	32	R 2.9	24
H 2.1	41	T 2.5 to 2.6	53
T 2.1	52	T 3.10	56
T 2.5	53	S 5.6	61
Foot pad burn		S 5.7 to S 5.9	62
E 3.4	8	Independent Welfare Audits	
M 2.2	28	M 4.1 to M 4.3	29
S 4.1, S 4.2	60	M 4.4 to M 4.8	30
S 4.2.1	61		

Subject	Page	Subject	Page
Injuries		Managers	
E 2.4	7	E 1.2	6
E 7.3	18	M 1.1 to M 1.3	27
R 4.1	25	M 4.6	30
M 3.1.1, M 3.3	28	M 6.18	35
M 3.6	29	T 1.3	51
M 6.14	35	T 1.5	52
H 1.12	39	T 3.1.1	55
H 2.1	41	S 2.1, S 2.3	57
H 2.5, H 2.5.1	42	S 2.4	58
T 1.6	52	S 5.12	62
T 3.3	55	Mechanical harvesting	
S 5.8 to S 5.10, T 5.12	62	T 2.21	54
S 6.11	64	Medicines	
S 11.31	72	M 1.3	27
S 11.41, S 11.43	74	H 1.12	39
Inspection		H 5.1 to H 5.5	46
E 4.0	10	H 5.6	47
M 3.1 to M 3.3	28	Noise	
M 3.4 to M 3.6	29	E 1.3	6
M 5.1	31	E 2.6	7
T 1.6	52	T 2.5, T 2.7	53
Killing		T 3.12	56
<i>see Slaughter/killing</i>		S 5.4	61
Lairage		S 6.6	63
S 3.1	59	Other animals	
S 5.1 to S 5.6	61	E 2.9, E 2.11	7
S 5.7 to S 5.14	62	R 4.1	25
Leg health		M 6.1 to M 6.3	32
H 1.6	37	M 6.4 to M 6.6	33
H 2.1	41	M 6.7 to M 6.12	34
H 2.2, H 2.3	42	M 6.13 to M 6.21	35
S 4.1	60	Paints	
S 4.4	61	E 2.8	7
Lighting		Pan feeders	
C 2.4	1	FW 1.7	3
C 2.8	2	Parasites	
E 2.3	6	E 3.1	8
E 4.0 to E 4.4.1	10	R 1.6, R 1.7	21
E 4.4.2 to E 4.6.2	11	H 1.12	39
E 4.7 to E 4.9	12	Perches	
E 4.10, E 4.11	13	E 7.2	17
M 2.0	28	E 7.3 to E 7.7	18
T 2.4	52	Poultry welfare officer	
T 2.11	53	S 2.3	57
S 5.6	61	S 2.4 to S 2.6	58
S 6.6	63	S 5.12	62
Litter		S 7.3	64
E 3.3, E 3.4	8		
E 3.5	9		
R 3.7	24		
M 2.2	28		

Subject	Page	Subject	Page
Popholes		Shelter	
R 2.2 to R 2.5	23	R 1.7	21
R 2.6 to R 2.9, R 3.5, R 3.6	24	R 4.1, R 4.1.1	25
Range requirements		R 4.2, R 4.2.1	26
<i>see Free range</i>		Slaughter/killing	
Records		H 2.1	41
FW 1.2	3	H 4.1 to H 4.6	44
FW 2.2.1	4	H 4.7, H 4.8	45
E 2.9	7	T 2.1	52
E 4.2	10	T 3.5	55
E 5.3	14	S 1.0 to S 2.3	57
E 6.2.1	15	S 2.4 to S 2.6	58
E 6.7.1	16	S 3.1 to S 3.5	59
M 1.0, M 1.3	27	S 4.1, S 4.2	60
M 2.4, M 3.2, M 3.3	28	S 4.2.1 to S 5.6	61
M 4.6	30	S 5.7 to S 6.1	62
M 5.6.1	31	S 6.2 to S 6.6	63
M 6.8	34	S 6.7 to S 7.6	64
M 6.13	35	S 7.7 to S 8.1	65
H 1.3, H 1.4	36	S 8.2 to S 9.2	66
H 1.5.1 to H 1.8	37	S 9.3 to S 9.11	67
H 1.9, H 1.10, 1.11.1	38	S 10.0 to S 10.4.1	68
H 1.16	40	S 11.1 to S 11.5	69
H 2.3	42	S 11.6 to S 11.18	70
H 4.7	45	S 11.19 to S 11.26.1	71
H 5.2, H 5.4, H 5.4.1	46	S 11.27 to S 11.35	72
H 6.0, H 6.0.1	47	S 11.36 to S 11.39	73
T 1.7	52	S 11.40 to S 11.45	74
S 3.5	59	Space requirements	
S 4.1, S 4.2	60	<i>see Stocking density/rates</i>	
S 4.2.1	61	Standard operating and emergency procedure	
S 5.11, S 5.12	62	T 3.2	55
S 11.7	70	Stock-keepers	
S 11.22	71	E 6.9, E 6.10	16
S 11.27 to S 11.29	72	M 1.1, M 1.3	27
S 11.38, S 11.39	73	M 2.0 to M 2.4	28
S 11.40.1, S 11.43 to S 11.45	74	M 4.6	30
Relative humidity		M 5.1, M 5.4.1	31
E 6.3, E 6.7	16	M 6.18	35
M 1.3	27	Stocking density/rates	
S 5.7	62	C 2.11.1	2
Salmonella		E 5.1 to E 5.3	14
H 1.12	39	R 1.5	21
Shackling		T 2.5	53
H 4.3.1	44	T 2.20, T 2.21	54
S 3.1	59	S 11.4	69
S 6.1	62		
S 6.2 to S 6.6	63		
S 6.7 to S 6.11	64		

Subject	Page	Subject	Page
Stunning		Verandas	
H 4.2	44	R 3.0 to R 3.7	24
H 4.8	45	Veterinary Health and Welfare Plan (VHWP)	
S 2.5.1, S 2.6	58	C 2.1	1
S 3.1	59	M 6.21	35
S 6.8, S 7.0 to S 7.6	64	H 1.3, H 1.4	3
S 7.7, S 8.1	65	H 1.5 to H 1.8	37
S 8.2, S 9.1 to S 9.2	66	H 1.12, H 1.13, H 1.15	39
S 9.3 to S 9.11	67	H 2.5.1	42
S 10.0 to S 10.2	68	H 5.2	46
Thermal environment		Veterinary surgeon	
<i>see Heat stress</i>		FW 1.1	3
Thinning		FW 2.1	4
E 5.2	14	H 1.2, H 1.4	36
Training		H 1.5.1, H 1.6	37
M 1.2, M 1.3	27	H 1.14, H 1.15	39
M 2.1, M 2.3, M 2.4	28	H 1.17	40
H 1.10	38	H 4.1.1, H 4.4	44
H 4.1.1	44	H 5.2	46
T 1.1	51	Water	
T 2.3.2	52	C 2.8, C 2.9	2
T 3.1	55	FW 2.1 to FW 2.6	4
S 2.3	57	FW 2.7 to FW 2.12	5
S 2.4	58	M 1.3	27
S 6.4	63	H 1.11	38
S 7.7	65	H 2.1	41
Transport		T 2.2	52
C 2.11.1	2	T 2.5	53
M 1.3	27	Welfare audits	
T 1.0 to T 1.3	51	<i>see Independent Welfare Audits</i>	
T 1.4 to T 2.4	52	Welfare Outcome Assessment	
T 2.5 to T 2.12	53	WA 1.1	49
T 2.13 to T 2.21	54	WA 1.2 to WA 1.4	50
T 3.0 to T 3.9	55	Wild Animal Control Plan	
T 3.10 to T 3.12	56	<i>see Other animals</i>	
S 5.3	61	Wood preservative	
S 5.8, S 5.11	62	E 2.8	7
Transport times			
T 3.5 to T 3.7	55		
Ventilation			
C 2.3	1		
E 2.6	7		
E 6.3, E 6.6, E 6.8	16		
M 1.3	27		
M 2.0	28		
M 5.3, M 5.4.1, M 5.5	31		
T 3.10	56		
S 5.6	61		



Royal Society for the Prevention of Cruelty to Animals

Wilberforce Way, Southwater, Horsham, West Sussex RH13 9RS

Telephone: 0300 1234 999 www.rspca.org.uk [facebook.com/RSPCA](https://www.facebook.com/RSPCA) twitter.com/RSPCA_official

The RSPCA helps animals in England and Wales. Registered charity no. 219099. The RSPCA only exists with the support of public donations. Copyright © 2017 RSPCA.

All rights reserved. This material must not be reproduced or used in any manner whatsoever without the express written permission of the RSPCA.

ISBN 978-0-901098-11-5