



RSPCA welfare standards for

TURKEYS



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Introduction

The '*RSPCA welfare standards for turkeys*' have been developed to provide the only RSPCA-approved scheme for the rearing, handling, transport and slaughter/killing of turkeys. 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, expanding on a standard, stating how a standard can/will be assessed and/or highlighting 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: Turkeys*'.**



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)

Poult sourcing

- P 1.1** Poults must:
- a) be hatched according to the '*RSPCA welfare standards for hatcheries*'
 - b) be sourced from an RSPCA Assured-approved hatchery.

Specific provisions for turkey poults

- P 2.1** For producers implementing brood and move operations, birds must be moved to their finishing/rearing accommodation by 8 weeks of age.
- P 2.2** Buildings must be fully prepared, ready to receive poults, in sufficient time to allow the environment to meet their thermal requirements.
- P 2.3** Up to the first 10 days of life, the number of feeders and drinkers placed, stocking density, air quality parameters and ventilation rates must be at least to the levels specified within the breeding company's published management guidelines.



After the first 10 days of life, for the above parameters producers should refer to the levels specified by the '*RSPCA welfare standards for turkeys*'.

- P 2.4** During unloading and placement, poults must be handled carefully.
- P 2.5** Care must be taken to avoid heat and cold stress in poults.
- P 2.6 *** Throughout the brooding period, the behaviour of the poults must be closely monitored and the brooding temperature adjusted accordingly.
- P 2.7** The environment for brooding poults must be lit at a minimum of 25 lux for the first few days.
- P 2.8** Supplementary feed trays and small water containers must be provided, in addition to the permanent feeders and drinkers, at the start of brooding.
- P 2.9** Feeders and drinkers must be kept clean and free from litter.
- P 2.10 *** 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 noxious gasses, for example carbon monoxide and carbon dioxide
 - 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 poults 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 poults 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.

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** All units must have a written feeding programme to ensure that turkeys are fed a wholesome diet which:
- a) is appropriate to their species
 - b) is appropriate to their age
 - c) is fed to them in sufficient quantity to maintain them in good health
 - d) satisfies their nutritional needs.
- FW 1.2** Turkeys must have access to nutritious food *ad libitum* each day, except when required by the attending veterinary surgeon.
- FW 1.3** Producers must have a written record of the nutrient content of the feed, as declared by the feed compounder.
- FW 1.4** No feedstuffs containing mammalian or avian derived protein are permitted.
- FW 1.5** The use of in-feed growth promoters is prohibited.
- FW 1.6** In-feed antibiotics may only be given for therapeutic reasons under the direction of the attending veterinary surgeon.
- FW 1.7** All foodstuffs must be safely and hygienically stored, transported, and delivered to prevent infestation, contamination, or wetting.
- FW 1.7.1** Managers must be familiar with the contents of the Defra '*Code of Practice for the Control of Salmonella during Production, Storage and Transport of Compound Feeds, Premixtures, Feed Materials and Feed Additives*' (PB 13303, 2009 Defra).
- FW 1.8** Food must not be allowed to remain in a contaminated or stale condition.
- FW 1.9** Where troughs are used, there must be a minimum of 30mm feeding space per bird, which may need to be increased depending on lighting programmes.
- FW 1.10** Where circular pan feeders are used, these must be:
- a) designed and manufactured for use with turkeys
 - b) provided in accordance with the manufacturer's recommended feeding space specifications.
- FW 1.11** Track feeders/feeder chains are prohibited.
- FW 1.12** The siting of feeders must be such that:
- a) all birds have ready access to food without undue competition
 - b) increased activity is encouraged in the birds.

FW 1.13 Where used, wire over feeders must not be electrified.



Where used, wire over feeders should be covered with plastic tubing to help discourage birds from attempting to perch on it.

Water

FW 2.1 Turkeys must have continuous access to an adequate supply of clean, fresh drinking water at all times, except when required by the attending veterinary surgeon.

FW 2.2 Water must not be allowed to remain in a contaminated or stale condition.

FW 2.3 Provision must be made for supplying water in freezing conditions.

FW 2.4 The minimum number of drinkers which must be provided are as follows:

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

FW 2.5 There must be a minimum of 2 drinkers available to a flock.

FW 2.6 All drinkers must be in working order, providing access at all times to clean, fresh water.

FW 2.7 Header tanks must be covered at all times.

FW 2.8 Drinkers must be of a design that reduces water wastage.

FW 2.9 In order to reduce water spillage and prevent consequent problems with litter management, drinkers must:

- a) be placed at an optimum height for the size and age of the birds
- b) be of an appropriate design.

FW 2.10 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 cut off.

FW 2.11 The siting of drinkers must be such that all birds have ready access to water without undue competition.

FW 2.12 The siting of drinkers must be such that increased activity is encouraged in the birds.

FW 2.13 Where used, wire over drinkers must not be electrified.



Where used, wire over drinkers should be covered with plastic tubing to help discourage birds from attempting to perch on it.

FW 2.14 Water meters must be connected to all the birds' drinking systems to monitor water consumption for each house.

FW 2.15 * The drinking quality of non-mains water must be:

- a) independently tested
- b) tested every 6 months, or where there is only one flock per year, tested prior to bird placement
- c) tested at the source.

FW 2.15.1 * The water quality test records relating to standard FW 2.15 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.

*



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.

Environment

The environment in which livestock are kept needs to take into account their welfare needs and 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, designs or layout of facilities not covered in the RSPCA welfare standards 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.

Buildings

- E 2.0** All turkeys must be provided with accommodation.
- E 2.0.1** Buildings must be designed, erected and maintained so as to be suitable for local weather conditions and withstand expected seasonal extremes of weather.
- E 2.1** New housing, or housing undergoing major structural change, must be designed to allow easy removal and minimal carrying and handling of birds during depopulation.
- E 2.2** For all accommodation, a notice containing a checklist of the key points relating to welfare (see E 2.3) must be prominently displayed at, or near, the entrance to each building and be amended accordingly.
- E 2.3** The checklist to satisfy standard E 2.2 must include:
- a) total floor area available to the birds
 - b) total number of birds
 - c) maximum number of birds permitted within the house
 - d) stocking density
 - e) total number of drinkers and feeders
 - f) target air quality parameters
 - g) lighting levels and regimes
 - h) 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 turkeys' environment that is likely to cause unnecessary injury or distress to the birds.



Environmental factors which should be considered in relation to standard E 2.4 include noise, atmospheric pollution, adverse weather conditions, predators and, in the case of free-range systems, soil conditions.

- E 2.5** Except where preservatives with an insecticidal role are used, turkeys must not come into contact with toxic fumes or surfaces, for example from paints, wood preservatives or disinfectants.

- E 2.6** All electrical installations at mains voltage must be maintained in order to be:
- a) inaccessible to the turkeys
 - b) well insulated
 - c) safeguarded from rodents
 - d) properly earthed
 - e) tested at least annually by a qualified or competent person
 - f) in good working order (e.g. any faults identified during testing to be rectified).

i **Electrical installations have to be tested every 3 years as part of the Periodic Inspection Report, in order 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 2.7** Housing and equipment must be designed so that all turkeys can be clearly seen.

- E 2.8** Where changes are being made to existing buildings or new equipment installed that has not previously been assessed, managers must inform RSPCA Assured at the time the change is being made.

i **It is strongly recommended to discuss any proposed changes, referred to in standard E 2.8, in relation to the RSPCA welfare standards with the RSPCA Farm Animals Department.**

- E 2.9** Managers must:

- a) be familiar with the contents of the '*Code of practice for using plant protection products*' (Defra, 2006, PB 11090)
- b) implement the recommendations as appropriate.

Floor and litter

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

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

- E 3.2** Buildings and equipment must be thoroughly cleansed and disinfected after each flock and/or before the placement of new birds.

- E 3.3** The floor of all houses must be completely covered in litter.

- E 3.3.1** The litter must:

- a) be of a suitable material and particle size
- b) be managed to maintain it in a dry, friable condition
- c) be of a sufficient depth for dilution of faeces
- d) allow birds to dust bathe
- e) be topped up daily, if necessary, with fresh litter
- f) be managed hygienically.

- E 3.4** Litter must be maintained at a minimum depth of 5cm.
- E 3.5** Turkeys must have access to litter at all times.
- E 3.6** Litter that is wet or otherwise contaminated must not be introduced into turkey housing.
- E 3.7** Litter must not be allowed to become wet, infested with mites or otherwise harmfully contaminated.
- E 3.8** Wet litter must be replaced immediately.
- E 3.9** Stock-keepers must:
- be aware of the welfare problems associated with poor litter management e.g. burnt hocks, foot pad lesions and breast blemishes
 - understand the factors which affect litter condition i.e. moisture, nitrogen content and greasy capped litter.

i The requirement to keep litter in a well-maintained state is detailed in law (Welfare of Farmed Animals (England) Regulations 2007) and the Defra Codes of Recommendations.

Pododermatitis (foot pad burn, which can result in lameness, pain and bacterial infection), hock burn and breast blisters can all be the consequence of poor litter.

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

In poultry houses, three environmental factors have to be considered together, because their control is interdependent. They are humidity, ventilation rate and environmental temperature.

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 being drawn into the house by the ventilation system. 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. It can also be helpful to encourage movement and an even spread of birds in the house to help prevent any build up of condensation on the litter.

The ventilation rate must always be maintained at a level sufficient to ensure that ammonia does not approach the threshold level of 15ppm. In cold weather this may necessitate increasing the heating levels within the house.

Finally, if birds spend excessive amounts of time squatting down due to leg problems or other diseases they will be more likely to suffer from conditions due to increased contact with the litter.

Primary source: Poultry Litter Management, Defra, 2004.

Lighting

i Commercially employed illuminance and colour balance (from artificial light sources) may impose a degree of visual sensory deprivation in turkeys – inhibiting foraging, exploration and social behaviours¹. Not allowing birds to use their full range of visual abilities is likely to have negative consequences on their behaviour and welfare¹.

The introduction of natural light into turkey houses is likely to be beneficial to bird welfare by, for example, increasing activity and enriching the birds environment and providing a range of illuminance levels in different areas within the house, which changes throughout the day. The light entering the house is also spectrally different to artificial sources, providing further variation.

Research has shown that turkeys demonstrate a greater preference to spend longer periods of time in brighter lit environments (20 and 200 lux versus 1 and 6 lux)¹.

¹Barber, C.L.; Prescott, N.B.; Wathes, C.M.; Le Sueur, C. and Perry, G.C. (2004) Preferences of growing ducklings and turkey poults for illuminance. *Animal Welfare*, 13:211-224.

E 4.1 * Adequate lighting, whether fixed or portable, must be available to enable the turkeys to be thoroughly inspected at any time.

E 4.2 * The lighting system in the turkey house must provide in each period of 24 hours:

- a) a minimum period of 8 hours continuous light, which must take place during the natural light period
- b) a minimum period of 8 hours continuous darkness up to the time of catching, which must take place during the natural dark period, except:
 - i. where the birds are kept under natural lighting conditions and the natural period of darkness is shorter
 - ii. for birds up to 3 days of age.

E 4.2.1 * During the light period (see standard E 4.2 a)) no area must be lit at less than 20 lux.

i On dark days, it may be necessary to use artificial lighting to ensure the 20 lux level is achieved.

E 4.2.2 * Outside the 8 hour light period (see standard E 4.2 a)), but not during the dark period, no area must be lit at less than 6 lux.

i Where injurious pecking or cannibalism is a problem, or to minimise the risk of a problem, ongoing management techniques (such as increasing environmental enrichment, increasing visual barriers and/or altering the diet) should be put in place. Lighting levels should be maintained to allow and encourage birds to explore their environment. However, as a last resort in an emergency situation, and with the ongoing use of other possible solutions, lighting levels can be reduced (where possible). This should only be for a short period of time, to help the birds settle. Lighting should then be increased gradually over a few days and returned to normal levels as soon as possible.

Advice should be sought from the attending veterinary surgeon in relation to these issues.

i Practical experience has shown that there are benefits to providing turkeys with a variable lighting level throughout the house. Darker areas provide the opportunity to rest whilst brighter lit areas allow birds to perform more active behaviours. Spatially variable lighting has also been reported to help reduce the incidence of feather pecking.

i Scientific studies have demonstrated that turkeys actively avoid very low lighting levels, around 2 lux, and prefer more brightly lit conditions, especially during the first few weeks of life.

Research on turkey vision has identified that damage to the eyes occurs when birds are kept under either very dimly lit conditions and/or when they are exposed to prolonged lighting. This can lead to a condition known as 'buphthalmia', which can result in temporary or even permanent blindness.

There is evidence that such problems can arise when birds are kept at lighting levels as low as 2 to 5 lux, and even at 10 lux changes to the eye have been recorded. For this reason, the RSPCA does not permit the use of very low lighting levels for the turkey's environment, although the provision of shaded areas is permitted for resting. However, light levels should be adopted which are as bright as practicable.

E 4.3 The use of intermittent lighting patterns to meet the minimum number of hours of darkness is not permitted, with the exception of the first 36 hours after placement.

E 4.4 Lighting patterns in all houses must be recorded.

*

i In the case of natural lighting, documenting that natural light patterns are followed would be sufficient to meet standard E 4.4.

Where possible, the lighting pattern in artificially lit houses should be recorded automatically.

E 4.5 The lighting level (illuminance) must be measured at bird height.

E 4.6 Birds must be exposed to natural daylight by 35 days of age at the latest.

i Birds should be exposed to natural daylight as early as possible. Natural daylight could be introduced gradually over the first 35 days of life so that birds are exposed to the full natural daylight provisions by day 35.

E 4.6.1 Natural daylight must be provided at all times:

- a) during the natural daylight period
- b) through all the required openings (see standard E 4.9).

E 4.7 Birds must be exposed to the natural dawn and dusk periods.

E 4.8 Natural light must penetrate all areas of the house.

E 4.9 The light openings in the house must correspond to at least 3% of the total floor area of the house.

- E 4.10** At least 90% of all the light openings required to achieve standard E 4.9 must be no smaller than 0.56m² (e.g. 0.75 x 0.75m or 1.0 x 0.56m).

i It is acknowledged that it may not be possible to install light openings of a minimum of 0.56m² in all areas of the house to achieve standard E 4.9. Therefore, where this is the case, up to 10% of the light openings required to achieve standard E 4.9 are permitted to be smaller than 0.56m².

- *** **i** The RSPCA is aware of alternative methods of providing natural light other than through windows, such as solar tubes, which may not meet standards E 4.9 and E 4.10. Producers considering using novel technologies to provide natural daylight which do not meet the current standards should contact the RSPCA Farm Animals Department to discuss this.

- E 4.11 *** When used outside the natural daylight period, for example, to extend the natural daylight period and prior to 35 days of age (see standard E 4.6), artificial lights must be switched on and off:
- a) in a stepped or gradual manner
 - b) over a period of at least 30 minutes.

- *** **i** The inclusion of ultraviolet (UV) light can have beneficial effects on turkey health, for example, by improving bone strength (also see standard E 7.8). Where UV light is provided, a uniform distribution should be achieved, as patches of light could become a focus for pecking behaviour. It should also be noted that glass windows can filter out UV light and, therefore, remove its beneficial effects.

- E 4.12** It must be possible to readily control the amount of natural daylight entering the building to the extent that darkness can be achieved.

i Installing, for example, shutters can help 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 daylight 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.

- E 4.13** The entry of natural light into the building must not be obstructed.

i For example, standard E 4.13 applies to the positioning of items within the building. It does not apply to methods used for controlling the amount of light entering through the light opening, as stated in standard E 4.12, which are being used in accordance with these standards.

E 4.14 * Where there are areas of different light intensity within the house, there must be:

- a) a gradual change in light intensity between each area
- b) no patches of bright light on the floor of the house.

i Bird activity may be greater in more illuminated areas, which can adversely affect litter quality. Streams of bright light could also encourage injurious pecking, especially during the first few weeks of the bird's life.

i Where it is possible that direct sunlight could enter through a light opening, it may be beneficial to use polycarbonate (rather than glass) windows, as they are better at diffusing light and can help avoid patches/streams of direct sunlight entering the building. Alternatively, horizontally mounted shutters, positioned above the windows, which can be adjusted up and down, can be used to block direct sunlight whilst still allowing natural daylight to enter the shed.

E 4.15 Where used, windows must be properly sealed to maintain correct airflow within the house and avoid draughts.

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. Experience has also shown that exposing birds to events occurring outside the house at an early stage of their lives allows them to develop recognition and familiarity and therefore reduce their fearfulness towards them.

E 4.16 Measures must be taken to:

- a) prevent windows from breaking
- b) prevent birds coming into contact with glass if it breaks.

i Standard E 4.16 could be achieved by, for example:

- i) erecting barriers, such as wire mesh
- ii) covering the window with a transparent self adhesive vinyl film
- iii) selecting a window material that is more resistant to breaking, such as Perspex.

Options ii) and iii) will also fulfil standard E 4.16 b). However, where option i) is selected, installing plastic guttering under the window, or the use of fine netting over the window that will capture broken glass, is acceptable.

E 4.17 Where glass is used, this must be safety/toughened glass.

i When installing windows, the additional information and advice below should be taken into account:

Window material

Those windows that help prevent condensation should be selected, e.g. double-glazed windows. Transparent windows will allow birds to see out of the building, further enriching their environment.

Positioning of windows

Where possible, windows should be installed down both sides of a house. This allows greater control over the light entering the house. 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 through the windows on the opposite side.

Thermal environment

The provision of natural daylight – particularly via windows – can affect 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 sunlight. The shutters, especially if insulated, can also help keep the building warm during cold weather, which is especially important during the brooding phase. It is also important to ensure that windows are properly sealed, so correct air flow within the house can be maintained and draughts avoided.

Stocking density

E 5.1 Stocking density, which is calculated using the floor space available to the birds, must never:

- a) exceed 25kg/m²
- b) be planned to exceed 25kg/m² (applies to current flock).

i Stocking density should be set at a level which is appropriate to the design of the building, its locality, and must take account of the ventilation capacity of the building in order to maintain adequate temperatures to avoid heat stress (also see standard M 1.4).

i Breed performance and historical data from previous flocks should form part of the plan for calculating stocking density for standard E 5.1 b).

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 thinning is not permitted.

i Thinning is characterised by placing additional birds into a building so that the maximum stocking density can be reached on one or more occasions prior to final depopulation (the removal of all birds from the building). During the rearing period, a proportion of the birds are removed from the building at planned times to ensure the maximum stocking density is not exceeded. Therefore, thinning is defined as the planned removal of a proportion of birds, on one or more occasions, from a building so as not to exceed the required maximum stocking density.

As an example, as the maximum stocking density is 25kg/m², if you intend to rear the birds to a maximum weight of 5kg at depopulation, then no more than 5 birds/m² can be placed in the building (i.e. 25 / 5 = 5).

E 5.3 Records of the following must be kept:

- a) number of birds placed in each house
- b) daily mortality
- c) number culled (including reason for culling)
- d) average weight of birds removed for slaughter.

Air quality and thermal environment

E 6.1 Ventilation systems, natural or forced, must be designed to maintain air quality.

E 6.2 Provision must be made to ensure that aerial contaminants do not reach a level at which they are noticeably unpleasant to a human observer.

i Air quality parameters should be maintained, under all foreseeable climatic conditions, below the following levels at bird head height:

Ammonia	5ppm
Carbon dioxide	5000ppm
Relative humidity	50 to 70%
Inhalable dust	10mg/m ³
Carbon monoxide	50ppm

Where practically feasible, air quality parameters, i.e. ammonia, carbon dioxide, carbon monoxide, etc. should be measured and recorded on a weekly basis. Where a level higher than that specified within the RSPCA welfare standards is recorded, daily recordings should be made until an acceptable level is achieved and maintained.

Where possible, these levels should be automatically recorded. Where automatic recording is not possible, producers should monitor and record air quality on a daily basis.

E 6.3 Provision must be made to ensure that turkeys have access to a thermally comfortable environment at all times so that heat/cold stress does not occur.

i The number, size and capacity of the fans are an important consideration when determining ventilation rate.

A minimum ventilation rate of $1.6 \times 10^{-4} \text{ m}^3/\text{s}$ per $\text{kg}^{0.75}$ liveweight is recommended. The maximum ventilation capacity should be sufficient to limit a maximum temperature lift of 3°C.

E 6.4 Daily measurements of the maximum and minimum temperatures must be recorded from the centre of the shed and at either end, at bird height.

E 6.5 Stock-keepers must:

- have access to a copy of the Defra booklet, '*Heat Stress in Poultry – Solving the problem*' (PB 10543, 2005)
- be familiar with its content
- adopt its recommendations.

Environmental enrichment

i Turkeys are naturally inquisitive and explore their environment by pecking to investigate objects. The provision of effective and suitable forms of environmental enrichment can encourage increased activity levels and has been shown to reduce pecking directed towards other birds and promote good health.

E 7.1 For every 500 birds the following provisions must be provided as a minimum:

- * a) 1 large (e.g. 250kg bale) or 2 small (i.e. conventional rectangular approximately 18kg) straw bales
- b) 2 metres of perch space (in addition to straw bales)
- c) 2 lengths of rope.

* **i** In relation to standard E 7.1 a), two small (i.e. conventional rectangular) straw bales, are not equivalent to one large (e.g. 250kg bale) straw bale in terms of the quantity of straw provided. When using two small bales it may therefore be necessary to replenish them more frequently to ensure that standard E 7.6 b) is met.

* **i** Stock-keepers are encouraged to use additional enrichment items, which are safe for bird use, to encourage greater bird activity and reduce/avoid injurious pecking. For example, additional enrichment items could include brassicas (e.g. cabbage, cauliflower, sprouts and broccoli), maize stalks, pumpkins, alfalfa blocks; the hanging of CDs, plastic drinking bottles and other similar items; and the addition of livestock, e.g. cattle, ear tags to hanging rope. There should be sufficient opportunity for all birds to explore these forms of enrichment.

Providing a variety of such items and regularly reviewing their use is strongly recommended to help ensure bird interest is maintained. Stock-keepers should monitor bird use of enrichment items, replacing any that are under-utilised.

i It is recommended that the lengths of rope provided are approximately 30cm long and knotted near each end to prevent the entire rope from fraying. Rope could also be suspended at turkey head height and knotted at the end.

E 7.2 Perches must be appropriate to the size and weight of the birds.

i As a guide, practical experience has shown that:

- i) a suitable perch height can range from approximately 20 to 150cm, but should be adjusted according to the size and breed of the turkeys being reared
- ii) turkeys prefer a 5 x 7.5cm (height x width) timber perch with rounded edges
- iii) turkeys should be provided with approximately 40cm of perch space per bird
- iv) approximately 40% of birds can choose to perch at any one time, which is important for calculating the total amount of perching space to provide to a flock.

Where applicable, sufficient space should be provided to allow birds to perch adjacent to each other.

It may be beneficial to the birds to provide perches of varying widths to cater for birds of different sizes and allow the bird to vary where its body weight is positioned on its foot.

E 7.3 Perches must:

- a) be designed to avoid damage to any region of the bird
- b) support the whole of the bird's foot
- c) allow the bird to curl its toes around it to allow the bird to express its normal perching behaviour
- d) be deep enough so that the turkey cannot puncture its own footpad by curling its toenails around the bottom
- e) be elevated.

i Experience and advice suggests that turkeys like to use elevated solid table structures to stand and rest on, and that turkeys of around 10 weeks and older may prefer these to elevated lengths of perching. The standards will be reviewed as more information becomes available, but the RSPCA would currently recommend that safe and appropriate table structures may be a beneficial addition to the turkeys' environment and that careful consideration is given to the perching requirements of turkeys reared above 10 weeks of age (while meeting standard E 7.1, and with reference to standards E 7.2 and E 7.3).

i Allowing birds to perch on top of drinker or feeder lines will not satisfy standard E 7.1. Birds perching on drinker lines could:

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

Crates and straw bales will not count towards the perching space requirement.

E 7.4 Where perches are aligned adjacent to each other, there must be a sufficient gap between perches to allow the turkey to grip the perch without risk of trapping its feet.

E 7.5 Perches must be accessible and easily seen by the birds.

i It is advised that perches be made visible by, for example, painting them white or using brightly coloured adhesive strips, to help birds negotiate them during the dark period. To encourage use, the perches could be placed in the darker areas of the shed.

E 7.6 All environmental enrichment provisions must be:

- a) made available by 14 days of age at the latest
- b) maintained/replaced throughout the rearing period as necessary.

i Standard E 7.6 applies especially to straw bales, which can be dismantled by the birds very quickly.

E 7.7 Turkeys must be provided with visual barriers.

i Visual barriers are items, such as straw bales and free-standing feeders, which can be used by the birds to seek a degree of refuge and rest from other birds. Research has shown that, in addition to other enrichment items, injuries caused by feather pecking can be reduced by providing four free-standing plywood boards (measuring 120 x 30cm (length x height)) for each 20m² of floor space, with a 25cm length of metal chain attached 5cm from the top in the middle of the board as a pecking attraction.

E 7.8 If injurious pecking is known to be a problem on the farm, e.g. from experience with the previous or current flock/s, then:

- a) the entire building must be lit with UV light, and
- b) the number of enrichment items required under standard E 7.1 must be increased by at least 25% until the problem is under control.

i Natural daylight provides a source of UV light (e.g. as in a poll barn system). However, windows can filter out much of the UV light in natural daylight. Therefore, where birds are not exposed to UV light within the building from a natural source, UV light can be provided using artificial sources, i.e. blacklight blue fluorescent tubes.

i Research has shown that the provision of UV lighting from an artificial source (Phillips TL D, 36W/08 blacklight blue lamps), in addition to other enrichment items, can help reduce the incidence of injuries caused by feather pecking.

It has also been shown that turkeys prefer UV enriched environments, as UV light is thought to allow turkeys to pick up on visual cues, which may be important for the performance of a range of visually mediated behaviours and for recognition of other flock members.

Climate change and animal welfare



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

The RSPCA believes that free-range conditions can offer considerable benefits to bird welfare, provided the range area is well-managed and the birds are offered suitable protection against inclement weather and predators. Where range is provided, the following standards need to be met in addition to all other relevant standards in other sections of this document.

- R 1.0** A Range Management Plan, incorporating the standards in the range section, must be developed, implemented and annually updated.

- i** The Range Management Plan (see standard R 1.0) is intended to help focus on range quality and management as well as showing how the range standards are being met. As a guide, the following should be included:
- map – total range area, location of shade/shelters, natural cover, enrichment, rotated areas
 - general details about the range – total available area, number of birds, stocking density
 - protective overhead shade/shelter – type (natural/artificial), amount
 - natural cover – type, amount (expected area if not fully grown)
 - enrichment areas for dustbathing/perching/foraging – type, number, management
 - range use – e.g. shelters/enrichment rotation
 - strategy for heavily worn and poached areas
 - strategy to minimise build up of parasites/disease
 - details of any planned rotation of range areas
 - details of management of the area directly outside the popholes
 - procedure before new flock is placed – plan for heavily contaminated areas
 - general comments – observations of range use and any future plans.

- R 1.1** For free-range systems, managers must be compliant with the EU Poultrymeat Marketing Standards Commission Regulation (EC) No 543/2008 including stocking densities and access to range.

- i** Legal requirements (as detailed in Commission Regulation (EC) No 543/2008) for turkeys reared in 'free-range' systems include:
- minimum 4m² range area per bird
 - access to range for at least half their lifetime.

- R 1.2** Free-range turkeys must have continuous daytime access to the range for a minimum of 8 hours each day except when the natural daylight period is less.

- R 1.3** All popholes must be kept open to satisfy standard R 1.2, except when this is precluded by adverse weather conditions or veterinary advice.

- R 1.4** The outdoor area in free-range systems must:

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

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

- R 1.5** If birds have access to any commercial arable crop then:
- a) the crop must 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
 - c) birds must not be exposed to any crop management practice that may cause them harm, e.g. spraying, pesticide use, sowing, cropping etc.

- R 1.6** Popholes must:
- a) be evenly distributed along the entire length of the building
 - b) ensure birds have ready, unhindered access to the range.

i It is strongly recommended that where there is a step at the base of the pophole, such as a concrete plinth, it should be no higher than 10cm. If it is higher than 10cm, ramps should be provided which run along the entire length of the pophole.

- R 1.7** Each pophole must be:
- a) a minimum of 75cm high, but in any case the height of the pophole must ensure that the tallest birds have sufficient clearance between their head and the top of the pophole to adopt a normal standing position under the pophole
 - b) a minimum of 1.5m wide to allow the passage of more than one turkey at any one time.

i As a build-up of the litter may reduce the pophole space available to the birds over time, the pophole height will only be measured according to the usable space available to the birds.

- R 1.8** There must be a minimum of 2 popholes per building.

i In some circumstances (for example, in unfavourable weather conditions and when turkeys are not fully grown) pophole height and/or number may need to be adjusted in order to manage the temperature and environment inside the house to safeguard the welfare of the birds. For this reason it is strongly recommended that more than the minimum number of popholes are installed to allow for adjustment. For example, to remain compliant with the requirements on a windy day, only popholes on the leeward side could be opened if there are a sufficient number installed.

- R 1.9** Turkeys must have a clear view of the range from within the building when adopting a normal standing position at the pophole.
- R 1.10** Free-range turkeys must have access to a well-drained area for resting whilst outside the building.
- R 1.11** Mobile houses must be moved with sufficient regularity to avoid fowl sick and continuous muddy conditions.
- R 1.12** In summer conditions, free-range turkeys must have access to shaded areas, of sufficient size such that they do not have to crowd together (thereby risking further heat stress).

- R 1.13** A minimum area of overhead shade and shelter (natural, artificial or a combination of both) of 10m² per 1,000 turkeys must be provided at all times.

i Some turkeys may need more shade and shelter in the summer months to minimise the risk of heat stress and crowding in shaded areas, as well as to further encourage ranging behaviour. Shelter provision can be calculated on the basis of the formula: $m^2 = ((N \times 0.3)W)/D$ where N is the number of birds in the flock, W is the expected average bird live weight at depopulation and D is the maximum stocking density recommended by Defra. For example, 500 birds reared to 7kg would be stocked at 41.7kg/m² according to Defra and therefore require a minimum total shelter area of 25m² (i.e. $m^2 = ((500 \times 0.3)7)/41.7$). This could take the form of 2 x 12.5m² areas, for example.

i Calculations of the overhead shade/shelter area will be based on the amount of shade provided by the object/facility.

Vegetation that does not provide overhead shade/shelter, and therefore cannot be included in the calculation of 10m² per 1,000 turkeys, includes:

- a) immature trees that have yet to produce foliage, and
- b) deciduous trees when they have lost their foliage, e.g. during winter.

In such cases, artificial shelters will need to be provided until trees are mature.

Hedgerows may be included in calculations of overhead shade/shelter provided that there is enough room underneath for turkeys to access. However, at certain times of the day, the position of the sun may mean that the hedgerow is not offering any protection in terms of shade. As shade/shelter must be appropriately distributed, hedgerows alone will not meet standard R 1.13.

- R 1.14** Shade and shelter facilities must be appropriately distributed to encourage full use of the range.

- R 1.15** The range must be managed in order to provide the most suitable conditions to encourage the birds to roam.

i Standard R 1.15 can be achieved by, for example:

- a) positioning shade and shelter facilities at varying distances from the house
- b) the rotation of artificial shelters in order to prevent poaching of the land around them
- c) the trimming of hedgerows so that access is provided underneath
- d) restricting access to certain areas of the range as and when necessary in order to prevent poaching of the land
- e) managing poached areas to aid recovery and prevent poaching reoccurring in the same area
- f) an appreciation of the need to take individual flock behaviour into account: some flocks may be reluctant to range and therefore need encouraging by, for example, providing a sheltered route, or 'corridor', onto the range.

- R 1.16** Natural cover must be present in the form of existing or newly planted trees/shrubs/cover crops/other at an area equal to at least 5% of the total range area (this may include natural cover meeting the requirements of standard R 1.13).

i Research and experience has shown the potential of natural cover to help encourage birds to use the range more fully. Natural cover may include the planting of trees and shrubs or semi-permanent vegetation that can easily be established and removed, such as artichoke and kale. A well-managed range should include a variety of different types of natural cover and areas of interest for turkeys. Wide open spaces should be avoided and the provision of moveable artificial shelters, enriched areas (standard R 1.17) and newly planted areas can help to achieve an appropriate distribution of elements.

The requirements of standard R 1.16 differ to those of standard R 1.13 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. For example, when mature, trees may cover an average area of 3m x 3m.

- R 1.17** Additional facilities, or designated existing natural elements, must be provided for dustbathing/perching/foraging or a combination of these behaviours:
- 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 turkeys to carry out perching, foraging 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 turkeys*' require the producer to keep and maintain, must be made available to the RSPCA Assured Assessor and RSPCA Farm Livestock Officer.

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 turkeys*'
 - b) are familiar with its content
 - c) understand and apply its content in their specific areas of responsibility.
- M 1.2** All staff employed who are responsible for the welfare of livestock must be identified, and records must be kept of all relevant training (including in-house) and experience received or gained.
- 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, which must include:
 - the procedures to be followed by those discovering such an emergency
 - the location of water sources for use by the fire brigade
 - a map grid reference and postcode for the location of the unit
 - d) develop and implement a biosecurity plan to minimise the risk of introducing disease onto a site
 - e) maintain records of production data, including:
 - i. incoming and outgoing stock
 - ii. mortality (reasons should be stated)
 - iii. culling (reasons must be stated)
 - iv. causes of illness and injury must be recorded
 - v. feed consumption
 - vi. water consumption
 - vii. maximum and minimum temperatures
 - viii. relative humidity
 - ix. ventilation (including settings and any necessary changes)
 - f) develop and implement a transport plan to RSPCA Assured approved abattoirs which minimises waiting time for the birds.
- M 1.3.1** Records relating to standard M 1.3 e) ii, iii and iv must be dated, signed and noted with the time of inspection.

- M 1.4** Managers must take into account the abilities of the stock-keepers when:
- a) deciding on stocking densities
 - b) deciding on the size
 - c) considering expanding the unit
 - d) considering installing more complex equipment.
- M 1.5** Prior to being given responsibility for the welfare of livestock, stock-keepers must be properly trained.

Stock-keepers

- M 2.1** Prior to being given responsibility for the welfare of livestock, stock-keepers must be properly trained and competent to:
- a) recognise early signs of disease
 - b) know the appropriate actions for treatment
 - c) recognise signs of normal behaviour, abnormal behaviour and fear
 - d) understand the environmental requirements for turkeys
 - e) handle turkeys in a positive and compassionate manner
 - f) cull turkeys when necessary to prevent further suffering.



Where possible, the stock-keeper should have attended an independently recognised validated training course.

- M 2.2** When an outbreak of abnormal behaviour occurs, it must be tackled immediately by appropriate changes in the system of management.
- M 2.3** Stock-keepers must be able to demonstrate their proficiency in procedures which have the potential to cause suffering, e.g. injections, beak trimming, culling.

Inspection

- M 3.1** All turkeys must be inspected:
- a) at least 3 times daily
 - b) using a procedure that will identify all birds that are sick, injured or behaving abnormally
 - c) and signed records must be kept with the date and time of inspections noted.
- M 3.2** In order that the turkey inspection is thorough, the stock-keeper must walk within approximately 3m of each bird and encourage them to move.
- M 3.3** All movement throughout the unit must be slow and deliberate, both to alleviate fear and reduce possible injury to birds.
- M 3.4** Any welfare problems seen during an inspection must be dealt with appropriately and without delay.



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.

Equipment

- M 4.1** Stock-keepers must inspect the equipment, including the automatic equipment, upon which turkeys depend at least once daily to check that there is no defect in it.
- M 4.2** Where a defect relating to standard M 4.1 is found it must be rectified immediately. However, if this is impracticable, such measures as are required to safeguard the turkeys from suffering unnecessary pain or distress as a result of the defect must be taken immediately and maintained until the defect is rectified.
- M 4.3** Where the birds' welfare is dependent on automated equipment, the system must contain:
- an alarm which will give adequate warning of the failure of that system to function properly (the alarm must operate even if the principal electricity supply to it has failed)
 - additional equipment or an alternative means (whether automatic or not) of maintaining a satisfactory environment so as to prevent the birds from suffering unnecessary distress as a result of the failure.
- M 4.4** For existing or new equipment which is used in management, e.g. heaters, lighting, ventilation (flaps/fans), 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 failures.

Protection from other animals

- M 5.1 *** A written wild animal control plan (WACP) must be:
- in place, and
 - implemented on farm.
- M 5.2 *** 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 5.3 *** 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 onto 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 5.4 *** 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:

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

- M 5.5 *** Where any lethal method of control is used, its use must have taken into account the result of the site survey (standard M 5.4).

- M 5.6 *** The WACP must include provisions that specifically exclude the following methods of control:

- snaring
- gassing
- vertebrate glue traps.

M 5.7 * Long-term baiting must not be used as a routine rodent control measure.

- * **i** In relation to standard M 5.7, 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 contribute to bait resistance in rodents.
- However, where bait traps are applied effectively and the requirements of standard M 5.3 have been implemented, and there continues to be problems with protecting livestock from wild animals, it is appreciated that continued baiting may be necessary. However, this should be part of a continued review of the need to bait following the requirements of standard M 5.4.
- * **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 5.8 * When bait and/or traps are used, records of their use must be kept and:

- state the location of the bait/traps
- state what bait/traps were used
- state the volume/number of bait/traps placed
- state the name of the person who placed the bait/traps
- be retained for at least two years.

M 5.9 * Bait and traps must:

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

M 5.10 * Bait must be used according to the manufacturer's instruction for:

- storage
- usage, including areas of use and replenishment
- disposal.

M 5.11 * Traps must be:

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

- M 5.12 *** 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 5.13 *** 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. level of activity at each trap
 - ii. any missing or disturbed traps
 - iii. the name of the person responsible for monitoring the traps.

- M 5.14 *** 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 5.15 *** 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 5.16 *** 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 5.17 *** 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 rodenticides*'.**

- M 5.18 *** Farm dogs and cats must not be permitted in the turkey house.

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 turkeys*', such as those relating to the presence and upkeep of paperwork. The audit is to specifically focus 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 2 for a full list of standards to be included within the welfare audit.

M 6.1 Producers must ensure that a welfare audit is carried out:

- a) to include an assessment of all the standards listed in Appendix 2
- b) by a welfare auditor (see standard M 6.2)
- c) on all houses where the '*RSPCA welfare standards for turkeys*' are being implemented
- d) at least once per flock.

M 6.2 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 fieldsperson (or, if the company does not have a fieldsperson, someone with an equivalent role within the company); a vet; or an independent consultant with a good knowledge of turkey production.

M 6.3 Welfare audits must be unannounced.

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

M 6.4 A welfare audit must take place:

- a) after 6 weeks of age
- b) in the rearing unit in the case of brood and move operations
- c) in the last 10 days prior to slaughter/killing on at least one occasion annually per house, except if there is only one flock per year.

M 6.5 For each flock, 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 action was taken to rectify each standard not being fully met (if relevant)
- g) verification that the audit was unannounced (if the producer was given any advance warning of the visit this must be stated)
- h) the signature and position/role of the person undertaking the audit
- i) the signature of the stock-keeper/farm manager.



Appendix 2 provides a template for the record referred to in standard M 6.5.

M 6.6 Any welfare problems identified during a welfare audit must be dealt with appropriately and without delay to rectify the problem.

M 6.7 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.

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

- H 1.1** A written Veterinary Health and Welfare Plan (VHWP) must be drawn up, reviewed and updated at least annually by the attending veterinary surgeon.



The Veterinary Health and Welfare Plan (VHWP) forms a vitally important part of the RSPCA welfare standards with regard to maintaining health and welfare of livestock on farm. The VHWP should take into account specific health and welfare issues that are known to affect turkeys, for example pododermatitis, and also health concerns that have been identified at farm on an individual basis.

The VHWP should also include details of any medication and recordings of stock management e.g. water consumption, feed consumption, body weight, maximum and minimum house temperatures, relative humidity and flock mortality.

- H 1.2** The VHWP must include targets set for health aspects and records kept to identify whether targets have been met every year and at each assessment made by the veterinary surgeon.
- H 1.3** If any flock performance parameters fall below the tolerance limits identified in the VHWP (standard H 1.1)
- a) the veterinary surgeon must be informed
 - b) the VHWP must be revised to include a programme of action which will remedy the problem.
- H 1.4** Flock performance data must be continuously monitored for signs of disease or production disorders.
- H 1.5** Where birds with a severe level of foot pad burn, or those with breast blistering or back scratching have been identified (see '*health monitoring*' section) the farm must take appropriate action, to be reflected within the VHWP, to prevent these conditions in subsequent flocks.
- H 1.6** Ailing and lame turkeys and any turkeys suffering from injury, such as open wounds or fractures, must be:
- a) segregated, but within sight and sound of other turkeys
 - b) treated without delay
 - c) or, if necessary, humanely killed immediately.
- H 1.7** 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 1.8** If injuries are found, a programme of preventative action must be specified in the VHWP (standard H 1.1).
- H 1.9** Facilities must be available to segregate sick or injured birds.

- H 1.9.1** Segregation pens relating to standard H 1.9 must:
- a) be within the main house
 - b) provide birds with food and water, which is accessible without undue effort or discomfort, as specified in '*Food and water*' section
 - c) be stocked at a density lower than the rest of the house to allow birds to rest quietly
 - d) be well littered, as specified in the '*Environment*' section
 - e) be inspected at least 3 times daily and an assessment made of each bird. This must be recorded.
- H 1.10** Stock-keepers must:
- a) take care when placing a turkey into the segregation pen
 - b) not, under any circumstances, drop the turkey over the surround.
- H 1.11** Any turkey that has difficulty standing and/or reaching food and water must be:
- a) promptly removed from the flock
 - b) if necessary, humanely killed.
- H 1.11.1** There must not be any overtly lame (Bristol gait score 3 or above) birds.



Lameness can be a serious welfare problem in growing turkeys, whether caused by infectious agents or growth abnormalities. Research has concluded that bird welfare is unduly compromised in birds with gait scores of 3 or more, as birds with such gait scores are likely to experience pain and discomfort. In fact, anatomical research on chickens has shown that such joint pathologies are likely to be as painful to chickens as they are to humans.

- H 1.11.2** Any bird with a gait score of 3 or above, as defined in the information box below, must be humanely killed immediately.



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.

- H 1.12** Management plans must prevent turkeys suffering chronic joint disease or leg deformation.



Leg disorders can be particularly prevalent in birds close to killing weight, especially in heavier finishing stags. Management techniques, such as the provision of enrichment items that encourage activity, and good litter and biosecurity management, can help prevent the occurrence of leg disorders. However, an underlying problem is that birds have been genetically selected, and are usually fed, so as to maximise muscle weight at the time of slaughter.

The RSPCA believes that selection for weight has been taken beyond the limit of acceptability and that it is not appropriate to continue to select for increased weight without first improving leg health. Therefore, breeding companies should improve selection for leg health and should not seek to produce commercial lines that have extreme conformation. Likewise, turkey producers should select strains that have good health and welfare characteristics and should not exploit the limits of the birds' growth potential if this is likely to result in poorer welfare.

It is also a legal requirement (under schedule 1, paragraph 29, of the Welfare of Farmed Animals (England) Regulations 2007) that: "animals may only be kept for farming purposes if it can reasonably be expected, on the basis of their genotype or phenotype, that they can be kept without any detrimental effect on their health or welfare".

The RSPCA is considering this issue further and may impose a limit on the maximum weight achieved by turkeys and/or prohibit the use of certain strains.

- H 1.13** If the mortality level within a house is in excess of 0.5% in any 24 hour period, a veterinary investigation must be made.



Investigation of lower mortality levels is at the discretion of the attending veterinary surgeon.

- H 1.14** Following depopulation, all houses must be thoroughly cleansed, disinfected and tested free from infectious agents as specified in the VHWP (see standard H 1.1).
- H 1.15** Written procedures must be in place, and must be followed at all times, for the safe disposal of pharmaceutical waste, needles and other sharps.
- H 1.16** Procedures relating to standard H 1.15 must be in strict accordance with the relevant waste disposal regulations.
- H 1.17** Medicines must be clearly labelled and stored in accordance with the label instructions.
- H 1.18** Medicines must be kept in a secure, lockable store, which is safe from children and animals, including pets and wild birds.
- H 1.19** The medicine store must be separate from food producing areas.
- H 1.20** Any medicine used must be licensed for use in the UK, and applied in accordance with UK and EU legislation.



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

- a) ***'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)
- b) ***'Code of practice on the responsible use of animal medicines on the farm'***, issued by the Veterinary Medicine Directorate
- c) ***'Veterinary Medicines: safe use by farmers and other handlers'***, issued by the Health and Safety Executive.

- H 1.21** All personnel involved in the administration of animal medicines must be competent to do so.

* Mutilations



The practice of beak trimming is contrary to the principles of the RSPCA welfare standards. However, at the present time, it is accepted that in some cases, such as in naturally lit systems, it may be necessary to beak trim to deter potential injurious pecking.

H 2.1 Where practiced, beak trimming must:

- a) take place only once
- * b) be carried out before 24 hours post-hatching
- c) not remove more than one third of the beak
- d) be conducted by properly trained and competent operators
- e) be carried out on the direction of the attending veterinary surgeon
- * f) be carried out using appropriate infra-red equipment.

H 2.2 * If, in emergency circumstances, and as a last resort (having tried alternative approaches such as changes in management, environment etc.) and only on veterinary advice, beak trimming of birds older than 24 hours is deemed necessary for welfare reasons, then the producer must:

- a) obtain a signed letter from the vet stating the reasons for advising that beak trimming be undertaken, and details of other approaches tried prior to beak trimming
- b) inform the RSPCA Farm Animals Department in writing with a copy of the letter referred to in a).

H 2.3 No other forms of mutilation are permitted, e.g. claw/toe trimming, desnooding and dewinging.

H 2.4 All artificial appliances (such as blinkers and contact lenses) which are designed to stop cannibalism must not be used.

Casualty killing/slaughter

H 3.1 Each farm must have provisions for the humane killing/slaughter – without delay – of casualty turkeys.

H 3.1.1 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.

H 3.2 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 slaughter is required to prevent suffering.

H 3.3 If a bird is in severe pain that is uncontrollable, then the bird must be promptly and humanely killed/slaughtered.

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

The Humane Slaughter Association (HSA) has produced a booklet entitled '*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 3.4 Permitted methods for casualty killing/slaughter are:

- a) captive bolt
- b) hand held electrical stunning, immediately followed by neck cutting.

i The use of captive bolt equipment on birds weighing 4kg and over is encouraged.

H 3.5 Manual neck dislocation is a permitted method of emergency killing or for the one-off killing of a very small number of turkeys, for birds weighing up to 3kg.

H 3.5.1 Where permitted, neck dislocation must involve stretching the neck to separate the spinal cord and cause extensive damage to the major blood vessels.

H 3.6 Those responsible for using the captive bolt must:

- a) have received appropriate training
- b) be competent when using this equipment.

H 3.6.1 Captive bolt devices must be used and maintained according to the manufacturer's guidelines.

H 3.7 Equipment that crushes the neck, including killing pliers, must not be used.

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

H 3.8 All carcasses must be disposed of strictly according to current legislation.


H 3.9 A record must be kept of how and where all such carcasses are disposed of.

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.


Catching

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.

*  **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 properly trained and competent.

 **Where possible this training should be validated.**

 **Managers should consider the construction of buildings and bear in mind the access to and from the area where birds are placed and removed. Particular attention should be paid to the width of doors.**


T 1.2 Managers must prepare full and detailed written instructions for the catching staff.

T 1.3 All catching staff must:

- a) have a copy of the instructions relating to standard T 1.2
- b) be aware of their duties
- c) be trained and competent to perform their duties.

T 1.3.1 The catching team leader/PWO must be familiar with the content of the Humane Slaughter Association DVD '*Poultry Welfare – Taking Responsibility*' and:

- a) convey the relevant content to other members of the catching/slaughter team
- b) ensure that the recommendations are applied where appropriate.

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

T 1.4 The farm manager/assistant must be made responsible for supervising and maintaining high welfare standards throughout the depopulation process, which includes the loading of birds onto the transport vehicle.

T 1.5 The farm manager/assistant must be present at all times during the catching operation.

- T 1.6** Procedures must be in place to ensure that any concerns regarding the catching techniques used by the catching staff are:
- a) recorded
 - b) raised with the area manager.
- T 1.7** Catching teams must never put speed of operation before bird welfare.
- T 1.8** Handling of birds must be carried out quietly and confidently, exercising care to avoid unnecessary struggling, stress and injury.
- T 1.9** Sufficient time must be made available to ensure birds are handled with care.
- T 1.10** Turkeys must not suffer prolonged thirst, hunger, or thermal distress. Specifically:
- a) birds must have access to water up to the time of catching
 - b) no bird must be deprived of food for more than 10 hours prior to slaughter
 - c) when catching during hot weather (in excess of 25°C), sufficient ventilation must be provided for birds until the time they are loaded (e.g. the provision of additional mobile fans)
 - d) when catching during cold weather, adequate draught free ventilation at bird height must be provided for birds up to the time of loading.
- T 1.10.1** During catching:
- a) partitions must be used to segregate the flock into groups of 50 to 100 birds (depending on bird size) for catching
 - b) the partitions must be continually relocated as depletion progresses to maintain a).
- i** **Segregating the flock into smaller groups for catching makes the catching process more manageable. The birds are easier to catch as they are contained in a smaller area, the birds can be retained closer to the modules, which limits the distance they have to be carried, and the likelihood of trampling and smothering is reduced.**
- i** **Partitions often comprise of 244 x 122cm (8 x 4ft) plywood sheets on framing, which extend out from the side of a shed toward the centre. Modules are placed between the two partitions to form a 'catching area.'**
- T 1.11** When only a proportion of birds are to be removed from a building, a partition (made from hurdles or hardboard, for example) must be erected prior to catching to separate those birds being caught from those remaining in the shed.
- The partition must:
- a) be mobile
 - b) not cause physical injury to the birds
 - c) minimise any disruption caused by the catching team to those birds remaining in the shed
 - d) not reduce the floor area available to those birds not being caught to such an extent that the maximum stocking density of 25kg/m² is exceeded.

- 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 after 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 Avian Rhinotracheitis.

The catching process should be managed sympathetically to minimise such problems.

T 1.11.1 When only a proportion of birds are to be removed from a building, those birds not being caught must have access to food and water during the catching operation.

T 1.11.2 Birds must be approached calmly and quietly to avoid stress.

- i** Resting of the bird's breast against the catcher's leg during carrying can help keep the bird calm.

T 1.12 Catching must take place in low or blue lighting to minimise fear reactions of the birds.

T 1.13 The method of catching must take into account the weight and size of the birds, and be adjusted accordingly. Specifically:

- a)
 - i. birds weighing less than 5kg must be caught and carried by both legs with no more than 1 bird in each hand
 - ii. birds must be placed in the crate one at a time
- b)
 - i. birds weighing 5kg and over must be caught and carried individually by grasping the shoulder of the wing furthest away from the catcher, whilst using the other hand to hold both legs
 - ii. birds must be lifted and held close to the body and placed into the crate with care.

T 1.14 Turkeys must not be caught or carried by a single leg.

T 1.15 During catching, action must be taken to prevent turkeys from crowding together.

T 1.16 Where crowding occurs, the house lights must be raised, the birds spread out calmly and quietly, then allowed to settle before catching is resumed.

T 1.17 Managers must ensure that when birds are placed in transport crates, handling of birds, design of crates, and method of transportation, minimise the soiling of feathers.

T 1.18 Care must be taken to ensure that birds do not come into contact with moving vehicles whilst being caught.

- T 1.19** Birds that are visibly unfit before loading must not be transported but humanely slaughtered/killed immediately.

i The mechanical harvesting of birds and the use of colony belt systems can offer some welfare advantages compared with manual catching. Producers considering using such a system should liaise with the RSPCA Farm Animals Department.

Modular transport systems

- T 2.1** Modular transport vehicles must be parked as near as possible to the house being de-populated.
- T 2.2** The distance birds are carried must be minimised, for example, by bringing the transport containers as close to the birds as possible.
- T 2.3** Modular crate transport drawers must:
- have completely open tops with a depth of not less than 350mm
 - permit adequate ventilation and protect birds from adverse climatic conditions
 - be thoroughly cleansed after carrying each consignment of birds. The cleanliness of the vehicle must be checked by the appointed supervisor before any birds are loaded onto the vehicle
 - be well maintained
 - have no sharp edges or protrusions on the crates or vehicle that could cause injury to the birds.
- T 2.3.1** When loading birds into module drawers:
- this must take place in the house
 - the top drawer must be loaded first
 - one hand must hold the legs, and the other hand must support the breast
 - they must not be held by the wing or neck
 - they must be placed carefully into the drawer
 - they must not be dropped or thrown into the drawer.
- T 2.3.2** The stocking density in each drawer must meet the specifications in the table below:
- | Live weight (kg) | Minimum area in cm ² per kg |
|------------------|--|
| Up to 1.6 | 180 - 200 |
| 1.6 to 2.9 | 160 |
| 3 to 4.9 | 115 |
-
- | Live weight (kg) | Maximum number of birds per m ² |
|------------------|--|
| 5 to 6.9 | 14 |
| 7 to 7.9 | 11 |
| 8 to 8.9 | 10 |
| 9 to 11.9 | 8 |
| 12 to 17.9 | 6 |
| 18 to 24 | 5 |

i The space allowances in standard T 2.3.2 for birds up to 4.9kg live weight are legal requirements. The variation in space allowance for birds up to 1.6kg is to allow for adjustment according to not only the weight and size of the birds, but also their physical condition, the weather and the likely journey time.

- T 2.4** Stocking density must be reduced by 10% when birds are being transported during hot weather (i.e. in excess of 25°C).
- T 2.5** As each drawer is filled, it must be closed carefully to ensure that the birds' heads, wings or legs are not trapped in any way.
- T 2.6** Modules must be taken from the shed slowly and care must be taken to ensure no damage is caused to the birds.

Fixed crate transport systems



The RSPCA advocates the use of modular-type transport systems for turkeys as they can offer improved bird welfare compared to fixed crate type systems. Where fixed crate systems are used, producers should consider investing in the installation of a modular transportation system.

- T 3.1** For those seeking RSPCA Assured approval, the fixed crate transport system must be authorised by the RSPCA Farm Animals Department.
- T 3.2** Fixed crate transport vehicles must be parked as near as possible to the house being depopulated.
- T 3.3** Birds must be walked calmly towards the entrance of the building where the vehicle is parked.
- T 3.4** Fixed crate vehicles must:
- a) have flaps which permit adequate ventilation and protect birds from adverse climatic conditions
 - b) have flaps which close securely
 - c) be thoroughly cleaned after carrying each consignment of birds
 - d) be well maintained
 - e) not cause injury to the birds.
- T 3.4.1** Fixed crates must:
- a) have no sharp protrusions which could cause injury to the birds
 - b) have floors that prevent faeces falling on birds beneath but do not hinder ventilation inside the crate.
- T 3.5** The cleanliness of the vehicle must be checked by the appointed supervisor before any birds are loaded.
- T 3.6** When loading birds into fixed crates:
- a) facilities must be provided for catchers to ensure they are able to load birds onto the vehicle from a position which gives them easy access to all the crates, i.e. a loading platform with steps
 - b) catchers must not lift birds above their head height
 - c) they must be loaded into the fixed crate carefully
 - d) they must not be thrown into the crate.
- T 3.7** The stocking density in each fixed crate must not exceed that specified in standard T 2.3.2.
- T 3.8** Stocking density must be reduced by 10% when birds are being transported during hot weather (in excess of 25°C).

- T 3.9** The person responsible for supervising the depopulation and loading must ensure that the flap on each crate is securely fastened and the wings, head or legs of any bird are not trapped in the flap or any part of the fixed crate.
- T 3.10** On unloading, if any birds are trapped or injured, a report must be made to the person in charge of supervising the catching and loading in order to identify and rectify any further problems.

Transport

- T 4.1** Personnel in charge of turkey transporters must:
- a) have completed an approved training course
 - b) be able to demonstrate their competence in handling turkeys when loading and unloading them and while in transit.

- T 4.2** All transporters must have a livestock capacity document on board at all times.



The livestock capacity document will give data on the size of the transporter and the calculated carrying capacity for different livestock species under different climatic conditions.

- T 4.3** All hauliers must have a written standard operating and emergency procedure to implement during transportation (see Appendix 1).
- T 4.4** An on-farm record must be maintained of any incidents relating to standard T 4.3.
- T 4.5** Where identified, prompt action must be taken to prevent further deaths, injury or suffering occurring.
- T 4.6** If on any day mortality exceeds 2 birds, or 0.1% for loads over 2,000 birds, for a single consignment of turkeys during transport:
- a) the level of mortality must be recorded
 - b) there must be an investigation to establish the cause/s of death, the outcome of which is recorded
 - c) effective preventative measures must be put in place without delay to remedy the problem.
- T 4.7** The time between the start of loading (first bird loaded) and the completion of unloading (last bird unloaded) must be less than 6 hours.
- T 4.8** The time from when the birds leave the farm to arriving at the processing plant must be no longer than 4 hours.
- T 4.9** Noise levels, from all sources, must be minimised during loading, unloading and transport.
- T 4.10** Every effort must be made to ensure:
- a) journeys are completed without unnecessary delays
 - b) that drivers are aware of any potential traffic problems and plan their journey accordingly.
- T 4.11** 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 4.12** If it is necessary to keep birds on board a stationary vehicle, the driver must take action to avoid heat/cold stress to the birds.

i In hot weather (in excess of 25°C) one of the most effective ways of providing a cooling draught is to keep the vehicle moving.

- T 4.13** The transport vehicle must be equipped with suitable curtains that can be opened and closed by a single operator.

- T 4.13.1** New vehicles must be equipped with fan-operated ventilation.

i The technology is now becoming available to monitor temperature and humidity on board transport vehicles. This allows drivers to take appropriate action to maintain ideal conditions for birds. The use of such equipment is encouraged by the RSPCA. The RSPCA will monitor the development of such technology and review its use for inclusion in future development of these standards.

- T 4.14** Plans must be made in advance and appropriate action taken to reduce the risk of heat stress occurring.

- T 4.14.1** Plans relating to standard T 4.14 must include the routine monitoring of weather 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.

- T 4.15 *** In periods of hot weather (in excess of 25°C):
- a) a central passageway must be left free of birds/trays to allow increased ventilation, and
 - b) turkeys must be transported at night or in the coolest parts of the day.

- T 4.16** Turkeys must be sheltered from extremes of weather 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.

- S 1.0** For those seeking RSPCA Assured approval, the standards relating to the slaughter/killing of turkeys (standards with the 'S' prefix) must be assessed by the RSPCA Farm Animals Department, prior to approval.
- S 1.1** Turkeys must be slaughtered as close as possible to the point of production.

Management

- 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, including the responsibilities and duties of staff and emergency procedures.
- S 2.2** The animal welfare policy must be reviewed and updated at least annually, and when there are changes to the design or operation of the handling, stunning or slaughter system.
- S 2.3** Managers must appoint at least 1 trained Poultry Welfare Officer (PWO), who is responsible for the implementation of the animal welfare policy.



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

- S 2.4** Managers, in conjunction with the PWO, must develop and implement a training programme for all staff handling and slaughtering birds.
- S 2.4.1** Managers and the PWO must ensure that staff are properly trained to carry out their duties and be competent to perform them.



Where possible, training related to standards S 2.4 and S 2.4.1 should be validated.

- S 2.5 *** The PWO must make frequent checks throughout the day to ensure that birds are being effectively stunned/killed.
- S 2.6 *** Where the birds are not being effectively stunned/killed the PWO must take immediate remedial action.

Closed Circuit Television (CCTV)




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(TV) 1.1** 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(TV) 1.2** CCTV cameras must be positioned to ensure a clear view of the processes being monitored is achieved at all times.
- S(TV) 1.3** It must be possible to observe clearly the view from each camera at all times via one or more monitors.
- S(TV) 1.4** CCTV footage must be recorded at all times where animals are undergoing any of the processes listed under standard S(TV) 1.1.
- S(TV) 1.5** 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.



Where possible it may be useful for managers to retain CCTV footage for longer than the three months specified in standard S(TV) 1.5, for their own monitoring and security purposes.

Lairage

- S 3.0** On arrival at the slaughter plant all birds must be:
- unloaded immediately
 - placed in an environmentally controlled lairage.
- S 3.1** All transport trays or fixed crates must be examined on arrival at the abattoir to identify any birds suffering from injury, heat or cold stress.
- S 3.1.1** Where problems relating to standard S 3.1 have been identified, immediate action must be taken to prevent suffering and ensure that similar occurrences are prevented.
- S 3.2** There must be a contingency plan in place to state what action will be taken to safeguard the birds' welfare in the event of heat stress occurring.
- S 3.3** Where turkeys are being unloaded from fixed crate vehicles:
- staff must be provided with facilities that allow them to unload birds from a position which gives them access to all the crates in each tier
 - care must be taken when removing birds from the crates.
- S 3.3.1** The lairage must be designed in order to minimise any distress caused to the birds.
-  **The design of the lairage should include aspects such as flooring. Uneven flooring can cause physical discomfort to birds when moving them through the lairage in modules.**
- S 3.4** Turkeys that are held in slaughter facilities must be:
- protected from direct rays of sun and from adverse weather, i.e. wind, rain, hail, snow etc.
 - provided with adequate ventilation
 - humanely killed immediately if found to be suffering.
- S 3.4.1** Temperature and humidity in the lairage must be regularly monitored and controlled to avoid heat and cold stress.
- S 3.5** All turkeys must be slaughtered as soon as possible after arrival at the abattoir, and in any case within 1 hour.
- S 3.6** Contingency plans must be in place to deal with occasions when unavoidable delays may occur.
- S 3.7** When a breakdown occurs that results in a delay in the slaughter process, birds may be held in lairage for up to 3 hours from the time of arrival, after which time they must be slaughtered using a permitted back-up method.
- S 3.8** The lairage must have reduced or blue lighting.
- S 3.9** Once the turkeys have arrived at the premises at which they are intended to be slaughtered, they must not be moved on to other premises for slaughter.
- S 3.10** Standby equipment, e.g. a generator, must be available for emergency breakdowns.
- S 3.11** Where live birds are removed from crates prior to shackling, unloading must take place as close to the shackle line as possible to minimise carrying distance and to avoid any stress caused to the birds.

- S 3.12** All deaths and injuries must be recorded and reported to the:
- a) driver
 - b) haulier
 - c) PWO
 - d) farm manager
- before the next consignment from the same source is collected.

- S 3.13** Records related to standard S 3.12 must be kept.

Health monitoring

- S 4.1** The level of the following must be recorded for each flock:
- a) foot pad burn (classified as a score 0 – 4 in Appendix 3)
 - b) breast blisters
 - c) back scratches
 - d) dirty feathers (see information box below standard S 4.2).

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

i For each transport load of birds delivered to the abattoir, a minimum of 100 feet from different birds, or 5% of the load (whichever is the greater), should be assessed for foot pad burn.

- S 4.2** The method used to score breast blisters, back scratches and dirty feathers must be objective and:
- a) differentiate between minor, mild and severe conditions
 - b) provide consistent results within and between observers
 - c) provide reliable and accurate data for the level of a condition within a flock.

i The following scoring system should be used to classify dirty feathers:

0 (None):	Clean – not significantly dirty
1 (Minor):	lightly soiled
2 (Mild):	medium soiling
3 (Severe):	heavily soiled

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 team manager should assess the birds.

- S 4.3** Data relating to standard S 4.1 must be reported back to the producing farm.

Shackling

S 5.0 With the exception of the specific circumstances outlined in standard S 5.0.1, the shackling of conscious birds is prohibited.

S 5.0.1 The shackling of conscious birds is only permitted:

- a) where:
 - i. birds are slaughtered/killed on the farm where they were reared for finishing, and
 - ii. birds are not subjected to any transport by vehicle to the place of slaughter/killing, and
 - iii. the only commercially/practically viable option available is to slaughter/kill the birds using a system that requires shackling, and
 - iv. written permission has been sought from and granted by the RSPCA Farm Animals Department
- b) 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 standard S 5.0.1 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 standard S 5.0.1 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 5.1 Shackling teams must be:

- a) thoroughly trained to handle the birds in such a way as to avoid injury
- b) aware of the risk of breakages that the hanging-on procedure can cause to turkeys
- c) supervised by a trained and competent person during the shackling process.

S 5.2 Abattoir managers must ensure that sufficient personnel are employed on shackling lines at all times to ensure due care and diligence.

S 5.3 Shackles must be of a size and type, and the slaughter line run at a speed, which permits turkeys to be hung on without causing unnecessary pain or distress.

S 5.4 Birds must be hung on by both legs.

S 5.5 The shackler must use a handling technique that calms the bird as it is being shackled.

i Running the hands down the legs and body of the bird after shackling can help to reduce the incidence of wing flapping. Keeping hold of the birds legs for 0.5 seconds after shackling may have a similar effect.

S 5.6 From the point of shackling to entry into the stun bath there must be a:

- a) breast comforter that runs along the entire length of the line
- b) reduction in noise level
- c) maximum light level of 5 lux, or low level blue lighting.

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

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 carcass, detract from the overall appearance of the carcass and lead to loss of total carcass weight if the wings require trimming.**

S 5.7 Care must be taken to ensure that birds cannot escape from the holding area or fall from the shackle line.

S 5.8 Where loose birds are found they must be taken immediately to the hanging on area or, if injured, immediately humanely destroyed out of the sight of other birds.

S 5.9 There must be no unevenness in the shackle line causing the shackles to jolt.

S 5.10 Turkeys must not be suspended for more than 30 seconds before they are stunned.

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. We would strongly encourage that live turkeys are not suspended for more time than is necessary for wing flapping to cease, which information suggests to be around 25 seconds.**

S 5.11 The design of the shackle line and entry to the waterbath must eliminate the risk of birds receiving pre-stun shocks.

i **Due to the size of turkeys, there is a greater risk of birds receiving pre-stun shocks due to the position of their wings, which can hang lower than their heads when shackled.**

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 must be taken 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.

- S 5.12** All crates must be checked to ensure no turkeys are left inside them.

Stunning

i The RSPCA recognises the shortcomings of the electrical waterbath stunning process, in terms of its actual and potential negative 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. As such, inverted shackling of conscious birds is being phased out, see standards S 5.0 and S 5.0.1.

Gas killing systems offer improved bird welfare and have been reported to provide a higher quality product and less carcass wastage due to downgrading of the carcass. Due to this, gas killing systems have the potential to pay for themselves over a given period of time.

- S 6.1** The following types of stunning equipment are permitted:
- a) electrically live stunning bath
 - b) dry stunner incorporating an electrically-live metal grid or bar
 - c) hand operated stunner
 - d) pneumatically powered poultry killer; however, this must not be used for routine killing purposes, i.e. only used in the event of a breakdown of one of the methods stated in a) to c).
- S 6.2** It must be possible to visually observe birds at all stages of the stunning procedure, i.e. on entry, during and immediately on exit from the stunning bath.
- S 6.3** Unstunned birds must be screened from dead birds.
- S 6.4** Where an electrical water stunning bath is used:
- a) the stunning bath must be set at a height appropriate for the size and number of birds
 - b) the height must be set such that the heads of all birds are covered by the water
 - c) it must deliver an average minimum current of 150mA per bird
 - d) the current must never go below 130mA
 - e) it must operate at a frequency of 50Hz with a sinusoidal (AC) waveform
 - f) DC stunning is prohibited
 - g) each bird must be in contact with the current for a minimum of 4 seconds
 - h) the water level must be of sufficient depth to cover the heads of the birds
 - i) the water must not overflow at the entrance to the bath
 - j) the electrode which is immersed in the water must extend the length of the water bath
 - k) it must be designed and set up to prevent birds receiving pre-stun shocks
 - l) it must be fitted with an ammeter to accurately monitor current flow through the bath when loaded with birds.

i The RSPCA is currently reviewing the use of high frequency stunning as an alternative stunning method for turkeys.

i When commercially feasible, consideration will be given to making constant current stunning equipment a requirement of the welfare standards.

i There is mixed opinion from researchers as to the effectiveness of using a DC waveform for stunning poultry. In particular, there are concerns over whether a bird is effectively stunned when subjected to a DC waveform. Current literature 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 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 to provide a good standard of welfare.

S 6.5 The shackle, at the point where it meets the turkey's foot, must be continuously sprayed with water using a mist spray, along the entire length of the stun bath.

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 allows for a looser fitting shackle to be used without compromising the level of stun the bird receives.

S 6.6 Where electrical hand-held stunners are used:

- a) turkeys must be restrained in a cone or on a shackle
- b) birds must be stunned immediately after being restrained
- c) care must be taken to ensure that the stunning electrodes are applied in the optimum position, i.e. applied firmly to either side of the head between the eye and ear
- d) hand-held stunners must deliver 400mA
- e) the current must be applied for at least 10 seconds and until initial wing flapping ceases (or if held in a cone, until legs become rigid and extended).
- f) neck cutting must be carried out immediately using a ventral neck cut to ensure both carotid arteries are severed.

S 6.7 All stunning and bleeding equipment must be properly and regularly maintained, cleaned and checked daily to ensure that it is in full and proper working order.

S 6.8 An independent, qualified person must inspect the stunning equipment to test its efficacy.

S 6.9 Any problems must be reported to the PWO and rectified immediately.

S 6.10 Contingency plans must be made to deal with occasions when unavoidable delays may occur and it is not possible to process birds.

S 6.11 If the slaughter line is stopped for longer than 1 minute, birds between the point of shackling and the killer must be humanely killed immediately.

S 6.12 All birds leaving the waterbath must be checked to ensure they have been effectively stunned or killed.

i The most reliable indicator that a bird is properly stunned by the low voltage method is the electroplectic fit. The characteristics of this condition are:

- neck arched with head directed vertically
- open eyes
- 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
- dilated pupils.

S 6.13 Birds which fail to be properly stunned must be immediately stunned using a permitted method as in accordance with standard S 6.1, and humanely slaughtered before entering the scalding tank.

S 6.14 Staff must be trained to recognise the signs of an effective stun, and use these signs to recognise that birds have been effectively stunned or are dead.

* 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 standard S 7.3 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.

S 7.1 * 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 standard S 7.1.

S 7.2 * 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 7.3 * 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 standard S 7.3 c), 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 7.4 * 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 7.5 * 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 7.6 * 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 7.7 *** In case of 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 standard S 6.1)
 - 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 7.8 *** There must be a means of flushing the system with atmospheric air with the minimum of delay.
- S 7.9 *** 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 7.10 *** Where more than one type of gas is used, the gases must be mixed thoroughly prior to supply into the system.
- S 7.11 *** Live birds must remain in their transport containers throughout the gas killing process.
- S 7.12 *** There must be a means of access to any bird within the system with the minimum of delay.
- S 7.13 *** There must be a diagram readily available on site that clearly and accurately shows the location of all the gas concentration monitoring sensors.

*  **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 7.14 *** Birds must not be subjected to the gas prior to entry into the system.
- S 7.15 *** For pre-filled gas systems, birds must not enter the system until the correct gas concentration throughout the system has been achieved.
- S 7.16 *** Once birds have entered the system, they must be subjected to the correct gas concentration without delay.
- S 7.17 *** 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 7.18 *** 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.

*  **For tunnel systems, the installation of appropriately positioned windows at regular intervals along the entire length of the system can be sufficient to satisfy standard S 7.18. 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.**

*  **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 standard S 7.18 is met at all times.**

- S 7.19 *** 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.
- *  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 standard S 7.19. NB. It may be necessary to provide additional light, e.g. a torch, within the container.**
- S 7.20 *** The movement of the transport crates through the system must minimise any disturbance caused to the birds.
- S 7.21 *** 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.
- *  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 loss of consciousness. If these behaviours are performed at a high frequency or vigorously then this is of a welfare concern.**
- S 7.22 *** 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 (see standard S 7.4).
- S 7.23 *** If birds show avoidable signs of fear or excitement (see standard S 7.21) 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 7.24 *** After loss of consciousness, birds must remain unconscious until death.
- S 7.25 *** Birds must be dead on exit from the system.
- S 7.26 *** 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 7.26.1 *** In relation to standard S 7.26, if dwell times vary according to various factors, such as bird weight, then separate dwell times must be established for each factor.

S 7.27 * 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:

- a) hourly, and
- b) 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 standard S 7.4).

* **i** **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 7.28 * Where inert gases are used:

- a) birds must be exposed to the gas mixture for no less than three minutes
- b) the total amount of time birds are exposed to the gas, i.e. the dwell time, must be:
 - i. recorded at least hourly,
 - ii. measured continuously, displayed and recorded, by no later than December 2019.

* **i** **With regard to standard S 7.28 a), The Welfare of Animals at the Time of Killing (England) Regulations 2015 requires birds are exposed to the gas for long enough to ensure that they are killed, i.e. a non-recoverable stun must be used.**

According to Council Regulation (EC) No. 1099/2009 on the protection of animals at the time of killing, a non recoverable stun requires exposure to inert gases or carbon dioxide associated with inert gases for greater than 3 minutes.

S 7.29 * For tunnel and pit type systems, the following must be recorded hourly:

- a) the transport crate throughput per minute
- b) the average weight of the birds being processed.

S 7.30 * 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 7.31 * On exiting the system, all birds must be checked as soon as practically possible to:

- a) ensure they are dead
- b) identify any signs of damage or injury that could have been caused in the system prior to them losing consciousness.

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

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

S 7.32 * Any birds that are not dead after exiting the system must be humanely killed without delay.

- S 7.33 *** During the gas killing process, the concentration by volume of each gas used must be continuously:
- a) measured
 - b) displayed
 - c) recorded by December 2019 at the latest.
- S 7.34 *** The correct gas concentration/s must be maintained at all times during the killing process.
- S 7.35 *** It must be demonstrated that the correct gas concentration gradient/profile is being maintained throughout the system consistently.

*

i With regards to standard S 7.35, it will be necessary to provide recent (within the last 12 months) or 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 7.36 *** Gas sensors must be linked to an audible and visual alarm system, which is automatically triggered:
- a) when the maximum residual oxygen level is above 2% where inert gases are used
 - b) when the concentration by volume of carbon dioxide rises/is likely to rise above the maximum permitted level (see standard S 7.3).
- S 7.37 *** Birds must not enter the system at any time when:
- a) the audible and visible warning signals have been activated (see standard S 7.36)
 - b) there is any defect in the operation of the system.
- S 7.38 *** The temperature of the gas must:
- a) be continuously monitored, either within the system, or immediately prior to entry into the system
 - b) 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
 - c) 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 7.39 *** 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 Standard S 7.39 can be achieved by providing an independent report that has measured this parameter within the last 12 months.

*



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., Reimert, 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 7.40 *** Gas sensors must be calibrated:
- a) at regular intervals
 - b) according to the manufacturer's procedures and recommendations.
- S 7.40.1 *** A verifiable record of calibration must be kept.
- S 7.41 *** Gas systems must:
- a) not cause injury to conscious birds
 - b) be well maintained
 - c) be cleaned according to the manufacturer's instructions.
- S 7.42 *** Records of birds recovering consciousness after exposure to gas mixtures must be maintained.
- S 7.43 *** 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 7.44 *** 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 7.45 *** 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.

Bleeding

- S 8.1** No more than 10 seconds must elapse between stunning and neck cutting.
- S 8.2** Post-stunning, both carotid arteries and both jugular veins must be effectively severed using a ventral cut.
- S 8.3** The neck cut must be checked by an appointed member of staff who must be given sufficient time to sever the blood vessels manually, if necessary.
- S 8.4** No further processing must take place until at least 120 seconds have elapsed since the major blood vessels in the turkey's neck have been severed.
- S 8.5** All birds must be checked to ensure that they are dead before entering the scalding tank.

Appendix 1

Transport – standard operating and emergency procedure

Relating to standard T 4.3

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. Mobile phones or other communication equipment (and procedures for use).
6. Guidelines on correct environmental conditions during the journey, depending on length of journey and ambient temperature.
7. RSPCA Welfare standards relating to transport of turkeys.
8. Procedure for loading/unloading of poultry transporters.
9. Procedure for delivery of poultry to customer sites.
- * 10. FTA – the current version (2015 at the time of printing) of '*The Driver's Handbook*' including Tachograph Regulations.
11. Fire extinguisher.
12. Operating procedures for roadside checks.
13. MAFF/Defra leaflet '*Guide to Alleviation of Thermal Stress in Poultry in Lairage*' (PB 3724, 1998).
- * 14. Daily journey sheet.
- * 15. Torch.

Appendix 2

Welfare audit form example

Relating to standards M 6.1 to M 6.7

Standards to be included as part of the welfare audit (see standards M 6.1 to M 6.7) and an example of a suitable welfare audit form.

Date		Unannounced	Yes / No
Auditor			
Producer			
Flock age			
Comments			

Standard number/s	Summarised standard	Check	Comments
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Food & water			
FW 1.1	Food provided: a) is appropriate for species b) is appropriate for age c) maintains birds in good health d) satisfies nutritional needs.		
FW 1.2	Food available at all times.		
FW 1.8	Food not contaminated/stale.		
FW 2.1	Water is clean & fresh & adequate supply available.		
FW 2.2	Water not contaminated/stale.		
FW 2.9	All drinkers: a) at correct height b) appropriate design.		

Environment			
E 2.4	There's nothing in the environment that could cause unnecessary injury/distress. To include outside environmental factors, e.g. noise, atmospheric pollution, adverse weather conditions, & other animals.		

Litter			
E 3.3.1 & E 3.4	<p>The litter:</p> <ul style="list-style-type: none"> a) is of a suitable material & particle size – no large clumps b) is in a dry & friable condition c) is at least 5cm deep d) allows birds to dustbathe e) is topped up if necessary f) is managed hygienically. 		

Lighting			
E 4.2	<p>In each 24h:</p> <ul style="list-style-type: none"> a) min 8h continuous light, & b) min 8h continuous darkness, except first 3d and where natural light is provided & natural period of darkness is less than 8h. 		
E 4.2.1	No area lit at less than 20 lux for at least 8h.		
E 4.6	Birds exposed to natural daylight no later than 35d of age.		
E 4.6.1	Natural daylight provided at all times during natural daylight period, through all required openings.		
E 4.11	When used outside natural daylight period, e.g. to extend the light period, and prior to 36 days of age, artificial lights switched on/off in stepped/gradual manner over a period of at least 30 mins.		

Space requirements & environment			
E 5.1	Stocking density within required limits.		
E 6.2	Aerial contaminants not noticeably unpleasant.		
E 6.3	Environment is thermally comfortable.		
E 7.1 *	<p>For every 500 birds, there is at least:</p> <ul style="list-style-type: none"> a) 1 large (e.g. 250kg bale) or 2 small (i.e. conventional rectangular approximately 18kg) straw bales, b) 2m of perch space, & c) 2 lengths of rope. 		
E 7.6	Enrichment items provided from 14d of age.		

Free-range			
R 1.1	Birds have access to the range for at least half their lifetime.		
R 1.2	Birds have continuous daytime access to the range.		
R 1.4	The range: a) surrounding the house is not poached b) consists of pasture mainly covered with living vegetation.		
R 1.13	There is a min. 10m ² of overhead shade & shelter per 1,000 birds.		
R 1.14	Shade & shelter facilities are appropriately distributed to encourage full use of range.		
R 1.15	The range is being managed to provide the most suitable conditions to encourage the birds to roam.		

Stock-keepers & management			
M 2.3	Stock-keepers can demonstrate their proficiency in procedures that have the potential to cause suffering, e.g. injection, beak trimming, culling.		
M 3.1	Birds are inspected a min 3x/d & inspection identifies sick/injured birds.		
M 3.3	Movement through unit does not frighten birds.		
M 3.4	Welfare problems seen during inspections are dealt with appropriately & without delay.		
M 4.1	Equipment upon which turkeys depend is inspected min 1x/d.		

Health			
H 1.3	If any health aspect exceeded the targets identified in the VHWP (see H 1.1): a) the vet was informed b) the VHWP was revised to include a programme of action that corrected the problem/s.		
H 1.11.2	There are no birds with a gait score of 3 or higher.		
H 3.3	Good culling practice being adopted – no birds that require culling are present in the flock.		

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

Signature of auditor: _____

Auditor position/role: _____

Signature of producer: _____

Appendix 3

Foot pad burn assessment guide

Relating to standard S 4.1



Score 0

No external signs of foot pad burn. The skin of the foot pad feels soft to the touch and no swelling or necrosis is evident.



Score 1

The pad feels harder and denser than a non affected foot. The central part of the pad is raised, reticulate scales are separated and small black necrotic areas may be present.



Score 2

Marked swelling of the foot pad. Reticulate scales are black, forming scale shaped necrotic areas. The scales around the outside of the black areas may have turned white. The area of necrosis is less than one quarter of the total area of the foot pad.



Score 3

Swelling is evident and the total foot pad size is enlarged. Reticulate scales are pronounced, increased in number and separated from each other. The amount of necrosis extends to one half of the foot pad.



Score 4

As score 3, but with more than half the foot pad covered by necrotic cells.

(Reference: P.M.Hocking et al. Standard European footpad dermatitis scoring system for use in turkey processing plants. World's Poultry Science Journal, Vol. 64 September 2008.)

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