

RSPCA welfare standards for

laying hens and pullets

March 2008





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Introduction

The RSPCA Welfare standards for laying hens are used to provide the only RSPCA-approved scheme for the rearing, handling, transport and slaughter of laying hens. Pullet rearers must also be aware of the *supplementary standards for pullets*, which are to be read in conjunction with the laying hen standards and are at the end of this document. The RSPCA Welfare standards for laying hens and pullets take account of legislation, government welfare codes, scientific research, veterinary advice, recommendations of the Farm Animal Welfare Council (FAWC) and the practical experience of the farming industry.

The standards are based upon the 'Five Freedoms' as defined by FAWC; hence the name 'Freedom Food'.

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, 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:

- 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) At the head of each section the broad objectives of the standards are described.
- (ii) The numbered requirements are the standards, all of which must be complied with.
- (iii) Boxed sections (indicated by (i)) give additional advice or may highlight areas where the standards will be reviewed in the future.
- (iv) Farmers are required by law to have a thorough knowledge of the 'Defra Code of Recommendations for the Welfare of Livestock: Laying hens'.

Freedom Food Ltd

Freedom Food is a wholly owned subsidiary of the RSPCA, formed to implement these standards. Upon satisfactory inspection farmers, hauliers, slaughterers, processors and retailers may subscribe to the scheme and use the Freedom Food trademark. All participants are regularly assessed by Freedom Food Ltd. A charge is levied to cover inspection, administration and marketing costs. Participants are also randomly monitored by members of the RSPCA Farm Animals Department, free of charge.

It is the intention of Freedom Food Ltd to establish sister, franchise organisations in other countries working to the RSPCA welfare standards and therefore, in time, establish a common and consistent message for consumers around the world.

Freedom Food Ltd is non-profit making. Any surplus income will be used to fund research into farm animal welfare.

Food and water

Livestock must have freedom from hunger, thirst and malnutrition by ready access to fresh water and a diet to maintain full health and promote a positive state of well-being. Feed and water must be distributed in such a way that livestock can eat and drink without undue competition.

Food

- **FW 1.1** All units must have a written feeding programme to ensure that hens are fed a wholesome diet which:
 - a) is appropriate to their species
 - b) is fed to them in sufficient quantity to maintain them in good health
 - c) satisfies their nutritional needs.
- **FW 1.2** Hens must have access to nutritious food at all times each day, except when required by the attending veterinary surgeon.
- **FW 1.3** Particular attention must be given to the provision of food and water in areas frequented by subordinate hens.
- **FW 1.4** Producers must have a written record of the nutrient content of the feed, as declared by the feed compounder.
- **FW 1.5** No feedstuffs containing mammalian or avian derived protein are permitted.
- **FW 1.6** The use of in-feed growth promoters is prohibited.
- **FW 1.7** In-feed antibiotics may only be given for therapeutic reasons under the direction of the attending veterinary surgeon.
- **FW 1.8** All foodstuffs fed must be safely and hygienically stored, transported and delivered to stock to prevent infestation or contamination or wetting.
- **FW 1.9** Food must not be allowed to remain in a contaminated or stale condition.
- **FW 1.10 *** 5cm of (actual) linear track (10cm single side) or 4cm of circular feeding space must be provided and be accessible for each bird.
 - In order to ensure that the feed track is accessible to birds, where feed tracks run parallel to one another they should be spaced a minimum of 60cm apart. This will help to ensure that birds can feed back to back.
- FW 1.11 Hand replenished feed systems with no integral store of food are prohibited.

FW 1.12 Hens must have access to insoluble grit (e.g. flint) no less than once weekly.

The provision of insoluble grit for laying hens is considered to be very important to aid digestion, and can be beneficial to young pullets as well as to laying hens. Birds should be provided with an appropriate quantity of insoluble grit from 3 weeks of age and throughout their lives. The recommended size and amount given per bird should be as follows:

Age of bird	Size of grit	Quantity of grit
Chicks (from 3 weeks of age)	0.2mm	1g per bird (maximum) given once a week with food.
Pullets (6 to 11 weeks old)	3.24 to 4.75mm	2g per bird, given once a week, with food.
Pullets (11 weeks to point of lay)	4.75 to 6.35mm	4 to 5g per bird, given once a week with food or placed in a separate feeder.
Laying hens – throughout lay (hen or turkey size)	6.35 to 8.0mm	28g per bird per month sprinkled on food or placed in separate feeder.

FW 1.13 The use of electrified wire over feeders and drinkers is not permitted.



Where there is a risk of contamination of food and water, producers should use alternative devices, such as roller bars, to discourage the birds from perching over feeding and drinking facilities.

- FW 1.14 * Feed distribution must ensure uniform feed availability throughout the entire feeder system.
- **FW 1.15** In the event of feather loss, the feeder must be run more frequently to ensure that hens can eat more to compensate for greater heat loss.

Water

- **FW 2.1** Hens 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 is as follows:

Bell 1 per 100 hens
Nipple 1 per 10 hens
Cups 1 per 10 hens

Food and water

- **FW 2.5** Drinker space must provide at least 2.5cm linear or 1cm circular drinking space per bird.
- **FW 2.6** In pens containing less than 20 hens, there must always be 2 or more drinkers.
- **FW 2.7** All drinkers must be in working order.

(i) Water, including borehole water, should be tested regularly, at least annually, and records maintained. Results should be within the following standards:

< 100 colony forming units (cfus) per ml Coliforms:

Total viable counts: < 1,000 cfus per ml.

- **FW 2.8** Header tanks must be covered at all times.
- **FW 2.9** Drinkers must be:
 - a) placed at optimum height for the size and age of the birds
 - b) of an appropriate design.

The environment in which livestock are kept must 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 1.0** 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.
- **E 1.1** Buildings must be designed to protect hens from physical and thermal discomfort.
- **E 1.2** * Buildings must be designed and erected so as to be suitable for expected local weather conditions.

Buildings

- **E 2.1** For all accommodation, a notice containing a checklist of the key points relating to welfare (see E 2.2) must be prominently displayed at, or near, the entrance to each building and be amended accordingly.
- **E 2.2** The checklist to satisfy E 2.1 must include:
 - a) total usable area available to the birds
 - b) total number of birds and stocking density
 - c) total number of drinkers and feeders
 - d) target air quality parameters
 - e) lighting levels and regimes
 - * f) emergency procedures, i.e. actions in the case of fire, failure of automatic equipment, when temperatures move outside acceptable limits and extremes of weather such as flooding and storm damage
 - g) nest box area available for each bird.
- **E 2.3 *** There must be nothing in the hens' environment that is likely to cause injury or distress to the birds that can be avoided.
- **E 2.4** Except where preservatives with an insecticidal role are used, hens must not come into contact with toxic fumes, for example from paints, wood preservatives or disinfectants.
- **E 2.5** All electrical installations at mains voltage must be:
 - a) inaccessible to the hens
 - b) well insulated
 - c) safeguarded from rodents
 - d) properly earthed
 - e) tested at least annually by a qualified or competent person.
 - By law electrical installations have to be tested every 3 years as part of the Periodic Inspection Report. However, at least once a year, the 'trip switch' should be tested to ensure it is in correct working order.

- **E 2.6** Housing and equipment must be designed so that all the hens can be clearly seen.
- **E 2.7** Provision must be made to ensure claw wear; if the substrate beneath the litter does not do this adequately, abrasive strips must be made available.
- **E 2.8** Birds must not have access to the droppings pit.
- **E 2.9** * The service area must be kept clean and tidy.
- **E 2.10 *** Where the main slatted area over a droppings pit is at a height of 1m or more above the litter area, ramps or alighting rails must be in place in order to assist birds moving between the two levels.
- **E 2.11 *** Ramps or alighting rails relating to E 2.10 must be:
 - a) provided at a minimum of 2m for every 600 birds
 - b) evenly distributed.
 - Where ramps have shallow angles (e.g. below 20°) extra management and attention may be required to ensure that bird droppings do not build-up beneath the ramp to levels where bird welfare may become affected.

The RSPCA is considering setting a maximum angle for ramps so as to minimise potential for injury and ease movement of birds through the unit. Houses should aim to keep angles below 60°.

- **E 2.12 *** Buildings built after 1st March 2008, where access to the litter from the slats is open (i.e. not through popholes), must provide a line of access to the litter from the slats of at least 2m per 600 birds.
- **E 2.13 *** Buildings built before 1st March 2008, in which access to the litter from the slats is open (i.e. not through popholes), must provide a line of access to the litter from the slats of at least 2m per 600 birds by 1st January 2020.
 - A pophole is defined as an opening of less than 2m in height that restricts the width of the building and is intended for the use of hens to access the range or litter.
- **E 2.14** * Electrified matting is not permitted.
 - * To minimise the risk of smothering the use of physical barriers rather than electric wire should be considered.
- **E 2.15** The apron immediately surrounding the outside of the house must:
 - a) be kept clean and tidy
 - b) not offer shelter to wild birds or rodents
 - c) be well managed with vegetation kept short.

Floor and litter

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



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

- **E 3.1.1** Birds must not be restricted from using the litter area for longer than 7 days after entering the laying unit.
- **E 3.2** Housing for hens must provide access at all times to:
 - a) well-maintained litter (except in the case of up to 7 days after entering the unit see E 3.1.1)
 - b) to a well-drained area for resting.
- **E 3.2.1** * If birds are held on the slats for the first 7 days after entering the unit to encourage the use of nest boxes, it must be demonstrated that access is not restricted from the litter after this period.
 - (i

Where appropriate, roller handles can be taken off or plastic ties used to hold up curtain to demonstrate that birds are not restricted from accessing the litter.

- **E 3.3** The litter must:
 - a) be of a suitable material and particle size
 - b) be managed to maintain it in a dry, friable condition (and replaced where necessary)
 - 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.
 - It is a legal requirement to keep the litter in a well-maintained state.
- **E 3.4** * Usable area in all hen houses must comprise of a minimum of one-third litter.
- E 3.5 * Litter depth:
 - a) must be maintained at a minimum of 10cm
 - b) may be built up from a minimum of 5cm over the first 2 months of use.
- **E 3.6** Stock-keepers must:
 - a) be aware of the welfare problems associated with poor litter management
 - b) understand the factors which affect litter condition, i.e. moisture, nitrogen content and greasy capped litter
- **E 3.7** * Where birds have access to litter through internal popholes, including to a veranda, the following applies:
 - a) the popholes must be provided according to the minimum specification required for birds having access to the range (see E 9.3 and E 9.4)
 - b) where the area within the veranda is included in the calculation of usable area, access must be provided between the house and the veranda at all times, as defined in a).

- **E 3.8** The construction of the veranda must ensure the following:
 - a) where the calculated floor area for stocking density incorporates litter on a veranda, the sides of the veranda must consist only of solid material from the ground to at least the top of the height of the pophole
 - adequate provisions must be made to prevent the area surrounding the veranda from flooding during wet weather
 - c) the roof must be entirely waterproof.
- **E 3.9** * Siting of the house must be considered in order to best be able to maintain and manage litter quality.
- **E 3.10 *** Fresh litter must be stored in dry, hygienic, rodent-proof premises.

Lighting

- **E 4.1** The lighting system in the hen house must provide in each period of 24 hours:
 - a minimum period of 8 hours continuous light, by the provision of either artificial light or access to daylight
 - b) a minimum period of 6 hours continuous darkness in every 24 hour cycle, except when the natural darkness period is shorter.
 - Where there are signs of stress in birds, producers should consider avoiding exposure to prolonged periods of light (i.e. in excess of 15 hours), to reduce the risk of health and behavioural problems developing.
- **E 4.2** Lighting patterns in all houses must be recorded.
 - (i) Where possible the lighting pattern should be recorded automatically.
- **E 4.3** Daytime lighting levels must allow birds to see and be inspected without difficulty.
- **E 4.4** The lighting system in hen houses must be designed and maintained in order to give a minimum of 10 lux throughout the house (with the exception of shaded areas).
 - The reduction of light levels within a house to prevent cannibalism should only be used as a last resort. Producers should aim to maintain a lighting environment which encourages birds to explore their environment. Only where problems become evident, and there is no other possible solution, should the lighting levels be reduced and then only for a short period of time to enable the birds to settle. The lighting level should then be increased gradually over a few days and returned to normal levels wherever possible.
- **E 4.5** Patches of high intensity light (artificial or natural) must be avoided within a house.
 - Varied lighting within the environment can help to encourage certain desired behaviours to take place, for example by increasing the levels of light over the litter area birds can be encouraged to dustbathe. Also, reducing the lighting levels over the perching area can enable birds to rest.

- **E 4.6** Artificial light must be switched off in a stepped or gradual manner to allow the hens to prepare for darkness.
- **E 4.7** In all hen housing, adequate lighting, whether fixed or portable, must be available to enable them to be thoroughly inspected at any time.

Stocking density



The RSPCA Farm Animals Department will review the maximum stocking density allowed in the units which are accredited under the Freedom Food scheme in light of any further scientific and practical information regarding the welfare of laying hens, and will amend the welfare standards accordingly.

- **E 5.1** All hens must have sufficient freedom of movement to be able, without difficulty, to stand normally, turn around and stretch their wings.
- **E 5.2** All hens must have sufficient space to be able to perch or sit quietly without repeated disturbance.
- **E 5.3** The following relates to stocking density:
 - a) the stocking density must not exceed 9 laying hens per m² of usable area
 - where the usable area corresponds to the available ground surface, a stocking density of 11.7 hens per m² of available area is permitted for those establishments applying this system up to 3 August 1999, until 31 December 2011.
 - **①**

Usable area is legally defined as an area at least 30 cm wide with a floor slope not exceeding 14% (8°), with headroom of at least 45cm.

- **E 5.4** Nest areas (including nest tops) must not be included as part of the calculated usable area.
- **E 5.5** Egg belt covers in front of nest boxes and at floor level may be included as usable area.
- **E 5.6** For flocks with more than 6,000 birds the following maximum flock and colony (subdivision of a flock) sizes must be adopted:

Barn max flock size 32,000 birds max colony size 4,000 birds

Free-range max flock size 16,000 birds max colony size 4,000 birds

- **E 5.6.1** * Each flock must have separate feeding, watering, lighting and ventilation facilities.
- **E 5.7** Records must be kept which enable the stocking density to be verified easily by producer/Freedom Food Assessor and RSPCA Farm Livestock Officer at any time.
- **E 5.8** Records relating to E 5.7 must include:
 - a) details of the number of birds placed in each house
 - * b) the daily mortality (where the cause of death can be identified, this must be stated)
 - c) the number culled (including reason for culling).

Air quality and thermal environment

- **E 6.1** Provision must be made to ensure that aerial contaminants do not reach a level at which they are noticeably unpleasant to a human observer.
- **E 6.2** Producers must assess air quality at bird height on a daily basis.
- **E 6.3** Ventilation systems, natural or forced, must be designed to maintain air quality.
 - the following levels at bird head height:

Ammonia 25ppm Carbon dioxide 5,000ppm

The measurement for relative humidity should be between 50 and 70%.

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 standards is recorded, daily recordings should be made until an acceptable level is achieved and maintained.

Air quality parameters should be maintained under all foreseeable climatic conditions, below

Where possible, these levels should be automatically recorded.

- **E 6.4** Inhalable dust, carbon monoxide and other aerial contaminants within hen buildings must be kept at levels that comply with COSHH regulations.
- **E 6.4.1** There must be, averaged over an 8 hour period:
 - a) dust not exceeding 10mg/m³
 - b) carbon monoxide not exceeding 50ppm.
- **E 6.5** Provision must be made to ensure that hens have access to a thermally comfortable environment at all times, so that heat/cold stress does not occur.
- **E 6.6** Where roofs are not insulated, producers must be able to demonstrate that a thermally comfortable environment is maintained at all times.
- **E 6.7 *** Stock-keepers must:
 - a) have access to a copy of the Defra booklet, 'Heat Stress in Poultry: Solving the Problem' (PB 10543, 2005)
 - b) be familiar with its content
 - c) adopt its recommendations, where appropriate.

Nest boxes

- **E 7.1** Individual nest boxes must be provided at not less than 1 per 5 hens or 1m² of nesting substrate per 120 hens.
- **E 7.2** Nest boxes must be provided with a suitable floor substrate that encourages nesting behaviour and minimises the risk of build up of parasites and disease.



The RSPCA recognises the need for pullets to identify food and water sources and to become accustomed to using nest boxes. The provision of loose material is especially important at the start of lay, to encourage the pullets to use the nest boxes. Consideration should be given to the age at which birds are introduced into the laying unit to give sufficient time to explore these facilities prior to egg laying.

- **E 7.3** * Nest box floors must not consist of wire or plastic-coated wire that can come into contact with the birds.
 - * Suitable floor substrates for nest boxes include clean straw, Astro Turf or dimpled rubber mats.
- **E 7.4** Nest boxes must be draught-free.

Perches

- **E 8.1** Perches must be provided at not less than 15cm per hen, including the alighting rail immediately in front of the nest boxes.
- **E 8.2** Some perches must be raised above the floor space to allow hens to avoid aggressors.
- **E 8.2.1** * Perches must not be mounted above the litter.
- **E 8.3** Perches must have a horizontal distance of at least 30cm between them to be counted as perch space, although more perches may be provided adjacent to one another to make a perforated floor.
- **E 8.3.1** * The horizontal distance between the perch and the wall must be at least 20cm.
- **E 8.4** Perches must have a top surface of approximately 4cm in width, have no sharp edges and be made of a non-slip material.



Perforated floors can be considered as perching space when they have perches incorporated within the floor structure or attached on top or beneath the floor surface.

Producers should note that on interpretation of European minimum standards for the protection of laying hens (Council Directive 1999/74/EC), slatted floors are not considered as perches in Scotland or Northern Ireland, where producers have reported positive welfare and production results from using aerial perching. Aerial perching for all hens may be required in the UK in the future. The RSPCA will be reviewing this standard, in light of any amended interpretation by Defra.

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- E 8.5 Perch space of not less than 460cm² per bird must be provided on slatted or mesh floored area.
- E 8.6 There must be a gap of no less than 1.5cm on either side of any perch to allow hens to grip the perches without risk of trapping their claws.
- E 8.7 Perches must be positioned to minimise fouling of any hens below.

Free-range



The RSPCA welfare standards for laying hens do not insist on hens having access to range. Where range is provided, the following standards must be met.

- E 9.0 Laying hens kept in free-range systems must have continuous daytime access to the range.
- E 9.0.1 Popholes must be opened no later than 9am and closed at dusk, unless bad weather or veterinary advice dictates that such a procedure cannot take place.



(i) 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. Birds should be introduced to the range area as soon as possible to encourage ranging behaviour.

- E 9.0.2 Where birds are intended to be kept for free-range purposes, they must be given access to the range from 21 weeks of age.
- E 9.0.3 Where buildings are converted from barn to free-range when birds are older than 21 weeks, access to the range must be delayed until a new flock is placed (see E 9.0.2).
- E 9.1 * The outdoor area in free-range systems must:
 - be designed and managed in ways which ensure that the land around the house does not become poached
 - consist of well-managed vegetation comprising of pasture/cover crop/trees or a combination of these elements
 - c) be actively managed in order to attract birds onto the range.
- Examples of active range management include:
 - the positioning of shade and shelter at varying distances from the house
 - the rotation of any artificial shelters
 - restricting access to certain areas of the range as and when necessary in order to prevent poaching of the land
- E 9.2 Hens kept in free-range systems must have sufficient popholes, appropriately distributed around the building, to ensure that all hens have ready access to the range.
- E 9.3 Each pophole must be at least 450mm high and 2m wide to allow the passage of more than one hen at a time.

E 9.4 There must be at least 1 pophole per 600 birds.



(i) Where popholes are wider than 2m, the total length of available popholes may be used in calculations of pophole requirements for a house.

E 9.5 Where the visual contact between hen and popholes is impeded in any way (for example where access from inside the house is up an incline) pophole height must be increased in order that sight of the range is never obstructed by other hens.



Where necessary, the height increase required by E 9.5 can be attained with mesh or similar material which allows more light to enter the house. Where the pophole height is above ground level, ramps should be provided to aid birds entering and leaving the house.

- E 9.6 The arrangement of popholes for all houses must be such that they are evenly distributed along the line of access.
- E 9.7 * For flocks/colonies of birds with 1,200 birds or less, the following applies (for flocks of 1,201 birds and above, see E 9.3 and E 9.4):
 - a) there must be a minimum of 2 popholes
 - b) popholes must be at least 50cm wide and 45 cm high

c)	Number of birds	Minimum total pophole length
	Up to 300 birds	1.0m
	301 to 600 bird	1.5m
	601 to 900 birds	2.0m
	901 to 1,200 birds	2.5m

E 9.8 Where verandas are attached to the side of the house, the popholes on both the house and the veranda must be of the size and ratio stated in E 9.3/E 9.4/E 9.7.



The distribution of popholes may be staggered to maintain the thermal environment inside the house.

- E 9.8.1 * For buildings built after 1st March 2008 the maximum distance travelled by a hen to reach the nearest pophole onto the range must not exceed 20m.
- **E 9.8.2** * For buildings built before 1st March 2008 the maximum distance travelled by a hen to reach the nearest pophole onto the range must not exceed 20m by 1st January 2010.

E 9.9 The stocking rate must not exceed 1,000 birds per hectare of range available to the hens over the flock life.



The RSPCA has considered the recent revision of the current EU Commission Regulation for the Special Marketing Terms for Eggs, (EC No. 1651/2001), which will allow greater stocking density on the outdoor range area. However, the Society is concerned that this may lead to difficulties with land management and, therefore, until further information is available, the maximum stocking density will remain at 1,000 birds per hectare or 10m² per hen and still allowing rotation of this area.

Land used for arable cropping should not be regarded as acceptable vegetation and shall be excluded from calculations for stocking density.

- The perimeter of the range must be within 350m from the house. E 9.10
- E 9.11 Where there is a risk of build up of parasites or disease on free-range land, rotational grazing or other disease control measures must be applied.
- E 9.12 Where rotational grazing is practised, the maximum stocking density required in European Commission Regulation (EC) No 1651/2001 must be satisfied.
- E 9.13 * Hens in free-range systems must be provided with overhead shade/shelter on the range, to protect from inclement weather and to reduce regular fear reactions to overhead predators.



The benefits of encouraging ranging behaviour in free-range flocks include a reduced risk of feather pecking. However, birds may be fearful of ranging out into exposed areas of land and prefer to seek areas of cover. Producers should make every effort to provide suitable provisions of overhead shade and shelter on the range which encourages ranging behaviour and, in addition, should explore ways of providing other forms of enrichment, such as perches and designated areas for dustbathing.

A minimum area of overhead shade/shelter of 8m² per 1,000 hens must be provided. E 9.14 *



Vegetation that does not provide overhead shade cannot be included in this calculation. This includes immature trees that have yet to produce foliage. In such cases, artificial shelters will need to be provided until trees are mature. Hedgerows may be included in calculations of overhead shade provided that there is enough room underneath for hens to access. Calculations of the overhead shade area are based on the amount of shade provided by the branches i.e. the diameter created by the tips of the branches.

- E 9.15 * Shades/shelters must be appropriately distributed to encourage birds onto the range.
- E 9.16 * Some shades/shelters must be sited 30 to 50m from the house.
- E 9.17 * All artificial shades/shelters must be of sound construction and be secure.

To help to maintain the correct number of birds housed inside in each colony, the range area should be divided between different colonies of birds to at least a 50m distance from the house.

Multi-tier



These standards are specific to any system incorporating raised tiers. Producers requiring further advice should liaise with the RSPCA Farm Animals Department.

- **E 10.1** * The following multi-tier standards must be read in conjunction with the rest of this document.
- **E 10.2** The overall design of multi-tier systems must:
 - a) allow for proper inspection of all birds at all levels
 - b) enable immediate access to any sick, injured or dead birds which require removal.
- **E 10.3** Consideration must be given to the placement and removal of flocks when implementing multi-tier systems in new or existing buildings, ensuring ready access for careful handling of birds at all levels, without causing injury.
 - **(i)**

A tier is defined as a raised slatted area that may provide perches, food and/or water for the birds and provides access for birds underneath.

Slats are defined as a slatted area where there is a droppings pit underneath. Such slats are not regarded as tiers and count as floor area (in addition to the litter) as in non-tiered units.

Tiers, in addition to floor area, can be counted as usable area

- **E 10.4** Where birds are on tiers above head height, there must be facilities provided to ensure that those involved with catching or inspection procedures do not have to climb on the side of the tiered structure.
- **E 10.5** The maximum stocking density must:
 - a) not exceed 9 birds/m² of usable area
 - b) when calculated at floor level, not exceed 15 birds/m².
- **E 10.6** Each tier must:
 - a) facilitate the movement of birds between the different tiers, and between tiers and slats
 - b) ensure that birds can gain access to the floor area
 - c) ensure that birds can gain access to the range area in the case of free-range systems.
- **E 10.7** In the laying unit, all tiers must have a properly designed manure belt removal system, which must be run at frequent intervals (and in any case at least once a week).
- **E 10.8** The maximum height of the highest tier, measured from the litter floor area to the underside of the manure belt of the highest tier, must not exceed 2m.
- **E 10.9** The vertical distance between the different tiers (including the floor to first tier) must be at least 0.5m high and no more than 1m (measured from the slatted or floor level to the underside of the manure belt).
- **E 10.10** Where birds move diagonally across tiers at different heights, or from tiers to slats and vice versa, the angle of descent (as measured horizontally from the higher tier) must be no more than 45°, to facilitate the movement of birds as they move up and down.

E 10.11 Where it is not intended for birds to move horizontally between different tiers, or between slats and tiers, there must be a gap of at least 2m.



(i) As a guide, in order that birds can move between adjacent tiers or between tiers and slats to gain access to the litter at floor level, the horizontal distance between tiers should be no greater than 80cm.

E 10.12 Where ramps are used, care must be taken to minimise the risk of droppings falling on birds below.



The use of ramps may be incorporated within the design to facilitate the movement of birds from the floor to the first raised tier.

- E 10.13 When flock size exceeds 3,000 the maximum number of raised tiers directly above each other must not exceed 2.
- E 10.14 When flock size is under 3,000 the maximum number of raised tiers directly above each other must not exceed 3.
- **E 10.15** * Where slats are present, a maximum of only 1 raised tier may be installed above this area.
- E 10.16 Where birds are given access to the range the maximum distance they have to travel to the nearest pophole measured on floor area must be no more than 20 metres.



Where possible, birds should be given access to the range area from both sides of the building in order to encourage ranging behaviour.

E 10.17 * Hens must not have to travel more than 8m in the house to reach food and water.

A high degree of caring and responsible management and stockmanship is vital to ensure good animal welfare. Managers and stock-keepers must 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, checklists, health plans, contingency plans, farm pest control plans, depopulation action plans, written standard operating and emergency procedures, policies and publications that the *RSPCA welfare standards for laying hens and pullets* require the producer to keep and maintain, must be made available to the Freedom Food 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 laying hens and pullets
 - b) are familiar with its content
 - c) understand and apply its content.
- **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 ensure that pullets are raised to the standards as set out in the RSPCA supplementary standards for the rearing of pullets (see page 43).

M 1.4 Managers must:

- ensure all stock-keepers have completed relevant and adequate training and can satisfy the Freedom Food Assessor and RSPCA Farm Livestock Officer of their competence in practical circumstances
- b) develop and implement plans and precautions to prevent/cope with emergencies such as fire, flood, storm damage, break down of environmental control 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
 - ii) the location of water sources for use by the fire brigade
 - iii) 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) ensure that the veterinary health plan (see H 1.1) is drawn up, implemented and regularly updated
 - f) maintain records of production data, which include documentation on:
 - i) incoming and outgoing stock
 - ii) the daily mortality (where the cause of death can be identified, this must be stated)
 - iii) the number culled (including reason for culling)
 - iv) feed consumption
 - v) water consumption
 - vi) maximum and minimum temperatures
 - vii) ventilation (including settings and any necessary changes)
 - g) develop and implement a transport plan to Freedom Food approved abattoirs which minimises waiting time for the birds.
 - if possible, water meters should be fitted in each hen house
- **M 1.5** Managers must take into account the abilities of the stock-keepers when deciding on stocking densities for present systems or when considering expanding the unit or installing more complex equipment.

Stock-keepers

M 2.1 Prior to being given responsibility for the welfare of livestock, stock-keepers must be properly trained.



Where possible, stock-keeper training should be validated.

- M 2.2 Stock-keepers must:
 - a) know the normal behaviour of laying hens
 - b) understand the signs which indicate good health and welfare.
- **M 2.3** When an outbreak of abnormal behaviour occurs, it must be tackled immediately by appropriate changes in the system of management.
- **M 2.4** Stock-keepers must be able to recognise a potential welfare problem in its earliest stages, enabling them to identify the cause and put matters right immediately.

- **M 2.5** Stock-keepers must be able to:
 - a) recognise the early stages of common diseases
 - b) know the appropriate actions for treatment of common diseases
 - c) understand the environmental requirements for hens
 - d) handle hens in a positive and compassionate manner
 - e) euthanase hens when necessary.
- **M 2.6** Stock-keepers must be able to demonstrate their proficiency in procedures which have the potential to cause suffering, e.g. injections, trimming of the beak.
- **M 2.7** Stock-keepers must be aware of the welfare problems associated with poor litter management, e.g. hockburn, foot pad lesions and breast blemishes.

Inspection

- **M 3.1** All hens must be inspected at least 3 times a day using an inspection procedure which will identify all birds which are sick, injured or behaving abnormally.
 - Inspections should be appropriately spaced throughout the day, i.e. morning, midday and afternoon/evening.
- M 3.2 On completion of inspection, records must be kept of ill, injured and dead birds.
- M 3.3 Records relating to M 3.2 must be dated, signed and the time of inspection noted.
- **M 3.4** Causes of illness and injury, and reasons for culling, must be recorded.



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

- **M 3.4.1** Any welfare problems seen during an inspection by the producer must be dealt with appropriately and without delay.
- **M 3.5** Work routines and practices must be designed to ensure that hens do not become fearful and are not frightened in avoidable ways.
- **M 3.6** All movement throughout the unit must be slow and deliberate, both to alleviate fear and reduce possible injury to birds.
- **M 3.7** Care must be taken at all times when handling individual birds.

Equipment

- **M 4.1** Stock-keepers must inspect the equipment, including the automatic equipment, upon which laying hens depend at least once daily to check that there are no defects.
- **M 4.2** Where a defect relating to M 4.1 is found (whether on inspection or at any other time):
 - a) the defect must be rectified immediately
 - b) if this is impracticable, such measures as are required to safeguard the hens from suffering unnecessary pain or distress as a result of the defect, must immediately be taken and maintained until the defect is rectified.
- M 4.3 Where the automatic equipment includes a ventilation system, the system must contain:
 - a) 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)
 - b) additional equipment or means of ventilation (whether automatic or not) which, in the event of such a failure of the ventilation system, will provide adequate ventilation so as to prevent the birds from suffering unnecessary distress as a result of the failure.



See Freedom Food information sheet Requirement for Alarmed Ventilation Systems (Issue 3, August 2003).

- **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:
 - a) demonstrate an ability to operate the equipment competently
 - b) demonstrate the ability to carry out routine maintenance
 - c) recognise common signs of malfunction
 - d) demonstrate knowledge of action to be carried out in event of failures.

Pests and predators

- **M 5.1** Humane precautions must be taken to protect laying hens from predators and rodents.
- **M 5.2** The intrusion of wild birds into non free-range houses must be prevented with netting or similar material over roof ventilation ducts, windows, etc.
- **M 5.3** Farm dogs and cats must not be permitted in the hen house.
- **M 5.4** Where a predator problem has been identified either in the house or range, producers must demonstrate that action has been taken to ensure the welfare of the birds.
- M 5.5 * Managers must:
 - a) have access to a copy of the 'Code of practice for the prevention of rodent infestations in poultry flocks' (Defra (formerly MAFF), 1996, PB 2630)
 - b) be familiar with its content
 - c) implement the recommendations as appropriate.

M 5.6 When developing and implementing farm pest and predator control plans, physical exclusion methods, and the removal of elements in the vicinity of livestock that might encourage the presence of pests and predators (see information box below), must be included.



Methods of physical exclusion and discouragement of pests and predators include:

- Construction/maintenance of fencing appropriate for excluding the pests/predators in question
- Removal of shelter/cover (e.g. weeds) in the area surrounding livestock buildings
- Removal/protection of obvious food sources
- Maintenance/proofing of buildings against pests and predators.
- **M 5.7 *** The farm pest control plan must include provisions that specifically exclude the snaring or gassing of animals.
- M 5.8 * Managers must:
 - a) have access to a copy of the 'Code of practice for using plant protection products' (Defra, 2006, PB 11090) [this code replaces the 'Code of Practice for the Safe Use of Pesticides on Farms and Holdings]
 - b) be familiar with its content
 - c) implement the recommendations as appropriate.

Pullets

- **M 6.1** All pullets destined for a Freedom Food accredited multi-tier laying unit must be sourced from a Freedom Food accredited multi-tier rearing unit.
- **M 6.2 *** All pullets destined for a Freedom Food accredited laying unit must be sourced from a Freedom Food accredited rearing unit.

PLEASE REFER TO THE SUPPLEMENTARY STANDARDS FOR THE REARING AND TRANSPORTATION OF PULLETS ON PAGE 43 OF THIS DOCUMENT.

Livestock must be protected from pain, injury and disease. The environment in which livestock are housed must be conducive to good health. All producers must develop a health plan in consultation with their veterinary surgeon.

Veterinary Health Plan

- H 1.1 * A written Veterinary Health Plan must be:
 - a) drawn up, reviewed and updated at least annually in conjunction with the attending veterinary surgeon
 - signed and dated by the attending veterinary surgeon.
- H 1.2 Records relating to H 1.1, including details of any medications administered, must be kept.
- H 1.3 The VHP (see H 1.1) must include:
 - a) targets set for health aspects
 - b) records kept to identify whether targets have been met every year and at each assessment made by the veterinary surgeon.
- H 1.4 The VHP (see H 1.1) must contain a salmonella control programme.

(i) The VHP (see H 1.1) forms a vitally important part of the RSPCA Welfare standards with regard to maintaining health and welfare of livestock. RSPCA guidelines are now available for producers wishing to use these as a basis for a veterinary health plan/flock plan.

H 1.5 * Managers must:

- have access to copies of the 'Code of Practice for the Prevention and Control of Salmonella in Commercial Egg Laying Flocks' (Defra (formerly MAFF), PB 2205, 1995)
 - and the 'Code of Practice for the Control of Salmonella during Storage, Handling and Transport of Raw Materials Intended for Incorporation into, or direct use as, Animal Feeding Stuffs' (Defra, PB 2202, 2003).
- b) be familiar with their content
- c) implement the recommendations as appropriate.
- H 1.6 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 1.7 If recurring injuries are found, a programme of preventative action must be specified in the VHP (see H 1.1).



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

- H 1.8 Attention must be paid to foot lesions.
- H 1.9 Flock performance data must be continuously monitored for signs of disease or production disorders.

- **H 1.10** If any flock performance parameters fall below the tolerance limits identified in the VHP (see H 1.1):
 - a) the veterinary surgeon must be informed
 - the VHP must be revised to include a programme of action which will remedy the problem.
- **H 1.11** Particular attention must be paid to such conditions as egg peritonitis, cannibalism, significant feather loss and red mite infestation.
- **H 1.12** Ailing hens, and any hen suffering from injury such as open wounds or fractures, or from prolapse of the vent must be:
 - a) segregated
 - b) treated without delay
 - c) if necessary, be humanely killed.
 - The practice of beak trimming is contrary to the principles of the RSPCA welfare standards. The RSPCA is currently reviewing this situation and intends to move away from the practice of beak trimming within the next 5 years. There is now sufficient scientific and practical experience which demonstrates that where the management and husbandry practices are optimal, including suitable environmental enrichment devices, the risk of feather pecking can be minimised.

Producers should adopt appropriate management techniques with a view to removing the need to beak trim. In addition, consideration should be given to the suitability of breed types, as the tendency to feather peck can be less with certain strains of bird. The RSPCA Farm Animals Department is currently in discussion with producers and will require all producers to make progress in this area. This situation will be reviewed and evaluated over the next 2 years in light of further experience.

- **H 1.13** Where birds are beak-trimmed, this procedure must be carried out:
 - a) between 5 and 10 days of age (see H(P) 1.3 to H(P) 1.8) unless in exceptional circumstances (see H 1.14)
 - b) by trained and competent operators using appropriate equipment.
- **H 1.14** If, in exceptional 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 10 days 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 with a copy of the letter referred to in a)
 - c) keep a copy of the letter referred to in a) on-site for inspection
- **H 1.15** All artificial appliances (such as blinkers attached to the beak or nostrils, as well as contact lenses) which are designed to stop cannibalism must not be used.
- **H 1.16** Hens must not be induced to moult.
- **H 1.17** 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 1.18** Procedures relating to H 1.17 must be in strict accordance with the relevant waste disposal regulations.

- **H 1.19** Medicines must be clearly labelled and stored in accordance with the label instructions.
- **H 1.20** Medicines must be kept in a secure, lockable store which is safe from animals, children and birds.
- **H 1.21** The medicine store must be separate from food producing areas.
- **H 1.22** A nominated person must:
 - a) be responsible for the management of the medicine store
 - b) keep appropriate records for stock control purposes.
- **H 1.23** Any medicines 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 the *'Guidelines on Responsible Use of Antimicrobials in Poultry Production'*, issued by the Responsible Use of Medicines in Agriculture (RUMA) alliance (RUMA, Acorn House, 25 Mardley Hill, Welwyn, Hertfordshire, AL6 0TT; www.ruma.org.uk).
- **H 1.24** All personnel involved in the administration of animal medicines must be competent to do so.

Casualty killing/slaughter

- **H 2.1** Each farm must have provisions for the humane killing/slaughter without delay of casualty hens.
- **H 2.1.1** 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.
 - It is not illegal to slaughter a bird to prevent further severe suffering if a method of humane slaughter is available on the premises and there is someone competent to undertake the procedure.

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 2.2** Only those methods of on-farm slaughter recommended by the HSA are permitted:
 - a) Hand-held electrical stunning, immediately followed by neck cutting; to be used if killing on a regular, routine or seasonal basis.
 - Neck dislocation; to be used in an emergency or for the one-off slaughter of a very small number of birds.
- **H 2.3** Equipment that crushes the neck, including killing pliers, must not be used.
 - Equipment that crushes the neck is neither quick nor humane.

- **H 2.4** If there is any doubt as to how to proceed, the veterinary surgeon must be called at an early stage to advise whether treatment is possible or whether humane slaughter is required to prevent suffering.
- **H 2.5** If a bird is in severe pain that is uncontrollable, then the bird must be promptly, humanely slaughtered/killed.
- **H 2.6** All carcasses must be disposed of strictly according to current legislation.
- **H 2.7** A record must be kept of how and where all such carcasses are disposed of.

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

Depopulation



It is a legal requirement for all free-range birds to have access to the range on a daily basis, including during the day before depopulation.

For clarification, throughout this section key staff involved in depopulation are defined as follows:

Producer/farm manager (or named supervisor) – ultimately responsible for the welfare of the birds, until they are loaded into the transport modules/crates.

Catching team leader – responsible for supervising the catching process, making sure all catching team members are aware of their duties and are competent to carry them out.

Senior catching team members – experienced senior members of the catching team, appointed by the catching team leader, to help supervise the other members of the catching team.

Haulier (driver) – responsible for making sure all birds are fit to travel and for the welfare of birds from the time they are placed into the transport modules/crates until they are unloaded from the modules/crates at the abattoir.

- **T 1.1 *** From the 1st March 2009 the producer/farm manager must ensure that only Freedom Food accredited catching teams are used for catching laying hens at depopulation.
 - The producer/farm manager may be Freedom Food accredited themselves if organising their own team for depopulation.
- **T 1.2 *** A depopulation action plan (DAP) must:
 - a) be drawn up by the producer/farm manager for each house prior to depopulation
 - b) be reviewed and signed after each depopulation by both the producer/farm manager or named supervisor, and the catching team leader.

T 1.3 * The DAP (see T 1.2) must include:

- a) building design
- b) catching plan
- c) transport arrangements
- d) post-depopulation records

(For more detailed information, see Appendix 3 for pro forma.)

Producers/farm 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 and access to mobile units.

All new buildings should have access for transport crates so that hens can be loaded inside the building, or a concrete area with shelter outside the unit should be provided. It is appreciated that this may be more difficult in some smaller and/or mobile units, but every effort should be made to ensure the welfare of the hens at the time of loading into transport crates.

- **T 1.4 *** If the catching team has concerns regarding the depopulation process and the welfare of the birds, the catching team leader must raise these concerns with the producer/farm manager.
- **T 1.5 *** If the producer/farm manager, or named supervisor, has concerns regarding the welfare of hens during the catching process, he/she must raise these concerns with the catching team leader.
- **T 1.6 *** The DAP (see T 1.2) must:
 - a) include any bird welfare issues raised by the catching team (see T 1.4)
 - b) include any bird welfare issues raised by the producer/farm manager (see T 1.5)
 - c) include any action to be taken to address the issues raised in a) and b) prior to the next depopulation.
- **T 1.7 *** The producer/farm manager must:
 - a) provide full written instructions of the catching plan to the catching team leader and senior catching team members (see T 1.8d)
 - b) take responsibility to ensure the welfare of the birds throughout the catching process
 - c) be recorded by name in the DAP (see T 1.2).
- **T 1.8 *** The catching team leader must:
 - a) be recorded by name in the DAP (see T 1.2)
 - b) ensure that all catching staff are aware of their duties
 - c) take responsibility for supervising, monitoring and maintaining RSPCA Welfare Standards throughout the depopulation of the house and loading of hens into the transport modules/crates
 - appoint a minimum of one senior member of the catching team for teams of up to eight members, and two senior members for teams of nine or more members
 - e) record the name(s) of the senior catching team members in the DAP.
- **T 1.9 *** The catching team leader and senior members of the catching team must:
 - a) have access to a copy of the current version of the RSPCA Welfare Standards for Laying Hens and Pullets
 - b) be familiar with the contents of the section on depopulation.
 - c) understand and apply the contents of the section on depopulation.

- **T 1.10 *** All personnel involved in the catching and transportation of hens must be:
 - a) properly trained
 - b) competent to carry out their duties.
 - Where possible training relating to T 1.10 should be validated.
- **T 1.11 *** The catching team leader must ensure that he/she:
 - a) has viewed the Humane Slaughter Association DVD 'Poultry Slaughter Taking Responsibility'
 - b) is familiar with its content in order to convey the relevant content to the catching team members
 - c) conveys relevant areas of its content to the other catching team members.
 - Where possible all members of the catching team should view the Humane Slaughter Association DVD 'Poultry Slaughter Taking Responsibility'.
- **T 1.12 *** Less experienced members of the catching team must be closely supervised by a senior member of the catching team or the catching team leader.
- **T 1.13 *** Hens must have access to water up to the time that the catching team begins to catch the first birds.
- **T 1.14 *** Producers/farm managers must liaise with the haulier and abattoir to ensure that the timing of the depopulation process does not deprive any bird from food for more than 12 hours (including the period up to the time of slaughter).
- **T 1.15** Catching must take place in low or blue lighting when the hens are roosting naturally to minimise fear reactions.
 - If blue lighting is unavailable, a dimmer switch can be used to create low lighting, to avoid potentially causing unnecessary stress to the birds by turning lights on and off.
- **T 1.16** Catching teams must never put speed of operation before hen welfare.
- **T 1.17** Adequate draught-free ventilation at hen height must be provided for uncaught hens up to the time of loading.
- **T 1.18 *** The catching and loading routine must involve at least two people, one catching the birds and the other opening and closing the drawers of the transport containers.
- **T 1.19** Hens must be caught individually by grasping both legs, just above the feet.
- **T 1.20** Hens must not be caught or carried by a single leg.
- **T 1.21** No more than 3 birds must be carried in one hand.
 - * Matching the number of birds carried by each catcher at any one time to multiples of the drawer stocking density can help in the efficient and smooth loading of the birds.

- T 1.22 * If carried in groups, care must be taken to ensure birds can be held comfortably without distress or injury.
- T 1.23 * Carrying distances must be kept to the minimum possible.
- T 1.24 Where crowding occurs, the house lights must be raised, the birds spread out calmly and quietly, then allowed to settle before catching is resumed.
 - Penning the birds into smaller groups for catching may help to minimise smothering, which can sometimes be caused by crowding.
- T 1.25 * Prior to depopulation, the catching team leader and senior members must have a detailed procedure, that they will employ to deal with loose birds in the house in order to ensure the welfare of such birds.
- T 1.26 * When modules are used for transport:
 - a) the top drawer must be loaded first
 - each drawer must be closed carefully to ensure that the birds' heads, wings and legs are not trapped in any way.
- T 1.27 * Birds which are visibly unfit (including those that are lame, fatigued, injured or ill) before loading must:
 - a) not be transported
 - b) be humanely killed immediately, as soon as observed.
- T 1.28 * The catching team leader or a senior member of the catching team must be nominated to be responsible for humane killing of birds that are deemed unfit for travel (casualty birds).
- T 1.29 * The nominated person (see T 1.28) must be:
 - a) trained and competent in carrying out humane killing
 - b) named in the DAP (see T 1.2).
- T 1.30 * Producers/farm managers must have in place, and be able to demonstrate, procedures to protect birds from wetting and chilling during the depopulation process.



 $\left(m{i}
ight)$ The use of curtains, shelter facilities during catching and loading and minimising the carrying distance from the building to the vehicle can help to protect birds from wetting and chilling.

- T 1.31 * The haulier must ensure that:
 - a) all birds are fit to travel
 - b) the welfare of birds is safeguarded from the time they are placed into the transport modules/crates until they are unloaded from the modules/crates at the abattoir.
 - The driver of the vehicle has a legal responsibility to inspect the birds at the time of loading and should inspect the birds prior to catching and departing.

Transport

- (i
- From January 2008 legislation requires all drivers to hold a certificate of competence demonstrating that they have undertaken appropriate training and can implement the skills and knowledge attained in relation to ensuring good welfare during the transport of livestock.
- **T 2.1** Personnel in charge of hen transporters must:
 - a) have completed an approved training course
 - b) be able to demonstrate their competence in handling hens when loading and unloading them and while in transit
- **T 2.1.1 *** The driver must:
 - a) have access to a copy of the current version of the RSPCA Welfare Standards for Laying Hens and Pullets
 - b) be familiar with the contents of the section related to transport
 - c) understand and apply the contents of the section related to transport where applicable.
- **T 2.1.2 *** The haulier must ensure that:
 - a) all birds are fit to travel
 - b) the welfare of birds is safeguarded from the time they are placed into the transport modules/crates until they are unloaded from the modules/crates at the abattoir.
 - The driver of the vehicle has a legal responsibility to inspect the birds prior to loading.
- **T 2.2 *** The timing of arrival of the catching team must be planned to minimise any unforeseen interruptions to the depopulation process.
- **T 2.2.1** All transport vehicles must be parked as near as possible to the house being depopulated.
- **T 2.3** All transporters must have a livestock capacity document on board at all times.
 - **(i)**

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 2.3.1 * Birds which are wet prior to loading must not be loaded close to the inlets on the vehicle.

(i)

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

Wherever possible, end-of-lay hens should be carried on vehicles where the ventilation system is capable of maintaining the temperature within the transport container below 26°C accompanied by a relative humidity (RH) of less than 75%. The ventilation system design and vehicle curtaining should reflect these requirements. Particular care and consideration should be given to poorly feathered birds who are more susceptible to chilling.

Transport

- **T 2.4** All hauliers must have a written standard operating and emergency procedure to implement during transportation (see Appendix 1).
- **T 2.5** All deaths and injuries during transport must be recorded and reported within 48 hours to:
 - a) the haulier (driver)
 - b) the haulier company
 - c) the slaughterhouse poultry welfare officer
 - d) the farm manager

before the next consignment from the same source is collected.

- **T 2.6** An on-farm record must be maintained of all incidents relating to T 2.5 that occur during transit.
- **T 2.7 *** Where causes of mortality or injury have been identified, prompt action must be taken to prevent further deaths, injury and suffering occurring.
- **T 2.8 *** Levels of transport mortality (in hens from any single source) above 0.1% in any 3-month period or on individual journeys must:
 - a) be the subject of investigation
 - b) be recorded.
- **T 2.9** The time between the loading of the last hen to the time of arrival at the final destination must be less than 8 hours.
- **T 2.10** The following applies to unloading:
 - a) where conditions allow, all birds must be unloaded immediately upon arrival
 - b) where it is not possible to unload birds immediately, a written plan must be available which details the procedures which are designed to ensure the welfare of the birds whilst they are on the vehicle.
- **T 2.11** Noise levels, from all sources, must be minimised during loading, transport and unloading.
- **T 2.12** In periods of hot weather (in excess of 21°C), hens must be transported at night or in the coolest part of the day or the stocking density must be reduced by 20%.
- **T 2.13 *** Hauliers must have in place, and be able to demonstrate, procedures to protect birds from extremes of weather (including wetting and chilling) at all times whilst hens are in modules, both prior to loading on to the vehicle and during transport.
 - * Parking the vehicle in an appropriate position can help to minimise any potential distress to the birds that could be caused by prevailing weather conditions.
- **T 2.14** 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 2.15** The producer/farm manager supervising the catching and loading of birds must liaise closely with the abattoir to minimise the time birds spend waiting on the vehicle in the event of an unexpected delay during depopulation.
- **T 2.15.1 *** The haulier must liaise directly with the abattoir to minimise the time birds spend waiting on the vehicle in the event of an unexpected delay during transport.

Transport

T 2.16 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 21°C) one of the most effective ways of achieving adequate ventilation is to keep the vehicle moving.

- T 2.17 There must be adequate ventilation for all birds when in transport crates and on the vehicle.
- T 2.18 * All birds must be transported by a Freedom Food-approved haulier.

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

S 1.1 Hens must be slaughtered as close as possible to the point of production.

Management and training

- **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.
- **\$ 2.2** The animal welfare policy must be regularly reviewed and updated.
- **\$ 2.3** Managers must appoint at least one 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, for example Bristol University Animal Welfare Officer Training programme.

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



Where possible this training should be validated.

- **S 2.5** The PWO must make frequent checks throughout the day to ensure that birds are being effectively stunned and are unconscious throughout the slaughter operation.
- **\$ 2.6** Where birds are not being effectively stunned, the PWO must take immediate remedial action.
- **\$ 2.7** The manager and PWO must:
 - a) have access to a copy of the current 'Code of Practice Welfare of Poultry at Slaughter: A Pocket Guide' (Defra (formerly MAFF) PB 3476, 1998)
 - b) be familiar with its content.
- **S 2.8** * The manager and PWO must:
 - a) have access to a copy of the Humane Slaughter Association's 'Best Practice Guidelines for the Welfare of Broilers and Hens in Processing Plants' (2004)
 - b) be familiar with its content
 - c) ensure that the recommendations are applied where appropriate.

Lairage



A number of abattoirs have installed Closed Circuit Television (CCTV) monitors within the preslaughter handling and slaughter areas. This allows those responsible for animal welfare within the abattoir to ensure that welfare standards are maintained. The installation of CCTV systems is recommended by the RSPCA.

- **S 3.1** Hens must be unloaded immediately on arrival at the slaughterhouse.
- **S 3.2** All transport containers must be examined on arrival at the slaughterhouse to identify any birds suffering from injury, heat or cold stress.
- **S 3.3** Any bird identified as suffering from injury, heat or cold stress must be killed immediately and humanely.
- **S 3.4** Records relating to S 3.3 must be kept.
- **S 3.5** In the lairage where hens are held the following must be provided:
 - a) protection from direct rays of sun and from adverse weather, i.e. wind, rain, hail, snow, etc.
 - adequate ventilation (temperature and humidity in the lairage must be regularly monitored and controlled)
 - c) reduced or blue lighting.
- **S 3.6** Where causes of mortality have been identified, prompt action must be taken to prevent further deaths, injury or suffering occurring.
- **\$ 3.7** Levels of transport mortality (in hens from any single source) above 0.1% in any 3-month period must:
 - a) be the subject of investigation
 - b) reported to the Freedom Food Assessor and RSPCA Farm Livestock Officer.
- **S 3.8** Once hens have arrived at the premises at which they are intended to be slaughtered, they must not be moved on to other premises for slaughter.
- **\$ 3.9** Standby equipment, for example a generator, must be available for emergency breakdowns.
- **\$ 3.10 *** 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.

Shackling

- **S 4.1** Shackling teams must be thoroughly trained to handle the birds in such a way as to avoid injury and bone breakage, and must be:
 - a) made fully aware of the risk of breakages that the hanging-on procedure can cause to hens
 - b) supervised by a trained and competent person during the shackling process.

- **S 4.2** Slaughterhouse managers must ensure that sufficient personnel are employed on shackling lines at all times to ensure due care and diligence.
- **S 4.3** Shackles must be of a size and type, and the slaughter line run at a speed, which permits hens to be hung on without causing unnecessary pain or distress.
- **S 4.4** Birds must be hung on by both legs.
- **S 4.5** Appropriate measures must be taken to prevent wing flapping and birds raising their heads before reaching the stunning bath.



The use of a breast bar, curtains, reductions in noise, low light intensity, running hand down birds at shackling, can reduce stress.

- **S 4.6** Care must be taken to ensure that birds cannot escape from the holding area or fall from the shackle line.
- **S 4.7** Where loose birds are found, they must be taken immediately to the hanging-on area or, if injured, immediately humanely destroyed out of sight of other birds.
- **S 4.8** Hens must not be suspended for more than 60 seconds before they are stunned.
 - Shackling a bird can cause discomfort and pain, so it is important to reduce the shackling period to a minimum. However, for an effective stun, it is necessary for the bird to be shackled for a short period, to allow it time to relax and stop wing flapping. Therefore, live chickens should not be suspended for more time than is necessary for wing flapping to cease, which has been shown to be around 15 seconds on average.
- **\$ 4.9** All crates must be checked to ensure no hens are left inside them.

Stunning

- **\$ 5.1** Stunning equipment must be of one of the following types:
 - a) electrically-live stunning bath
 - b) dry stunner incorporating an electrically-live metal grid or bar
 - c) hand operated stunner.
- **\$ 5.2** Unstunned birds must be screened from dead birds.
- **\$ 5.3** The line to the stunning bath must be darkened or lit with blue light.

- **\$ 5.4** Where an electrical 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 make an effective contact with the water bath
 - a voltage sufficient to produce an average minimum current of 120mA per bird with a minimum of 105mA (50Hz sinusoidal) must be maintained
 - d) each bird must be in contact with the current for a minimum of 4 seconds
 - e) the water level must be of sufficient depth, and the water must not overflow at the entrance
 - f) the electrode which is immersed in the water must extend the length of the water bath
 - g) the water bath stunner must be designed and set up to prevent birds receiving pre-stun shocks
 - h) the water bath must be fitted with an ammeter to accurately monitor current flow through the bath when loaded with birds.
- **\$ 5.5** All stunning and bleeding equipment must:
 - a) be properly maintained
 - b) be regularly cleaned
 - c) be checked daily to ensure that it is in full and proper working order.
- **S 5.6** Any problems must be:
 - a) reported to the PWO
 - b) rectified immediately.
- **\$ 5.7** All birds leaving the water bath must be checked to ensure they have been effectively stunned or killed.
- **\$ 5.8** Birds which fail to be properly stunned must be humanely killed immediately.
- **S 5.9** Staff must be trained to recognise the signs of an effective stun, and use these signs to ensure that birds have been effectively stunned or are dead.
 - 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:

The most reliable indicator that a bird is properly stunned by the low voltage method is the

- completely limp carcass
- no breathing
- loss of nictitating membrane reflex
- dilated pupils.
- **S 5.10** Contingency plans must be made to deal with occasions when unavoidable delays may occur and it is not possible to process the birds.
- **\$ 5.11 *** If the slaughter line is stopped for longer than 60 seconds, birds between the point of shackling and the killer must be humanely killed immediately.

Bleeding

- **S 6.1** Carotid arteries and jugular veins must be effectively severed using a ventral cut.
- S 6.1 must be checked by the appointed member of staff who must be given sufficient time to sever the blood vessels manually, if necessary.
- **S 6.3** No more than 10 seconds must elapse between stunning and neck cutting.
- **S 6.4** All birds must be checked to ensure that they are dead before entering the scalding tank.
- **S 6.5** Hens must not be immersed in a scalding tank or plucked until at least 90 seconds have elapsed since the major blood vessels in their necks have been severed.

Controlled Atmosphere Systems (CAS)



Evidence suggests that the use of gas under controlled conditions (controlled atmosphere systems or CAS) as a means of killing birds can provide many welfare benefits, such as reduced manual handling and avoiding the need to shackle live birds. It is a legal requirement that CAS must be designed to kill the birds and must not be used as a stunning method.

- **S 7.1** In accordance with UK Welfare of Animals (Slaughter or Killing) Regulations 1995 (WASK), as amended, every person engaged in the gas killing must be properly instructed as to:
 - a) the method of operation of the CAS
 - b) the procedures for any necessary flushing of the CAS with atmospheric air, and
 - c) the procedures for any necessary evacuation of birds from the CAS.
- **S 7.2** Only the following gas mixtures are permitted:
 - 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 30% by volume and the oxygen concentration does not exceed 2% by volume.



The RSPCA is aware that recent scientific studies have shown that there may be additional welfare benefits to using alternative gas mixtures which are currently not permitted under the WASK Regulations 1995. The RSPCA will review the use of gas mixtures currently permitted in the RSPCA's Welfare Standards in light of any further recommendations made and relevant changes to existing UK Legislation.

- **\$ 7.3** Where more than one type of gas is used, the gases must be mixed thoroughly prior to supply into the CAS.
- **S 7.4** Daily checks must always be undertaken to ensure that there is a sufficient supply of gas to kill all birds to be received, prior to the commencement of the process.
- **S 7.5** The gas concentrations must be continuously monitored.

- **S 7.6** Birds must be:
 - a) immersed into approved gas mixtures
 - b) held in that atmosphere until they are dead.
- **S 7.6.1** The delivery of gases must be constantly monitored.
- **\$ 7.6.2** Sensors monitoring the concentration of gases must be:
 - a) fitted in different locations along the equipment
 - b) clearly marked and readily identified.
- **\$ 7.7** The gas monitors/sensors installed in the equipment must be linked to an audible and visual alarm system, which is automatically triggered:
 - a) when the gas concentration is incorrect
 - b) when the maximum residual oxygen level is above 2%.
- **\$ 7.8** Gas monitoring/sensing devices must be:
 - a) calibrated at regular intervals, according to manufacturer's advice
 - calibrated using certified calibration gases, to ensure the correct concentrations are maintained at all times.
- **\$ 7.8.1** A verifiable record of calibration must be kept.
- **\$ 7.9** Birds must not enter the equipment until the correct gas concentration has been established. This must be controlled automatically.
- **\$ 7.10** Birds must not be subjected to any of the gas mixture prior to entry into the CAS.
- **S 7.11** There must be appropriate equipment, such as an extractor fitted at the entrance to the equipment to effectively address S 7.10.
- **\$ 7.12** All birds must be exposed to the maximum concentration of the gas mixture within a maximum of 10 seconds of entry into the system (WASK Regulation, 1995, as amended).



The RSPCA Farm Animals department is investigating the feasibility of installing CCTV equipment inside the Controlled Atmosphere System to allow visual assessment of the birds as they enter and pass through the system. The welfare standards will be reviewed as soon as further information about the availability of such equipment is known.

- **S 7.13** On exiting the CAS, all birds must be checked immediately to ensure that they are dead.
- **S 7.14** Any birds found to be conscious on exiting the CAS must be removed and humanely killed immediately.
- **\$ 7.14.1** Verifiable records of birds recovering consciousness after exposure to gas mixtures must be maintained.
- **S 7.15** In case of failure, there must be a back-up slaughter method available and ready for use at all times which is capable of dealing with all birds awaiting slaughter.
- **S 7.16** On exiting the CAS, birds must be checked thoroughly to identify any signs of damage or injury which could have been caused whilst in the CAS.

- **\$ 7.16.1** The causes of injury relating to \$ 7.16 must be thoroughly investigated to ascertain where and how this may have occurred.
- **\$ 7.17** Any signs of damage or injury to birds which has occurred whilst in the CAS, and results of investigation into the cause, must be recorded.
- **S 7.18** Where it is found that injury was caused while the birds were still conscious, immediate action must be taken to rectify the problem and to reduce the likelihood of such damage being caused to other birds.
- **S 7.19** A contingency plan must be drawn up to include details of what action would be taken if a breakdown occurred while birds were still in the CAS, to avoid prolonged delays.
- **S 7.19.1** * Where live birds have remained in the CAS for longer than 2 minutes, the system must be flushed with atmospheric air to remove the remaining gases, and birds must be immediately removed for slaughter using a permitted back-up method.
- **\$ 7.20** There must be a means of flushing the system with atmospheric air.

* Planned on-farm slaughter/killing

- **\$ 8.1 *** The only permitted methods for planned on-farm slaughter/killing (but see also \$ 8.2 below) are:
 - a) hand held electrical stunning, immediately followed by neck cutting
 - b) captive-bolt followed by neck dislocation and bleeding (neck dislocation and bleeding are not necessary when captive-bolt is used for emergency culling or during disease control operations).
- **\$ 8.2 *** Any producers considering neck dislocation for planned on-farm killing must contact and liaise with the RSPCA Farm Animals Department.
- **S 8.3** * The captive bolt device must be used and maintained according to the manufacturer's guidelines.
- **\$ 8.4 *** Equipment that crushes the neck, including killing pliers, must not be used.
 - * (i) Equipment that crushes the neck is neither quick nor humane.

SUPPLEMENTARY STANDARDS FOR THE REARING OF PULLETS

The following standards for the rearing and handling of pullets are additional requirements to the *RSPCA Welfare standards for laying hens.* They must be read in conjunction with the rest of this document.

Food and water (supplementary standards for pullets)

- FW(P) 1.1 2.5cm of (actual) linear track (5cm single side) or 2cm circular feeding space must be provided per bird.
- **FW(P) 1.2** Food must be readily available at all times throughout the lighting period.

①	The provision of insoluble grit for laying digestion, and can be beneficial to your provided with an appropriate quantity of lives. The recommended size and amounts of the provided with an appropriate quantity of the provided with a provi	ng pullets as well as of insoluble grit from	to laying hens. Birds should be 3 weeks of age and throughout their
	Age of bird	Size of grit	Quantity of grit
	Chicks (from 3 weeks of age)	0.2mm	1g per bird (maximum) given once a week with food.
	Pullets (6 to 11 weeks old)	3.24 to 4.75mm	2g per bird, given once a week, with food.
	Pullets (11 weeks to point of lay)	4.75 to 6.35mm	4 to 5g per bird, given once a

6.35 to 8.0mm

- **FW(P) 1.3** Examples of the feeding and watering equipment to be used post-brooding must be included within the brooder area (either the surround or the whole house) to ensure birds find food and water quickly when the chick feeding and watering equipment is removed.
- **FW(P) 1.4** The rearer must provide a drinking system similar to that provided by the egg producer and, if the rearer is are not sure, then both systems must be provided.
- FW(P) 1.5 Feed track and other mechanical equipment must be designed and maintained to prevent injury to chicks.
- **FW(P) 1.6** Feeding points must be placed adjacent to drinkers.

Laying hens - throughout lay



week with food or placed in a separate feeder.

28g per bird per month sprinkled on food or placed

in separate feeder.

- **FW(P) 1.7** Feeders and drinkers must be equally spaced within the house.
- **FW(P) 1.8** Food and water must be provided immediately prior to the placement of chicks to ensure there is no deterioration caused by heat during brooding.
- **FW(P) 1.9** Where spot brooding is used, care must be taken to ensure feeders and drinkers do not become hot, especially where metal feeders are used.
- **FW(P) 1.10** Stock-keepers must ensure that chicks are feeding and drinking properly and should check the birds' crops following placement.
- **FW(P) 1.11** Feeders and drinkers must be kept clean and free from litter.



Tepid water should be provided for the chicks during the first few days of placement.

FW(P) 1.12 The minimum number of drinkers must be provided as follows:

nipples 1/12.5 pullets bell drinkers 1/125 pullets cups 1/20 pullets

- FW(P) 1.13 Supplementary chick drinkers must:
 - a) be provided for the first 3 to 4 days
 - b) if chicks are beak trimmed, must be phased out within a few days after trimming.

Environment (supplementary standards for pullets)

Building preparation



Rearing pullets in a system which is similar to that of the laying unit can help birds better adjust to the laying environment. The RSPCA will consider amending the requirements for rearing systems, for future inclusion in the standards.

- **E(P) 1.1** All old litter must be cleared from the house before it is cleansed and disinfected.
- **E(P) 1.2** All poultry buildings must be effectively cleansed and disinfected before chicks are placed in the house.



Single site (all in/all out) rearing is highly desirable.

- **E(P) 1.3** The poultry house must be ready to receive chicks 24 hours before placement.
- **E(P) 1.4** All equipment on which the chicks depend must be properly functional prior to the chicks being placed.

Brooder management

- **E(P) 2.1** Where whole house brooding is used:
 - a) sufficient time must be allowed to ensure that the necessary target brooding temperature at bird level will be achieved prior to the chicks being placed, allowing for the difference in the time of year and external temperature
 - b) the temperature of the house taken in several parts of the house at chick head height must be recorded throughout the brooding period.
- **E(P) 2.2** Where spot brooding is used:
 - a) brooders must be lit for a sufficient period of time prior to the placement of chicks which ensures they will not be chilled
 - b) 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
 - c) the equipment within the brooder area must be arranged such that the chicks are able to move to different temperature zones
 - d) there must be temperature zones within the brooder surround
 - e) the number of chicks per brooder must be based on the brooder manufacturer's recommendations.
- **E(P) 2.3** Throughout the brooding period, the behaviour of the chicks must be closely monitored and the brooding temperature adjusted accordingly.
- **E(P) 2.4** The layout of the equipment in the brooding area must be such that chicks can find feeders and drinkers at all times.

Floor and litter

- E(P) 3.1 Pullets must have access to litter at all times.
- E(P) 3.2 At least one half of the area must be covered by litter.

Lighting

E(P) 4.1 Daytime lighting levels must allow birds to see without difficulty and to be properly inspected.



(i) The RSPCA is currently reviewing the evidence about the need for natural light and the quality of light provided in enclosed buildings. The RSPCA believes that birds must be given sufficient light to encourage normal behaviours. Scientific research clearly shows that young chicks have preference for brighter lighting conditions compared with older birds, while older birds prefer different levels of light depending on their activities. When kept under very low levels of light for a prolonged period of time, there is a risk of abnormal development of the eye which can lead to both temporary and permanent blindness. Therefore, the RSPCA recommends that pullets should be kept at a lighting level of no less than 10 lux for at least 10 hours each day, except in circumstances when it may be necessary to lower the lighting level temporarily to reduce the risk of injury caused by feather pecking and cannibalism.

- E(P) 4.2 The lighting system in the pullet unit must be designed and maintained in order to give a minimum illumination of 5 lux throughout the house.
- **E(P) 4.3** Where spot brooding, during the first few days of rearing sufficient light must be provided to attract chicks to the sources of heat, feeders and drinkers.



The lighting pattern during the rearing period should ideally be matched to that at the start of the laying period. If necessary rearers and producers should seek advice on rearing and lighting patterns from an advisory body such as ADAS.

E(P) 4.4 * Artificial light must be switched off in a stepped or gradual process.

Space allowance

- **E(P) 5.1 *** The following applies to the stocking density of pullets:
 - a) birds must not be stocked at a density any greater than 20kg/m² at 16 weeks of age
 - b) it must not be likely to exceed 20kg/m² at 16 weeks of age.



An adequate amount of space should be provided for each bird and the number of birds placed should be adjusted according to the age at which the birds will be transferred to the laying hen unit to provide sufficient space for older birds.

An important guide to pullet rearing is whether more than 20% of the pullets have liveweights in excess of ±10% of the mean weight.

The following guidelines (based on the current breeder target weights at the rearing farm) should be used when determining the number of birds/m₂ to be placed at the rearing site:

Age of pullets (weeks)	Number of pullets/m²
15	15
16	14
17	13
18	12

Air quality and thermal environment

- **E(P) 6.1** During the brooding period the house or brooder area must be adequately heated.
- **E(P) 6.2** Care must be taken to avoid heat stress.



Additional heat may be required during cold weather to maintain ventilation rates and air quality.

E(P) 6.3 Regular brooder servicing and maintenance must be carried out to ensure that brooders are working effectively.



Daily measurements of air quality and ventilation should be taken to ensure that, averaged over an 8-hour period, the levels of carbon monoxide comply with COSHH regulations and do not exceed 50ppm.

A minimum ventilation rate of 1.6 x 10⁻⁴m³/s per kg^{0.75} liveweight is recommended. The maximum ventilation capacity should be sufficient to limit a maximum temperature lift of 3°C.

E(P) 6.4 Producers must demonstrate to Freedom Food Assessors and RSPCA Farm Livestock Officers the minimum ventilation rate for a unit which is maintained independently of temperature.

Multi-tier



These standards are specific to any system incorporating raised tiers. Producers requiring further advice should liaise with the RSPCA Farm Animals Department.

- **E(P) 7.1** * The following multi-tier standards must be read in conjunction with the rest of this document.
- **E(P) 7.2** All chicks must be given access to litter at all times.
- **E(P) 7.2.1** * At least one-half of the floor area must be covered in litter and equal a minimum of one-third of the usable area.
- **E(P) 7.3** Where chicks are confined to the slatted area during the initial rearing period, litter must be provided on a temporary flooring covering the slatted area.



Corrugated cardboard can be placed over the slatted area during the initial rearing period, and shavings can then be added. A lip can be useful at the edge of the slatted area in order to keep the litter in.

- **E(P) 7.4** * Where young pullets are contained within part of the system for the first weeks of life, they must be given access to raised tiers at no later than 15 days of age.
- **E(P) 7.5** Once chicks are given access to the whole area, care must be taken to ensure that they can find food and water and, if necessary, additional inspections must take place to facilitate this process.
- **E(P) 7.6** Tiers must be provided at different heights, to accustom birds to moving around the system and to enable roosting on raised tiers.
- **E(P) 7.7** All tiers must be positioned to facilitate the movement of birds between the different tiers and between the floor and the tiers.
- **E(P) 7.7.1 *** Once raised, the vertical distance between tiers with adjustable height (including the litter floor to the first tier) must be such that it allows access for birds to move underneath with sufficient headroom.
- **E(P) 7.7.2** * The vertical distance between tiers with adjustable height must be no more than 1m when measured from the litter floor or upper side of the tier below to the underside of the tier above.
- **E(P) 7.7.3** The height of the highest tier, measured from the solid floor with litter to the underside of the highest tier (or manure belt if present), must not exceed 2m.
- **E(P) 7.7.4 *** The vertical distance between static/fixed tiers (including the litter floor to the first tier) must be at least 0.5m high and no more than 1m when measured from the litter floor or upper side of the tier below to the underside of the tier above (or manure belt if present).
- **E(P) 7.8** When flock size exceeds 3,000 the maximum number of raised tiers directly above each other must not exceed 2.
- **E(P) 7.9** When flock size is under 3,000 the maximum number of raised tiers directly above each other must not exceed 3.

- **E(P) 7.10 *** If birds are restricted to part of the system for an initial brooding period, food and water facilities must remain available on this level.
- **E(P) 7.11 *** Where no food is provided on a tier (or floor level), food must be provided on the tier directly above or below.
- **E(P) 7.11.1** * Where no water is provided on a tier (or floor level), water must be provided on the tier directly above or below.
 - **E(P) 7.12** All pullets must be:
 - a) accustomed to moving up and down between different tiers
 - b) be familiar with gaining access to perches, and sources of food and water at the different tiers.
 - **(i)**

The following guidelines are a result of observations made by the RSPCA to date, they will be reviewed for future inclusion in the standards.

The height of the highest tier should be at least 60cm, for the first 10 weeks of life.

The highest tier should be at least 1m high from 11 weeks of age.

In order to ensure birds have access to sufficient raised tiers, producers should aim to provide approximately 50% of tiers which are at least 60cm high.

- **E(P) 7.13 *** For all pullets destined for multi-tier laying systems:
 - a) a minimum of 124cm² of slatted (tier) area must be provided per bird
 - b) a minimum of 1cm raised perch must be provided per bird.
- **E(P) 7.14 *** The maximum stocking density must not exceed 20kg/m² of usable area at 16 weeks of age. When calculated at floor level this must not exceed 33kg/m².

Perches

- **E(P) 8.1 *** For all pullets not destined for a multi-tier laying system:
 - a) perches must be provided at not less than 1.75cm per pullet
 - b) perches must be introduced by 10 days of age at the latest
 - c) perches must be positioned to facilitate the movement of pullets underneath.

E(P) 8.2 * Perches must be positioned to minimise fouling of any pullets below.

· | (i

The inclusion of perches within the pullet rearing unit promotes bird activity, can help to maintain bone strength, can assist with the birds' ability to adapt when they are transferred to the laying hen unit and can assist in the reduction of floor eggs in the laying environment. Evidence shows that pullets are more likely to use the perches if they are included in their environment from a young age.

In order to avoid accumulation of droppings and litter quality problems beneath perches, extra litter management may be required in these areas.

Extra management and attention may be required due to the potential addition of harbourage sites for red mite. Care should be taken to ensure that perches are cleaned effectively between flocks.

The RSPCA will review the requirement for the provision of slatted areas for pullets, in light of any further information, for future inclusion within the standards.

Management (supplementary standards for pullets)

M(P) 1.0 * All records, checklists, health plans, contingency plans, farm pest control plans, depopulation action plans, written standard operating and emergency procedures, policies and publications that the *RSPCA* welfare standards for laying hens and pullets require the producer to keep and maintain, must be made available to the Freedom Food Assessor and RSPCA Farm Livestock Officer.

Training

- M(P) 1.1 Stock-keepers must:
 - a) undergo a period of training which includes relevant, practical experience
 - b) be competent in the rearing and handling of chicks and pullets.
- **M(P) 1.2** Trainee stock-keepers must be able to demonstrate that they have gained the necessary skills and competence to ensure that a high level of husbandry is maintained.

Records

M(P) 2.1 Stock-keepers must monitor and record bird liveweights, culls and mortality.



This should be done at a frequency and in a manner which will cause minimum distress to the birds. Detailed records of bird performance, any treatment and mortality should be completed as part of the VHP (see H 1.1).

Chick sourcing

M(P) 3.1 Chicks must be sourced from a Freedom Food accredited hatchery.

Health (supplementary standards for pullets)

Veterinary Health Plan

- H(P) 1.1 As part of the VHP (see H 1.1) a vaccination programme must be developed which takes into account:
 - a) disease challenges in laying hens
 - b) any disease challenges which have been identified at the laying unit.
- H(P) 1.2 Ailing pullets, and any pullet suffering from injury such as open wounds or fractures, must be:
 - a) segregated
 - b) treated without delay
 - c) if necessary, be humanely killed.
 - (i) The practice of beak trimming is contrary to the principles of the RSPCA welfare standards. The RSPCA is currently reviewing this situation and intends to move away from the practice of beak trimming within the next 5 years. There is now sufficient scientific and practical experience which demonstrates that where the management and husbandry practices are optimal, including suitable environmental enrichment devices, the risk of feather pecking can be minimised.

Producers should adopt appropriate management techniques with a view to removing the need to beak trim. In addition, consideration should be given to the suitability of breed types, as the tendency to feather peck can be less with certain strains of bird. The RSPCA farm animals department is currently in discussion with producers and will require all producers to make progress in this area. This situation will be reviewed and evaluated over the next 2 years in light of further experience.

- H(P) 1.3 Where birds are beak trimmed, this procedure must be carried out between 5 and 10 days of age. (See Appendix 2 – Procedures for handling of chicks).
- H(P) 1.4 Beak trimming must be carried out only on the direction of the attending veterinary surgeon and by trained and competent operators using appropriate equipment.
- **H(P) 1.4.1** * Pullet rearers and those responsible for carrying out the beak trimming operation must:
 - a) have access to a copy of the 'BEIC Code of Best Practice for beak trimming' (March 2004)
 - b) be familiar with its content
 - c) understand and apply its content.

The RSPCA is aware that alternative methods of beak trimming, such as infrared, have been developed which may offer potential welfare improvements, for example by reducing the risk of pain caused during the procedure, as well as improving the accuracy with which the procedure is performed. The Society will review the findings of the latest research on this technique as soon as this becomes available to ensure that only the most appropriate method is used, and to ensure that the bird's welfare is maximised throughout life.

Health

Supplementary standards for pullets

H(P) 1.5 Operators of the 'Lyon' beak trimming equipment must ensure that only the minimum amount of beak is removed.



This can be achieved by reducing the pressure applied to the back of the head as the chicks beak is placed into the equipment, using the smallest hole.

- **H(P) 1.6** Care must be taken to ensure that the beak is cauterised to avoid the risk of haemorrhage.
- **H(P) 1.7** The named supervisor must ensure that chicks' beaks are trimmed as consistently as possible.
- **H(P) 1.7.1** Throughout the beak trimming operation, the named supervisor must ensure that hourly checks are carried out on the chicks that have been trimmed.
- **H(P) 1.8** Any chick found to have been beak trimmed incorrectly must be examined carefully and, if necessary, humanely culled.

Transport (supplementary standards for pullets)

The following standards are additional to those for transport specified in the RSPCA welfare standards for laying hens. They cover all transporters including fixed compartment systems, modular systems and loose crate systems They must be read in conjunction with this document.

T(P) 1.0 The producer must be able to demonstrate to the Freedom Food Assessor and the RSPCA Farm Livestock Officer that there is effective communication between the pullet rearer and egg producer to minimise the time between loading of the birds and unloading at the laying hen unit.



(i) It is the pullet rearer's responsibility to ensure that the birds are loaded and transported with care and to ensure that the time of loading corresponds to the estimated time of arrival indicated to the egg producer. It is the egg producer's responsibility to ensure there are sufficient number of personnel present when unloading the birds.

- T(P) 1.1 The transport vehicles must be parked as near as possible to the house being depopulated or populated.
- T(P) 1.2 Where birds must be carried to the transport vehicle, they must not be passed between catchers.



It is permissible for the birds to be passed to the person responsible for loading the birds into the transport compartments.

- **T(P) 1.3** Birds must be:
 - a) handled with care at all times
 - b) placed carefully into the transport compartments
 - c) not dropped or thrown.
- **T(P) 1.4** Facilities must be provided for catchers which ensure that they are able to load birds onto the vehicle from a position which gives them easy access to all transport compartments.
- T(P) 1.5 Catchers must not lift birds above head height.
- **T(P) 1.6** Each catcher must be aware of the legal requirements with regard to catching.
- **T(P) 1.7** All transport systems must:
 - a) permit adequate ventilation and protect birds from adverse climatic conditions
 - b) be thoroughly cleansed before carrying any birds to a new site
 - c) be well maintained
 - d) have no sharp edges or protrusions on the crates or vehicle which could cause injury to the birds.
- **T(P) 1.8** The cleanliness of the vehicle must be checked by the appointed supervisor before any birds are loaded onto the vehicle.
- T(P) 1.9 The person appointed to supervise the depopulation and loading must verify that T(P) 1.1 to T(P) 1.8 are met before depopulation commences.

- T(P) 1.10 On unloading, if any birds are trapped or injured a report must be made to the person in charge of supervising the catching and unloading, in order to identify and rectify further problems.
- T(P) 1.11 The timing of delivery of pullets must be such that birds are not held stationary on vehicles for long periods of time (and within the maximum journey time specified in the RSPCA welfare standards for laying hens).
- T(P) 1.12 Levels of transport mortality above 0.1% in any 3-month period must be the subject of investigation and reported to the Freedom Food Assessor and RSPCA Farm Livestock Officer.
- **T(P) 1.12.1** In relation to T(P) 1.12, where records have identified higher levels of mortality, prompt action must be taken to prevent further deaths, injury of suffering occurring.
- T(P) 1.13 All vehicles must carry a fire extinguisher.



(i) Where possible vehicles should be fitted with controlled ventilation.

- T(P) 1.14 Vehicles must carry a mobile telephone or other means of communication in case of an emergency where assistance is required.
- **T(P) 1.15 *** All birds must be transported by a Freedom Food approved haulier.

Modular systems

- T(P) 2.1 Modular transport systems must have completely open tops with a height of not less than 220mm.
- **T(P) 2.2** The top drawer of the module must be loaded first.
- **T(P) 2.3** The stocking density in each tray must not exceed 56kg/m². The stocking density must be reduced by 20% when birds are being transported during periods of hot weather, i.e. in excess of 21°C.
- **T(P) 2.4** As each drawer is filled, it must be closed carefully to ensure that the birds' heads, wings and legs are not trapped in any way.

Appendix 1

Transport - standard operating and emergency procedure

Items to be included

- 1. Out of hours telephone numbers and emergency procedure.
- 2. Accident procedure.
- 3. Certificate of motor insurance.
- 4. Tyres punctures codes 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 laying hens and pullets.
- 8. Procedure for loading/unloading of poultry transporters.
- 9. Procedure for delivery of poultry to customer sites.
- 10. FTA 'The Driver's Handbook' (2006) including tachograph regulations
- 11. Fire extinguishers.
- 12. Operating procedures for roadside checks.
- 13. Defra leaflet 'Guide to Alleviation of Thermal Stress in Poultry in Lairage' (Defra (formerly MAFF) PB 3724, 1998).
- 14. Daily journey sheet.

Appendix 2

Procedures for handling of chicks during beak trimming

- 1. A nominated person must be in charge of the whole operation, and must sign a record which states that he/she has completed and/or is satisfied with:
 - a) initial checks of the standard of beak trimming (based on observations of at least 100 chicks per person)
 - b) set up of beak trimming equipment, including a maximum temperature setting adjusted to individuals according to, for example, pressure applied, experience, etc.
 - techniques employed by each beak trimmer during the procedure each beak trimmer will be named for identification purposes
 - d) performance of newcomers, who must be supervised carefully and additional attention given to such personnel until the nominated person is satisfied that the beak trimmer is competent, all to be stated on the record sheet
 - e) on-going hourly checks throughout the beak trimming of chicks
 - f) holding facilities which segregate chicks for each beak trimmer and which retains chicks for approximately 1 hour for inspection purposes, before these are returned to the main flock.
- 2. There must be a specific inspection procedure of the pullets in the weeks following beak trimming, carried out by the farm manager at the pullet rearing farm. Daily records must be completed and include a signed affirmation which states that this named person is satisfied with the quality of bird and condition of the beaks, as described in the RSPCA welfare standards.

Appendix 3

Depopulation Action Plan (DAP)

The following pages provide an example of a DAP template (see Transport - Depopulation section). The DAP template should be further developed to meet any specific requirements relating to a particular unit.

Responsibilities during depopulation:

• Producer/farm manager (or named supervisor)

Ultimately responsible for the welfare of the birds, until they are loaded into the transport modules/crates.

Catching team leader

Responsible for supervising the catching process, making sure all catching team members are aware of their duties and are competent to carry them out.

• Senior members of the catching team

Experienced senior members of the catching team, appointed by the catching team leader, to help supervise the other members of the catching team.

Haulier (driver)

Responsible for making sure all birds are fit to travel and for the welfare of birds from the time they are placed into the transport modules/crates until they are unloaded from the modules/crates at the abattoir.

Depopulation Action Plan (DAP) - prior to depopulation

To be completed by the producer/farm manager or appointed representative

Action	Carried out? (include date)
Complete up to one month prior to depopulation	
Liaise with the processor as to the depopulation date. Report:	
a) the production system	
b) number of birds	
c) breed	
d) approximate weight	
e) feather condition	
f) health status of the flock	
g) any access problems	
Ensure the roadways are in good condition for access to the unit	
Ensure the ground where the loading of birds will take place is in good condition	
Liaise with the haulier and catching team leader regarding the arrival time	
Liaise with the catching team leader regarding catching frames, to establish whether or not the catching team will bring their own	
(Modules can be used for making a pen for the birds and are easily moved in the event that smothering begins)	
Prepare the catching plan (a copy to be kept with the DAP)	
Include: a) the catching route - minimise the number of steps up, down or over required to reach the vehicle - minimise any problems of uneven or otherwise hazardous flooring - consider the width of the doorway's in order to allow easy and safe access when carrying birds - how to protect birds from adverse weather conditions once outside of the building, both during loading and whilst on the vehicle	
b) the handling plan - double leg catching - no more than three birds to be carried per hand - consider matching numbers in hands to multiples of the drawer stocking density - use of catching frames - consider penning into small groups to help minimise crowding and smothering - humane killing of unfit birds immediately, rather than being left until the end of the depopulation - how loose birds will be dealt with	
Complete the day before depopulation	
Ensure all access roads and the areas around the poultry unit doors are clean, tidy and clear of clutter	

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Depopulation Action Plan (DAP) - on the day of depopulation

To be completed by the producer/farm manager or appointed representative

Action	Carried out? (include date)
Prior to arrival of the catching team and haulier	
Ensure all non-permanent fixtures and fittings with the potential to hinder the catching process have been removed from:	
a) the catching area	
b) the route used for carrying birds out to the loading area	
This may include feeders, drinkers, perches and any other farm equipment, particularly where sharp edges and protrusions could cause injury to the birds or catching team.	
Close nest boxes	
Block off any corners etc where birds could hide	
Upon arrival of the catching team/haulier	
Give the written catching plan to the catching team leader	
Instruct the catching team leader as to the lighting available and where the controls are located	
Show the catching team leader where all necessary facilities are located	
In order to safeguard the welfare of the birds during depopulation it is important to create and keep a relaxed atmosphere in order to ensure that the operation proceeds smoothly. Providing facilities for the catching team, such as toilets, tea and coffee will help to achieve this.	

To be completed by the catching team leader

Procedure for dealing with loose birds:	

Depopulation Action Plan (DAP) - key personnel

Name of producer/farm manager or appointe	d supervisor:
Name (block capitals)	Signature
Name of catching team leader:	
Name (block capitals)	Signature
Name of senior (accredited) team member(s)	:
Name (block capitals)	Signature
Name (block capitals)	Signature
Name of catching team member responsible birds:	for the humane destruction of casualty
Name (block capitals)	Signature

Depopulation Action Plan (DAP) - post depopulation

To be completed by the producer/farm manager or appointed representative

Number of unfit birds killed during catching	
Number of DOAs and injuries upon arrival at the abattoir	
(to be received within 48 hours of the depopulation)	
Causes of mortality:	
Action taken to prevent further deaths and injury:	

Appendix 3 - depopulation action plan (DAP)

Re	Review of depopulation (include both positive and negative feedback)			
a)	Producer/farm manager's or appointed representative's comments:			
Sig	gned: Date			
b)	Catching team leaders comments:			
Sig	gned: Date			
c)	Detail's of any action required and by whom:			

To be completed by the producer/farm manager or appointed representative and the catching team leader

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