

Layer Hens

Animal Welfare (Layer Hens)

Code of Welfare 2012

A code of welfare issued under the Animal Welfare Act 1999

6 December 2012

National Animal Welfare Advisory Committee

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Preface

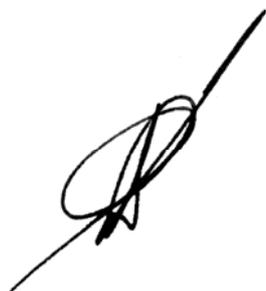
The Animal Welfare Act 1999 came into force on 1 January 2000. It establishes the fundamental obligations relating to the care of animals. These obligations are written in general terms. The detail is found in codes of welfare. Codes set out minimum standards and recommendations relating to all aspects of the care of animals. They are developed following an extensive process of public consultation and are reviewed every 10 years, or sooner if necessary.

I recommend that all those who care for animals become familiar with the relevant codes. This is important because failure to meet a minimum standard in a code could lead to legal action being taken.

I issue codes on the recommendation of the National Animal Welfare Advisory Committee. The members of this committee collectively possess knowledge and experience in veterinary science; agricultural science; animal science; the commercial use of animals; the care, breeding and management of companion animals; ethical standards and conduct in respect of animals; animal welfare advocacy; the public interest in respect of animals; and environmental and conservation management.

The Animal Welfare (Layer Hens) Code of Welfare 2012 is issued by me, by a notice published in the Gazette on 6 December 2012, under section 75 of the Animal Welfare Act 1999. This code comes into force on 7 December 2012 and revokes the Animal Welfare (Layer Hens) Code of Welfare 2005.

This code is deemed to be a regulation for the purposes of the Regulations (Disallowance) Act 1989 and is subject to the scrutiny of Parliament's Regulations Review Committee.

A handwritten signature in black ink, appearing to be 'David Carter', written in a cursive style with a long, sweeping line extending upwards and to the right.

Hon David Carter

Minister for Primary Industries

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Quick reference guide to Minimum Standards

All minimum standards in this code of welfare are relevant to the housing and management of layer hens. However, the following key is provided for ease of reference. Owners and persons in charge of layer hens must be familiar with the parts of this code applicable to their own circumstances.

Cages

A cage is an enclosure constructed of metal or plastic and holding 3-7 hens. Cages do not have perches, scratching areas or nest areas. They are inside a building and can be multi-tiered. They are also known as current or conventional cages. All minimum standards except 10 and 11 apply to layer hens kept in cages.

NAWAC has determined that cages do not meet the requirements of the Animal Welfare Act 1999. This code provides an exemption under section 73(3) of the Act that allows for cages to continue to be used as they are phased out entirely. The full details of the transition arrangements can be found in minimum standard 12.

Colony cages

A colony cage is a modified and enlarged enclosure with more space than cages and with perching, nesting and scratching areas. This system may be referred to as a furnished or enriched cage. All minimum standards except 10 and 11 apply to layer hens kept in colony cages:

Barns

A barn is a building housing layer hens as either a single or multiple groups, with or without access to an outdoor area, but with areas for nesting, perching and scratching. Barns with access to the outdoors are usually referred to as free range systems and the building can be either fixed or moveable. If a barn has multiple internal levels it is often referred to as an aviary and/or multi-tier system. All minimum standards except 11 apply to layer hens kept in barns, and minimum standard 11 applies to layer hens with outdoor access.

1. Introduction

1.1 What is the purpose of this code of welfare?

This code sets the minimum standards for the care and management of layer hens under all forms of management used in New Zealand. The purpose of this code is to provide guidance to the owners of layer hens and to persons who are in charge of them about the standards they must achieve in order to meet their obligations under the Animal Welfare Act 1999.

Good welfare for layer hens relies on a combination of good practice in stockmanship, design, maintenance and management of facilities, and an appropriate choice of hen genetics to suit the requirements of specific housing and management systems. Hens have physical, health and behavioural needs that must be met, regardless of the production system employed, if their welfare is to be maintained. This code provides for the gradual phase-out of current systems that do not allow these needs to be met.

This code includes information and example indicators for each minimum standard. The list of indicators is not exhaustive but is given to provide guidance on ways in which a minimum standard may be met.

This code also includes recommendations for best practice to encourage standards of care over and above the minimum.

1.2 Who does this code apply to?

This code is intended for all persons responsible for the welfare of layer hens. Under the Act the “owner” of an animal and every “person in charge” of an animal is responsible for meeting the legal obligations for the welfare of animals under their care. In practice, the identification of the person in charge will depend on the minimum standard in question.

The owner of the hens may place them in the care of others for purposes such as feeding and management, rearing, transport and slaughter. However, this does not absolve owners of their responsibility to ensure that these tasks are carried out in accordance with this code.

Some minimum standards are general and describe welfare outcomes for hens and others are more prescriptive and specify how these outcomes should be achieved. The more prescriptive standards are designed to remove uncertainty and ambiguity for the owner in identifying good welfare practice. It is the responsibility of the owner to take account of both outcomes and prescribed actions in the minimum standards and act accordingly.

1.3 What animals does this code apply to?

This code applies to all layer hens (as defined in Appendix I: Interpretation and Definitions) regardless of the management system under which they are kept, from the time chicks are in the last half of development before they hatch (which has relevance to the sale of embryonated eggs), through to the catching and transport of hens at the end of the laying cycle. It also applies to roosters, and hens kept where eggs are not sold. This code does not apply to layer hen breeder birds.

1.4 What happens if I do not follow the minimum standards in this code?

Failure to meet a minimum standard in this code may be used as evidence to support a prosecution for an offence under the Animal Welfare Act. A person who is charged with an offence against the

Animal Welfare Act can defend him or herself by showing that he or she has equalled or exceeded the minimum standards in this code.

Example indicators provided with the minimum standards do not have a legal effect and when determining whether a minimum standard has or has not been met, all relevant factors are taken into account, including the current state of scientific knowledge, technology and good practice, as well as the environment and individual circumstances of the animals concerned.

The recommendations for best practice in this code have no legal basis. They are included to encourage higher standards of animal welfare.

1.5 How does this code relate to other codes?

Other codes of welfare may also be relevant to layer hen welfare and should be consulted where appropriate (see Appendix III, “Codes of Welfare”, to this code and the Ministry for Primary Industries website at: www.mpi.govt.nz).

2. Stockmanship

Introduction

The importance of good stockmanship cannot be over-emphasised. The care of layer hens, at all stages of production, requires experience and high standards of performance.

Those responsible for the care of layer hens must be competent, well trained and work at least to the minimum standards required by this Code of Welfare. Personnel should be appropriately trained and instructed in the care and maintenance of layer hens and how their actions may affect the hens' welfare.

Knowledge of the normal appearance and behaviour of layer hens is essential for their ongoing health and welfare. It is important that those in charge of layer hens are able to recognise early signs of distress or disease so that prompt action is taken or advice sought. It is common industry practice that there are separate rearing and production phases with personnel who have specific knowledge relating to each phase.

Those in charge of layer hen operations must ensure that their personnel, including contract or temporary staff, have either the relevant knowledge and training, or appropriate supervision by trained and competent people, to ensure that the health and welfare needs of the hens in their care are met.

Minimum Standard No. 1 – Stockmanship

- (a) Layer hens must be cared for by personnel who possess the appropriate ability, knowledge and professional competence to maintain their health and welfare in accordance with the minimum standards listed in this code.**
- (b) Staff must be suitably trained to handle an emergency e.g. fire evacuation.**

Example indicators for Minimum Standard No. 1 – Stockmanship

- Layer hens are maintained in accordance with requirements of this code
- Operational procedures are documented and implemented
- Documentary evidence of staff training and/or competence is maintained
- Personnel have an understanding of the code of welfare and their obligations
- There is evidence of staff being trained and practised in emergency management e.g. fire evacuation

Recommended Best Practice

- Persons involved in the farming of hens should receive training from accredited training providers.

General Information

The appropriate number of personnel to care for layer hens depends on a number of factors, including the number of hens, the design of the system, the age of the hens, and the facilities and equipment available within the system.

Quality assurance programmes, e.g. Risk Management Programmes (as per the Animal Products Act), emphasise the importance of training of personnel. The Agriculture Industry Training Organisation lists a number of training qualifications for those involved in the poultry industry <http://www.nzqa.govt.nz/framework/>. Additional information can be found on the industry website www.eggfarmers.org.nz and EMQUAL list a number of workplace fire and emergency management qualifications for those seeking formal qualifications in emergency response <http://www.emqual.org.nz>.

3. Food and Water

Introduction

Food and water are essential for maintaining good layer hen welfare. Nutrient composition, feed availability, quantity of feed, absence of contaminants in the feed and water, and access to the feeders and drinkers are all important features of any management system. Requirements for the quality and composition for the feed supplied to layer hens are mandated under the Agricultural Compounds and Veterinary Medicines Act 1997.

Minimum Standard No. 2 – Food and Water

- (a) All layer hens must receive adequate quantities of food and nutrients each day to enable them to:**
 - (i) maintain good health;**
 - (ii) meet physiological demands; and**
 - (iii) avoid metabolic and nutritional disorders.**
- (b) All layer hens must have continuous access to water that is sufficient for their needs, palatable and not harmful to their health, including up until the time of depopulation.**
- (c) The interval of time from hatching to first feed and drink must be as short as possible and no more than 48 hours.**
- (d) Food and water must be provided in ways that prevent undue competition and injury.**
- (e) Hens that cannot access food and water adequately must be removed during daily inspections, and raised separately or humanely destroyed immediately.**
- (f) Food must not be withheld for more than 12 hours before depopulation.**

Example indicators for Minimum Standard No. 2 – Food and Water

- Feed quality and composition meet the standards of the New Zealand Feed Manufacturers Association *Manufacture of Animal Feeds in New Zealand Code of Practice*
- Feed particle size is appropriate for the age and size of the hens
- Flock growth rates are monitored regularly, for example by representative samples of hens in each shed and age group being weighed on a regular basis
- Corrective action is taken if the average sample weight is more than 2% less than the previous weighing (information on weights for breeds of hens can be obtained from breeding companies or avian veterinary services)
- Linear feeders provide at least 10cm of space per hen or circular feeders provide at least 4cm of space per hen
- Continuous drinking troughs provide at least 2.5cm of space per hen or circular drinking

troughs provide at least 1 cm of space per hen

- Hens in cages have access to at least two nipples or cups. In other housing systems a minimum of 1 bell per 100 hens or 1 nipple or cup per 10 hens is provided
- Water derived from sources not subject to local authority control is shown to be potable and tested for microbiological contamination or as required under a Risk Management Programme
- Daily feed and water intakes align with breeder recommendations for age of stock
- Feed nutrients are checked promptly if hens display negative behaviours (e.g. injurious feather pecking, cannibalism)
- Operation of feeding and watering equipment is monitored daily and corrective action is taken promptly and documented
- A reserve supply of feed and water is maintained on site, sufficient for the maximum hen capacity for at least 72 hours in case of an emergency

Recommended Best Practice

- (a) Uncontrolled permanent water sources (e.g. open stock troughs, creeks) used as major drinking water sources should be monitored for microbiological quality and palatability at a frequency dependent on test results.
- (b) Water within drinker lines should be regularly flushed and monitored for microbiological quality.
- (c) Water should be provided by nipple drinkers.
- (d) Provision of insoluble grit is beneficial for the hens' digestive system and this should be provided at levels appropriate to the hens' age from 3 weeks old. Suitable advice on appropriate levels can be obtained from breeder recommendations.
- (e) Hens should have food withheld for 3 – 6 hours prior to loading for transport. (Note: Minimum Standard 2(b) requires water to be provided at all times.)

4. Shelter and Shade

Introduction

Provision of shade and shelter is important for protecting hens from environmental extremes and may be provided by the main building that is used to house hens, and for hens with access outdoors, by additional, purpose-built shelters, including a winter garden or covered veranda. Shade and shelter outdoors, such as trees, shrubs or artificial structures, are important in encouraging hens to fully utilise the outside area and spacing of shelter less than 10 m apart will also encourage use of the outside area.

Minimum Standard No. 3 – Shelter and Shade

- (a) All hens must have access to shelter from adverse weather that is likely to cause heat or cold stress, and to minimise the risk of predation.
- (b) If openings to the outdoor area or winter garden are provided, they must be designed to minimise the adverse effects of the weather on the hens and on the quality of litter.

Example indicators for Minimum Standard No. 3 – Shelter and Shade

- Hens do not show signs of heat stress (panting, wings outstretched) or cold stress (huddling)
- Protection from predators is provided
- Overhead shade or shelter is provided on the range at all times throughout the year in a manner that encourages full use of the range
- Windbreaks are evident in exposed areas on the range
- The openings to the outside are sheltered from the weather and the litter around the openings is in good condition

General Information

Shade and shelter provision for hens is also an integral part of range management covered in Minimum Standard 11.

4.1 Housing and Equipment Design, Construction and Maintenance

Introduction

Provision of appropriate housing, including the indoor area of systems with outdoor access and other facilities, is essential for the health and welfare of layer hens.

Minimum Standard No. 4 – Housing and Equipment Design, Construction and Maintenance

- (a) Housing systems and equipment, including shelters used outside and mechanical equipment, must be designed, constructed and maintained to avoid injury, disease or harm to layer hens.
- (b) Housing systems must be sited to facilitate drainage of storm water away from buildings and to minimise risks posed by natural and environmental hazards.
- (c) Precautions must be taken to secure the site and buildings against unauthorised entry of people, to protect the health and welfare of the hens.
- (d) Measures must be taken to control pests in and around hen housing and shelters.
- (e) Controlled environment housing must have alarms that warn of power failure and/or significant temperature variance.
- (f) Housing systems, with the exception of cages, must provide facilities for roosting (e.g. perches), a surface for pecking and scratching, and a secluded nesting area.
- (g) All housing systems must be designed to allow hens to maintain a natural posture throughout.
- (h) The design, size and maintenance of the openings and doors of housing systems must be such that hens can be placed in or removed from them without injury or distress.
- (i) The following specific design requirements apply, according to the housing system:

Cages:

- (i) Multi-deck cages must be arranged so that the layer hens in the lower tiers are protected from excreta from above.
- (ii) Manure must be removed from under a cage before it accumulates sufficiently to touch the cage floor.
- (iii) All cages for layer hens must have:
 - A floor slope not exceeding 8 degrees which supports the forward facing claws.
 - A cage height of at least 40cm over 65% of the cage floor area and not less than 35cm at any point.
 - Access for each layer hen to at least two drinking points.
 - Suitable claw shortening devices fitted, if any modifications are made to the cages.

Colony Cages:

- (i) A secluded nest area must be provided and the floor of the nest area must be covered with a suitable substrate that prevents direct contact of hens with the wire mesh floor.
- (ii) Floor slope must not exceed 8 degrees which supports the forward facing claws.
- (iii) A colony cage height must be at least 45 cm other than in the nest area.
- (iv) Perches must be provided and designed to allow the hen to grip without risk of trapping its claws and must provide at least 15cm of space per hen to allow all birds to perch at the same time.
- (v) A scratching area must be provided.
- (vi) Suitable claw shortening devices must be fitted.

Barns:

- (i) **Secluded nest areas must be provided and must be of adequate size and number to meet the laying needs of all hens, and ensure hens can lay without undue competition.**
- (ii) **The floor of the nest area must be covered with a suitable substrate that prevents direct contact of hens with a wire mesh floor.**
- (iii) **Perching areas must be provided and designed to allow the hen to grip without risk of trapping its claws and must allow all birds to perch at the same time.**
- (iv) **Perches must be placed to prevent the fouling of hens or their food on lower levels and of a height that allows hens to use them easily and without risk of injury.**
- (v) **Any slatted, wire or perforated floors must be constructed to support the forward facing claws.**
- (vi) **In multi-tier systems the distance between the levels must be at least 45cm and the levels must be arranged so that the layer hens in the lower tiers are protected from excreta from above.**
- (vii) **All hens must have access to good quality friable litter at all times to allow them to scratch and forage.**
- (viii) **If openings to the outdoor area or winter garden are provided, they must be at least 35cm high and 40cm wide, and evenly distributed along the building, to allow hens free access without risk of smothering or injury.**
- (ix) **If openings to the outdoor area or winter garden are provided, they must be designed to minimise the adverse effects of the weather on the hens and on the quality of the litter.**

Example indicators for Minimum Standard No. 4 – Housing and Equipment Design and Maintenance

- All birds can be inspected with ease (i.e. there is good access to all birds and sufficient lighting)
- Provisions are in place to control personnel accessing the premises
- Pest control is implemented and documented
- Environmental parameters of the housing system are in accordance with the minimum standards for Lighting, Ventilation, and Temperature
- Operation of equipment is monitored daily and corrective action is taken promptly and documented
- There is documented evidence of routine cleaning of the facilities and equipment so that transmissible diseases / parasites are avoided or managed
- There is documented evidence that alarms have been checked and tested at least monthly and problems immediately rectified
- There is documented evidence of preventative maintenance in place for facilities and equipment
- Fail-safe flaps are fitted to fans, outlets and inlets to enable natural ventilation

- Wire nest floors are covered by a suitable substrate e.g. plastic matting, artificial turf or straw
- Perches are of a design and construction (including height and spacing) that minimises injury (such as keel damage) or ill-health (such as foot problems) or vent pecking
- 95% of all eggs are laid in the nesting areas
- Scratch pad area is sufficient to allow all birds to exhibit foraging behaviour
- Perches provide at least 15cm of space per hen
- If a raised slatted floor is used for perching, the slatted area is at least 1/3 of the internal living space
- In barns, at least 1 nest is provided per 7 hens or, for group nests, at least 1m² of nesting space is provided per 120 hens
- In barns, at least 250cm² of litter/hen is provided and the litter occupies at least one-third of the ground area to encourage pecking, scratching and dust bathing behaviours
- Hens with outdoor access make regular use of the range
- Any failure or fault in housing or equipment (e.g. damaged flooring) is documented and immediately rectified
- Emergency management plan outlines actions to take in event of power failure
- Cage units are secured to prevent toppling
- Droppings are not falling on hens below

Recommended Best Practice

- (a) Each opening to the range and/or winter garden should be a minimum of 1 m wide and 45 cm high.
- (b) Hens should have enough vertical and horizontal space available to stretch to their full height and flap their wings.
- (c) Perches should provide at least 17cm of space per hen.
- (d) Perches should be fitted at greater than bird head height (i.e. 40-50 cm) to reduce the risk of vent pecking.
- (e) Swinging or aerial perches should not be used as they are associated with a very high incidence of keel fractures.
- (f) In barns with access to the outdoors a winter garden should be provided where hens can scratch and forage irrespective of weather conditions.
- (g) All hens should have access to dustbathing material.
- (h) Hens should be provided with nesting areas where they can lay eggs in seclusion.

General Information

Perforated or slatted floor areas can be considered perching space if they are raised and they allow the hen to grip without risk of trapping its claws. It is not clear at what height perches should be offered to maximise welfare – but for night time, roosting hens will prefer the highest perch if perches

of different heights are offered. Accessibility of high perches has to be ensured, by incorporating lower level perches from which the hens can reach the higher levels. In non-cage systems, good accessibility can be achieved by minimising the angles between perches of different heights to less than 45 degrees and by limiting the distance between horizontal perches to 1m.

The Animal Welfare (Glueboard Traps) Order 2009 places restrictions on the sale and use of rodent glueboard traps and they will be prohibited from 1 January 2015. For more information, see <http://www.legislation.govt.nz>.

4.2 Contingency Planning

Introduction

The provision and efficient operation of a suitable environment in sheds is often reliant on technology. Adverse events caused by climatic events or natural disasters which disrupt the shed or technology can affect the welfare of fit and healthy hens, but have a greater impact on those more vulnerable because of their age (e.g. young chicks). It is every person's and organisation's responsibility to include planning for the welfare of their animals in their contingency plans.

Minimum Standard No. 5 – Contingency Planning

- (a) Persons in charge of layer hens must have contingency plans to address any event which could result in a potentially significant welfare impact on the hens.**
- (b) Alternative means of maintaining ongoing environmental control and provision of food and water must be available in case of emergencies, including power or computer failure or mechanical breakdown.**
- (c) Appropriate fire prevention measures and a documented emergency plan must be in place.**

Example indicators for Minimum Standard No. 5 – Contingency Planning

- A written contingency plan, covering potential adverse events, such as those affecting food and water supply, environmental conditions, and housing is available for inspection, and staff are trained to implement it.
- Alternative arrangements are in place in case of equipment or supply failure to ensure hens receive their daily requirements of feed and water, and that temperature and air quality are maintained
- An alarm system indicates the event of any power or computer failure
- All alarm systems, fire fighting equipment and emergency power supply are tested regularly and test results documented

General information

Further information on preparing for emergencies and adverse events may be obtained by referring to the MPI website at <http://www.mpi.govt.nz/environment-natural-resources/funding-programmes/natural-disaster-recovery>.

5. Facility management

5.1 Stocking Densities

Introduction

Stocking density cannot be considered in isolation from other minimum standards as it is interrelated with food and water availability, environmental controls, housing system design, hen behaviour and active range management policies. The stocking density compatible with acceptable welfare of the hens is dependent on good stockmanship and management of all environmental factors so that hens do not have to compete for their food, water, perches, or access to an outdoor area.

Consideration of the outdoor stocking level needs to take into account factors such as soil type, drainage, flock size and frequency of flock rotation e.g. a heavy, poorly drained soil can carry fewer hens than land that is light and well drained.

Minimum Standard No. 6 – Stocking Densities

(a) Stocking densities or space per pullet (7–18 weeks of age):

- (i) must be a minimum of 370 cm² per pullet for those reared in cages or colony cages.**
- (ii) must not exceed 14 pullets per m² for those reared in barns.**

(b) Stocking densities or space per layer hen (19 weeks of age or older):

Cages

- (i) must be a minimum of 500 cm² per hen for cages built prior to 1 January 2005.**
- (ii) must be a minimum of 550 cm² per hen for cages built from 1 January 2005.**
- (iii) must be a minimum of 550 cm² per hen for all cages from 1 January 2014.**

Colony cages

- (i) must be a minimum of 750 cm² per hen or 13 hens per m².**

Barns

- (i) must not exceed 7 hens per m² for barns with no outdoor access.**
- (ii) must not exceed 9 hens per m² for within barns with outdoor access.**

(c) Stocking of the outdoor ranging area must not exceed 2,500 hens per hectare.

Example indicators for Minimum Standard No. 6 – Stocking Densities

- Distribution and behaviour of hens using all facilities is monitored and recorded on a regular basis
- Hens are not displaying symptoms of overcrowding, such as excessive pecking or distress calls
- The majority of hens with access outdoors are observed to use the outside range

Recommended Best Practice

- (a) Stocking of the outdoor ranging area should be less than 900 hens per hectare.

5.2 Lighting

Introduction

The management of light is an integral part of ensuring hen health and welfare, especially in preventing or reducing feather pecking and cannibalism. It can also be used to encourage certain hen behaviours e.g. higher light levels on the litter area can encourage hens to dustbathe and lower levels over the roost areas can encourage hens to rest. Lower light at the nests encourages the hens to use the nests.

Minimum Standard No. 7 – Lighting

- (a) Chicks must be provided with light of at least 50 lux at chick level for at least the first seven days so they can easily locate food and water.
- (b) Chicks and pullets housed under artificial light must be exposed to short periods of darkness after placement, in order to train them to blackout conditions should lighting fail.
- (c) After the training period, where hens are housed under artificial light, lighting schedules must provide a minimum of eight hours of continuous darkness in each 24-hour period.
- (d) Lighting levels during the light phase must not be lower than 20 lux at hen level so that hens can see each other and their surroundings.
- (e) Light levels during daily inspections must be sufficient to stimulate activity of the hens and allow hens and equipment to be clearly visible.
- (f) Where hens are housed under artificial light, the light intensity must be raised and lowered gradually over a 15-minute period to give them sufficient time to roost and come off perches without causing injury.

Example indicators for Minimum Standard No. 7 – Lighting

- Light control systems are working and are well maintained
- Light levels during inspection are sufficient to ensure that all hens in all parts of the shed or barn are clearly visible, including at all levels in multi-tier systems
- Natural and artificial lighting is evenly distributed to facilitate the distribution of the hens over the floor area and avoid overcrowding
- Light levels during the light period are at least 20 lux at hen level
- There are no injuries caused by changes in the light intensity

Recommended Best Practice

- (a) Light intensity at hen level should be at least 50 lux.
- (b) Chicks and pullets should be exposed to the lighting regime they will experience during laying (e.g. brightness level or natural light).

General Information

At certain times of the year, hens that are exposed to natural light may experience day-lengths longer than the limit required by Minimum Standard 5(c) above (which applies to hens kept under artificial light), and this is acceptable.

5.3 Air Quality and Ventilation

Introduction

Ventilation provides fresh air and removes stale, contaminated air. It assists in the control of temperature, humidity, noxious gases (e.g. ammonia, methane, carbon dioxide, carbon monoxide), dust and other airborne particles and litter quality. The accumulation of water vapour, heat, noxious gases and dust particles may cause discomfort or distress to the hens and predispose them to the development of health problems.

Humidity is determined by both external ambient conditions and factors within the shed such as stocking density, liveweight of the hens, ventilation rate, indoor temperature, functioning of technical equipment and litter quality (where this is relevant). Roofs should be insulated to reduce condensation. In controlled environment housing, good insulation of the walls and floor in addition can assist with achieving good air quality and temperature control.

Ammonia problems are more likely to occur in early morning and during periods of high humidity such as in winter.

Dust is a potentially harmful air contaminant, particularly in combination with ammonia and other gases. It may directly damage the respiratory tracts of poultry and also act in the transmission of infectious agents.

Minimum Standard No. 8 – Ventilation

- (a) Ventilation of housing systems must be sufficient to prevent the build-up of heat, humidity, dust or noxious gases to levels that are harmful to hen health or that cause pain or distress to hens.**
- (b) Immediate remedial action must be taken if ammonia levels greater than 20 ppm are detected at hen level, or if hens exhibit signs of heat stress, respiratory distress or distress from humidity, dust or noxious gases.**

Example indicators for Minimum Standard No. 8 – Ventilation

- Hens do not display any signs of discomfort, distress or disease (e.g. panting and wing stretching if hot, huddling if cold, sneezing)
- Hens do not have any eye or nasal irritation indicative of ammonia level over 20 ppm or other air quality problems

Recommended Best Practice

- (a) Air quality parameters, such as ammonia levels, should be monitored and recorded on a weekly basis.

- (b) Immediate remedial action should be taken if ammonia levels are greater than 10 ppm at hen level by increasing ventilation and taking measures to reduce the source (e.g. adding dry litter or removing manure).

General Information

Ventilation has to be considered alongside other minimum standards such as temperature and stocking density, as they all interrelate. Stock persons need to be able to recognise bird behaviour changes and act accordingly to ensure good welfare and bird health is not compromised e.g. increase the ventilation rate if the birds are panting due to high temperatures and review nutrition and feeding times to reduce heat stress.

5.4 Temperature

Introduction

Temperature requirements for layer hens vary considerably from day-old to end of lay and must be managed in response to changing requirements.

Newly hatched chicks have limited ability to maintain adequate body temperatures and thus additional heat input is required to maintain the temperature of the brooding area at a minimum of 30°C. Thereafter the temperature can be progressively reduced to provide a comfort level appropriate to the age of the chick.

Signs of heat stress include panting and spreading of wings. Adult hens with shade, space and access to cold drinking water can survive short periods of heat stress but if possible should be cooled with direct fans.

Signs of cold stress include huddling and shivering. Chicks should be given supplementary heat and older birds protected from wet and draughts.

Temperature is affected by ventilation and low temperature and low ventilation rates tend to increase humidity which can lead to poor litter quality.

Minimum Standard No. 9 – Temperature

- (a) Temperatures inside housing systems must be maintained within a range compatible with good health and welfare of the hens.**
- (b) When hens show signs of being too cold or too hot remedial action must be taken immediately.**
- (c) The brooder area for newly placed chicks must be pre-heated and the temperature maintained at a level that promotes good chick health and welfare.**

Example indicators for Minimum Standard No. 9 – Temperature

- Temperature at the level of the hens is monitored and within the temperature range specified in the breeding company guidelines, as appropriate for the age and breed of the hens
- Corrective action is taken if signs of stress (sneezing, prolonged panting and wing extension due to heat or huddling due to cold) are observed during daily inspection

- Temperature and hen behaviour is monitored more frequently when ambient temperatures are extreme and corrective action is taken if required
- Chick behaviour and distribution within the brooding area is monitored and remedial action is taken as required

General Information

There is an interrelationship between temperature, humidity, ventilation rate, windspeed and stocking density. Stock persons have to be competent at reading bird behaviours and acting accordingly e.g. increasing ventilation rate if birds are panting due to heat stress.

Both hens and houses exchange heat with their surroundings and having houses insulated makes control of temperature and humidity levels much easier.

5.5 Litter Management in Barns

Introduction

Litter management is a key part of managing the welfare of hens in barns or the winter garden, so that problems such as dust, fungal proliferation, and conditions such as bumble foot or respiratory disease are minimised.

Key features of litter management are control of the quality, type and depth of the litter used, moisture (including the way water is provided), temperature, ventilation, feed type and quality and stocking density. The siting of openings and maintenance of drainage outside the barn are also important when hens have access outdoors.

Minimum Standard No. 10 – Litter Management in Barns

- (a) Litter material must be of good quality, friable and free from toxic contaminants.**
- (b) Litter condition must be managed to avoid levels of dustiness or dampness that could cause leg, respiratory, or other health problems such as the build-up of parasites or diseases.**

Example indicators for Minimum Standard No. 10 – Litter Management

- Most hens show scratching, foraging and dust bathing behaviour
- Plumage and feet of hens are in good condition and are monitored regularly
- Litter is inspected regularly for signs of caking or greasiness and remedial action taken
- Litter is obtained from reputable sources and visually inspected before use
- If wood shavings are used they are dry, from non-treated timber and free from toxic contamination
- Drinkers are managed to avoid leaks or spillage leading to wet litter

Recommended Best Practice

- (a) Litter should be maintained at a minimum depth of 10 cm and built up further over the first few months of use.
- (b) Litter should be used for one laying cycle only, including litter in winter gardens.

General Information

The optimum depth of litter depends on the choice of litter material. Litter needs to be especially carefully managed in winter when low temperatures lead to low ventilation rates, and consequently the higher humidity may result in the litter becoming wet. This is more likely if hens also have access outdoors. Stock persons should be aware of the factors that affect litter condition and the welfare problems associated with poor litter management.

5.6 Range Management

Introduction

Maintenance of good conditions on the range is essential for the health and welfare of hens.

Hens are fearful of wide open spaces and so providing and managing overhead shade and shelter on the range encourages its use and allows the hens to display a wider range of natural behaviours.

Fear of using the range may increase stress of hens inside the shed and can lead to negative behaviours such as injurious feather pecking. Research shows that providing a variety of shade and shelter is beneficial, particularly natural shelter from trees and shrubs positioned to encourage the hens to move away from the barn perimeter.

Minimum Standard No. 11 – Range Management

- (a) **The outdoor area must be managed actively to ensure that the ground conditions and vegetation are not harmful to the health and welfare of the hens.**
- (b) **The area immediately around the barn must be managed to prevent the ground becoming wet and muddy, to keep the hens' feet clean and minimise parasite build up in this area.**
- (c) **A range management plan must be in place that addresses pasture quality, vegetation, and control of parasites and diseases.**
- (d) **Access to the range must be available during daylight hours unless prevented by bad weather or on veterinary advice.**

Example indicators for Minimum Standard No. 11 – Range Management

- Hens with access outdoors are observed to use the outside range frequently
- There is minimal evidence of pugging, standing water and muddy, dusty or contaminated conditions
- The area immediately around the barn is managed to keep hens' feet clean
- The range is free of poisonous plants and contaminants
- A system of range rotation is in place that takes account of the type of soil, drainage and flock size

- Measures to prevent parasite build up on the range are in place
- Vegetation on the range is maintained in good condition and nutrient build up is managed
- Access to/from the outdoor area is not blocked

Recommended Best Practice

- (a) Range enhancement, e.g. trees, shrubs, covered shelters, covered sand baths, or straw bales, should be provided throughout the range area to encourage hens to use the whole of the range area and feel safe to move away from the barn openings and barn perimeter.
- (b) The range should be wide enough in front of the barn openings to help manage range quality.

General Information

The time taken for land to become contaminated with parasites or nitrogen build up depends upon the type of land, stocking density and weather patterns.

The ground around permanent houses can be protected with slatted platforms, covered verandas, areas of gravel or other suitable methods (e.g. bark or mesh), to avoid it becoming contaminated and muddy.

To prevent paddocks becoming muddy or burdened with worms, coccidia and other parasites to an extent that could be harmful to the birds' health, a number of management techniques should be used which may include the rotation of flocks in separately fenced paddocks.

6. Behaviour

Introduction

The ability for layer hens to be able to show normal behaviour in the farm environment is an important welfare consideration. Layer hens show much of the natural behaviour exhibited by their wild ancestors, the jungle fowl. While selective breeding has reduced their drive to perform some behaviours (e.g. sexual behaviour) they have retained a strong need to perform many of their ancestral behaviours including:

- Laying their eggs in a protected nesting area;
- Perching (or roosting);
- Scratching and foraging;
- Dustbathing; and
- Extending and flapping their wings, flying onto roosts, preening, and vigilance for predators.

Current housing systems may constrain these behaviours to some extent. Indoor systems are more constraining than outdoor systems and colony cages provide reduced opportunities for foraging and dustbathing behaviours to be expressed. There is also evidence that certain behaviours are more important to hens than others at different times. For example, as hens approach the time to lay their eggs they place a high value on a nest site, and rank nesting behaviour a higher priority than feeding.

Where the ability of hens to escape is constricted, fear and panic can lead to smothering.

Minimum Standard No. 12 – Behaviour

- Hens must have the opportunity to express a range of normal behaviours. These include, but are not limited to nesting, perching, scratching, ground pecking, and dustbathing.**
- Any cage installed prior to 31 December 1999 must be replaced with a housing system that meets the requirements of Minimum Standard 12(a) by 31 December 2018.**
- Any cage installed prior to 31 December 2001 must be replaced with a housing system that meets the requirements of Minimum Standard 12(a) by 31 December 2020.**
- All cages must be replaced with a housing system that meets the requirements of Minimum Standard 12(a) by 31 December 2022.**
- Any housing system installed from 7 December 2012 must meet the requirements of Minimum Standard 12(a).**

Note:

Section 73(3) of the Animal Welfare Act 1999 provides that the National Animal Welfare Advisory Committee (NAWAC) may, in exceptional circumstances, recommend minimum standards that do not fully meet the obligations to ensure that the physical, health and behavioural needs of the animal are met. In making this recommendation NAWAC must have regard to, among other things, the feasibility and practicality of effecting a transition from current practices and any adverse effects that

may result from such a transition, and the economic effects of any transition from current practices to new practices.

NAWAC considers that the use of layer hen cages providing less than 750 sq cm per hen and no perches, discrete nesting areas or scratching surfaces, does not fully meet the obligations of the Act. Minimum Standards 12 (b), (c), and (d) provide for a transition from these cages to alternative ways of housing and managing layer hens – i.e. colony cages and barns.

Example indicators for Minimum Standard No. 12 – Behaviour

- Layer hens are active and alert, calm, confident and inquisitive
- Layer hen behaviour is monitored and timely remedial action is taken when appropriate, including managing the effects of injurious pecking
- Layer hens show types and frequencies of activities that are normal for their age

Recommended Best Practice

- (a) Pullets reared for barn systems should be reared with access to litter and perches from 6-18 weeks of age, to aid familiarisation with the laying system.
- (b) Pullets reared for multi-tier barn systems should be reared with access to feed and water on multiple levels from 6-18 weeks of age, to aid familiarisation with the laying system.
- (c) Layer hens should be provided with litter for dustbathing.
- (d) Resources should be located in a way that minimises competition between birds and encourages them to perform a range of normal behaviours.
- (e) All hens should be provided with several resources to promote foraging behaviour.

General Information

The minimum standards and suggested indicators outlined elsewhere throughout this code are also intended to ensure that housing and management allows the behavioural needs of layer hens to be met, and provide advice on how these needs can be met.

Injurious pecking (damaging feather pecking, vent pecking and cannibalism) is often associated with poor foraging opportunities, overcrowding and dietary imbalance. The problem is more difficult to manage in large group-housed systems and it is particularly important that pullets are given access to litter and range before placement in the layer barn. In large flocks there may also be competition or avoidance of negative social interactions by some hens. For example some hens may be unwilling to leave a barn for the outdoors for fear of encountering unfamiliar or dominant individuals.

Consideration of group dynamics and the abundance and positioning of resources in the design and management of large flocks should be made in order to ensure that as many individuals as possible have sufficient space and access to resources to perform a full behavioural repertoire.

7. Handling and Husbandry Procedures

7.1 Handling and Catching

Introduction

Minimisation of undue stress and the avoidance of injury are key considerations whenever layer hens are being handled. Competent handling of layer hens is essential for their proper husbandry. Distress and risk of injury to both the hens and their handlers are decreased when good handling practices are followed. Reducing fear by keeping hens calm makes them easier to handle. Careful handling during the catching of end of lay hens, which may have reduced bone strength, is especially critical to minimise risk of injury to the hen.

Minimum Standard No. 13 – Handling and Catching

- (a) Layer hens must be handled in a manner that minimises pain and distress and does not cause injury.
- (b) Layer hens, except day-old chicks, must not be picked up or suspended by one leg, the wings or the neck.
- (c) The stress of handling, especially at depopulation, must be minimised by appropriate design of the facilities.
- (d) All members of catching teams must be trained in the handling of layer hens, and a nominated member of the catching team must be responsible for supervising, monitoring, and maintaining welfare standards throughout the catching process.
- (e) A handler must not carry more than four hens in each hand.
- (f) Hens that are injured before or during the catching procedure must be humanely destroyed immediately.

Example indicators for Minimum Standard No. 13 – Handling and Catching

- No injuries attributable to handling occur
- Where chicks are moved on conveyor belts, the maximum height between consecutive conveyor belts does not exceed 40 cm
- Any chicks that fall on the floor are picked up immediately
- There is evidence of training for catching teams
- Any injured or unfit hens identified during the catching process are immediately and humanely destroyed
- A documented depopulation plan is completed by the farm manager
- Documented record of nominated supervisor is evident

Recommended Best Practice

- (a) Manual handling of hens should be kept to a minimum during stocking and depopulation.

General Information

Research has shown that manual handling of the hens during stocking and depopulation can compromise their physical, physiological and behavioural wellbeing. Therefore catching procedures that minimise handling will be beneficial for hen welfare.

Penning loose-housed hens into small groups will minimise the risk of crowding and smothering during catching.

7.2 Loading and Transport

Introduction

Transport systems must be designed and managed to ensure hens do not suffer unnecessary distress or discomfort. The transport and handling of hens must be kept to a minimum. Personnel involved in transport must be thoroughly trained and competent to carry out the tasks required of them. Contingency plans should be in place to deal with events such as vehicle breakdowns, adverse weather and transport delays to ensure that the thermal comfort of the different age groups are not compromised and transport stress is minimised.

The Animal Welfare (Transport within New Zealand) Code of Welfare applies to the transport of hens.

Minimum Standard No. 14 – Loading and Transport

- (g) All hens, including chicks, selected for transport must be examined by the person in charge prior to loading to ensure they are fit for transport and are able to withstand the journey without suffering unreasonable or unnecessary pain or distress.**
- (h) Persons responsible for the loading and transport of hens must be trained in careful handling procedures and understand the effects that poor transport conditions may have on the welfare of the hen.**
- (i) Hens must be placed in transport crates gently and in a manner that allows them to rapidly regain an upright position.**
- (j) Day old chicks must be held and transported in conditions of controlled temperature and airflow.**
- (k) Crates and containers must be constructed to ensure there are no hazards likely to cause injury to the hens.**
- (l) Conveyances and containers must have sufficient ventilation, even when stationary, to prevent harmful concentrations of gases or water vapour, and protect the hens from climatic conditions that would compromise their welfare.**
- (m) A contingency plan must be in place to address potential transport problems. Drivers of vehicles must be properly briefed on the contingency plan.**

Example indicators for Minimum Standard No. 14 – Loading and Transport

- There are documented records of hens injured or dead on arrival
- Hens are transported in an upright sitting position
- Hen transport crates are a minimum height of at least 22 cm
- Transport boxes/crates for day old chicks are a minimum height of 10 cm and have a

minimum floor space of 25 cm² per chick

- Ventilation and stocking rate during transport are controlled according to weather and hen condition (e.g. weight, health and feather status)
- The temperature during transport within a container is within 8 to 26°C for laying hens and 24 to 31°C for day old chicks and there is no evidence of panting or huddling and shivering in hens
- There is a documented training record for loading and transport crews
- A documented contingency plan is evident
- Chicks are delivered to the place where they will be reared as soon as possible after hatching
- Compliance with Animal Welfare (Transport within New Zealand) Code of Welfare is evident

General Information

Air carriers need to conform to the current International Air Transport Association (IATA) regulations when accepting and transporting hens. More information see: <http://www.iata.org/>.

8. Health

8.1 Disease and Injury Control

Introduction

Disease control is an integral part of hen welfare. Appropriate methods to prevent and control disease in layer hens include the use of vaccination and preventative medication programmes, and ensuring that good levels of hygiene are maintained and appropriate biosecurity and parasite control measures are employed.

All persons responsible for the care and management of poultry need to be competent in recognising the signs of ill-health. These signs may include a reduction in feed and water intake, a reduced rate of lay or of body weight gain, changes in the colour and/or consistency of faeces, changes in appearance (e.g. feather colour and cover), activity or behaviour, or an increase in mortality.

Minimum Standard No. 15 – Management of Health and Injury

- (a) Every hen must be inspected at least once a day and steps must be taken to address any abnormalities in the flock.**
- (b) Mortalities, including culls, must be monitored and recorded and dead hens removed from the flock daily.**
- (c) Sick or debilitated hens must be removed and treated or be killed by a humane method as soon as possible.**
- (d) Medication must be used only in accordance with registration conditions, manufacturers' instructions or professional advice.**
- (e) Hens must not be subject to induced moulting.**
- (f) If the early signs of a disease outbreak are recognised or suspected, or mortalities are greater than expected, appropriate intervention must be undertaken by a suitably qualified person.**
- (g) Premises and equipment must be thoroughly cleaned before restocking to prevent the carry over of disease-causing organisms to incoming hens.**

Example indicators for Minimum Standard No. 15 – Management of Health and Injury

- Dead hens and culls are removed daily and numbers recorded
- Disease outbreaks, health problems and remedial action are documented
- Abnormal conditions are noted, the cause identified and appropriate remedial action taken
- Sick or debilitated hens are removed to a hospital pen with easy access to feed and clean water and treated
- Regular assessments of the risk of infectious and parasitic diseases are made and appropriate control systems are in place to prevent them
- Persons responsible for the welfare of hens have an understanding of good farm biosecurity measures and adopt them. They also have some knowledge of the signs of notifiable diseases (e.g. avian influenza, Newcastle disease) and what actions they need to take if concerned

- Sufficient inspections are undertaken during which temperature, light levels, availability of feed, feeding systems, water and all parts of the ventilation system are checked, and where problems are encountered, appropriate remedial action is taken to protect the welfare of the hens

Recommended Best Practice

- (a) Layer hens should be under the care of a specialist poultry veterinarian and a flock health plan should be documented and in place.

8.2 Beak Tipping

Introduction

Feather pecking and cannibalism may occur in any layer hen system. The incidence, onset and severity of injurious pecking can be reduced by management strategies.

Beak tipping is commonly used to reduce the potential damage from any pecking. Infrared beam beak treatment (IRBT) is now the standard practice for the commercial hatcheries in New Zealand. It is carried out on day old chicks, and its precision and accuracy minimises welfare issues for the hens.

Minimum Standard No. 16 – Beak Tipping

- (a) Beak tipping must only be carried out by competent, trained operators.**
- (b) Beak tipping, when undertaken, must be done using an infrared beam within 3 days of hatching.**
- (c) The tipping of beaks of individual hens after 3 days of age must only be undertaken in an emergency with veterinary approval and under veterinary supervision to help control outbreaks of cannibalism during the laying period.**
- (d) The operator must not remove more than one-quarter of the upper or lower beaks. This means for:**
 - (i) one to three day old chicks, no more than 2mm of the beak;**
 - (ii) adult hens, no more than the blunting of upper and lower tips.**

Example indicators for Minimum Standard No. 16 – Beak Tipping

- Infrared treatment is undertaken in accordance with supplier instructions
- Inspection of beaks is undertaken to ensure minimum amount removed
- Staff training records are documented

Recommended Best Practice

- (a) Alternative strategies for managing injurious (feather) pecking that minimise the need for beak tipping should be employed e.g. use and availability of different foraging resources.

General Information

The incidence of feather pecking is affected by genetics, environmental conditions, nutrition and management practices. There is ongoing genetic research to develop strains of hens which are less prone to feather pecking. NAWAC has concerns about the welfare implications of beak tipping and encourages the industry to develop management systems to protect against all forms of injurious pecking without the need for beak tipping.

9. Humane Destruction

Introduction

Humane destruction of hens and chicks may be carried out on individuals, such as culls, or when depopulation is required for disease outbreak or at end of lay.

Minimum Standard No. 17 – Humane Destruction

- (a) The method(s) used for the humane destruction of layer hens, including unhatched eggs in the last half of incubation and newly hatched chicks, must ensure rapid death, which is confirmed by inspection.**
- (b) Persons undertaking humane destruction must be appropriately trained and must ensure that the hens are managed gently and calmly at all stages of the process.**
- (c) Any equipment used to undertake humane destruction must be well maintained and not overloaded, so that it operates effectively and efficiently.**
- (d) Maceration equipment used for humane destruction must be designed to cause very rapid and complete fragmentation of the egg or day-old chick into small particles.**
- (e) When using gas, the procedure must ensure the collapse of every hen within 35 seconds of exposure to the gas. Layer hens must remain in the gas for at least a further two minutes following collapse and be inspected to ensure that they are dead upon removal from the gas.**

Example indicators for Minimum Standard No. 17 – Humane Destruction

- Humane destruction protocols are documented
- Acceptable methods are used. These include:
 - (i) Electrical stunning followed by neck dislocation and exsanguination
 - (ii) Neck dislocation alone
 - (iii) Gas using a mixture of inert gases and/or carbon dioxide
 - (iv) Immediate fragmentation/ maceration for unhatched eggs and day-old chicks
- Any other methods used for humane destruction of hens (referred to in the OIE Terrestrial Animal Health Code (<http://www.oie.int/international-standard-setting/terrestrial-code/access-online/>)) are performed under veterinary supervision
- Persons performing humane destruction are appropriately trained and ensure that the hens are managed gently and calmly at all stages of the process
- Appropriate behaviour towards and handling of hens, including chicks, is observed and corrective action taken as required
- All hens killed are inspected following the procedure to confirm death
- Hens are confirmed unconscious within 35 seconds of exposure to gas
- Staff training and supervision is documented and monitored
- Equipment used to perform humane destruction is never overloaded and is well maintained to ensure that it operates efficiently and maintenance is documented

Recommended Best Practice

- (a) Layer hens should be humanely destroyed using a mixture of inert gases with a low concentration of carbon dioxide (i.e. up to 30%) to produce an atmosphere with less than 2% oxygen by volume.

10. Hatchery Management

Introduction

The aim of hatchery management is to produce healthy hens. The key processes and conditions in hatchery management which affect the health and welfare of newly hatched chicks include:

- cleaning and hygiene procedures;
- prompt removal of chicks after hatching;
- grading of day-old chicks;
- humane destruction of cull chicks and unhatched eggs;
- satisfactory holding room conditions;
- satisfactory transport conditions for day old chicks;
- vaccinations carried out humanely and with minimum stress to the chicks;
- infrared beak treatment (IRBT) equipment and automated vaccinators cleaned and serviced after every hatch where used;
- hatching trays with live chicks moved smoothly and kept level and precautions taken to prevent chicks falling onto the floor.

All minimum standards in this code apply to hatcheries and chicks.

11. Roosters

Keeping a rooster with layer hens can settle the birds, leading to less fighting and therefore fewer injuries.

All minimum standards, as appropriate, in this code apply to roosters that are kept with layer hens, regardless of the management system under which they are kept.

12. Welfare Assurance

Introduction

The maintenance of good records is an integral part of a welfare assurance system and good farm management.

Recommended Best Practice

- (a) To help ensure that standards of animal welfare and husbandry are maintained, each commercial layer hen facility should implement a quality assurance system that provides for written procedures regarding hen welfare.
- (b) The elements of the quality assurance system should provide for the minimum standards, the indicators relevant to each and recommendations for best practice of this code.
- (c) The quality assurance system should require continual review of existing systems and procedures that could enhance the welfare of layer hens. Producers and the Egg Producers Federation of New Zealand should encourage ongoing debate and assessments of management practices that may improve the welfare of layer hens. Where improvements to current practice are identified, these should be communicated to producers via appropriate technology transfer methods such as seminars, workshops, and industry newsletters.
- (d) The quality assurance system should provide for all incidents resulting in significant sickness, injury or death of hens to be fully investigated and documented. Where the results of an investigation may have implications for current industry management practices, a report outlining the incident and implications should, as soon as it is available, be forwarded to the appropriate industry body for consideration.

General Information

The adoption or adaptation of an industry generic welfare assurance programme for welfare and husbandry procedures may meet these recommendations.

Appendix I: Interpretation and Definitions

Act	The Animal Welfare Act 1999.
animal	<p>As defined in the Act:</p> <p>“(a) Means any live member of the animal kingdom that is –</p> <ul style="list-style-type: none">(i) A mammal; or(ii) A bird; or(iii) A reptile; or(iv) An amphibian; or(v) A fish (bony or cartilaginous); or(vi) Any octopus, squid, crab, lobster, or crayfish (including freshwater crayfish); or(vii) Any other member of the animal kingdom which is declared from time to time by the Governor-General, by Order in Council, to be an animal for the purposes of the Act; and <p>(b) Includes any mammalian foetus, or any avian or reptilian pre-hatched young, that is in the last half of its period of gestation or development; and</p> <p>(c) Includes any marsupial pouch young; but</p> <p>(d) Does not include –</p> <ul style="list-style-type: none">(i) A human being; or(ii) Except as provided in paragraph above, any animal in the pre-natal, pre-hatched, larval, or other such developmental stage.”
available technology	NAWAC takes to mean technologies which are used practically to care for and manage animals, for example, existing chemicals, drugs, instruments, devices and facilities.
aviary	A multi-tier barn system with access to nests and perches at a number of heights or multiple tiers which consist of a raised slatted area providing perching and access to food / water at each level.
barn	A building that houses layer hens as either a single or multiple groups, with or without access to an outdoor area but with an area for nesting, perching and scratching. Barns with access outdoors are usually referred to as free range and the building can be either fixed or moveable. If a barn has multiple internal levels it is often referred to as an aviary and/or multi-tier system.
beak tipping or trimming	The removal of the upper and lower tips of the beak (maximum 25%).
brooding	The management of chicks from day-old to four weeks of age.

caking	Undesirable compaction of the surface of litter.
cage	A cage is an enclosure constructed of metal or plastic and holding 3-7 hens. Cages do not have perches and/or nest areas. They are inside a building and can be multi-tiered. Also called current or conventional cages.
chick	Layer breed of poultry from hatching to 7 weeks of age.
claw shortening devices	Abrasive device or flooring for scratching.
colony cages	A colony cage is a modified and enlarged enclosure with more space than cages and with perching, nesting and scratching areas. Colony cages may also be referred to as furnished or enriched cages.
controlled environment	An enclosed insulated building containing layer hens which provides control of lighting, ventilation and temperature, with feed, water and egg collection also usually automated.
day-old chicks	Chicks up to 72 hours of age (surviving on their internal yolk sack).
depopulation	Removal of all hens, usually at end of lay, from the particular environment.
embryonated egg	A fertilised egg which contains a developing chick embryo.
end of lay	When laying is terminated, either naturally or as a management practice.
good practice	NAWAC takes to mean a standard of care that has a general level of acceptance among knowledgeable practitioners and experts in the field; is based on good sense and sound judgement; is practical and thorough; has robust experience-based or scientific foundations; and prevents unreasonable or unnecessary harm to, or promotes the interests of, the animals to which it is applied. Good practice also takes account of the evolution of attitudes about animals and their care.
hatchery	A facility in which fertile eggs are incubated and hatched in controlled environment cabinets.
hen(s) / layer hen	A chick, pullet or laying hen.
induced (forced) moulting	The deliberate practice of making hens in a group cease egg production simultaneously and then lose and replace feathers and restore bone integrity to bring them into another laying cycle.
instantaneous fragmentation	Mechanical method of humane destruction of eggs and day-old chicks (also known as maceration).
lux	An international measure of light intensity (not to be confused with watts).
owner	As defined in the Act: “in relation to an animal, includes the parent or guardian of a person under the age of 16 years who – Owns the animal; and Is a member of the parent’s or guardian’s household living with and dependent on the parent or guardian.”

perch	An elevated structure, including perforated/slatted areas, that allows hens to roost off the ground and grip with their claws.
person in charge	As defined in the Act: “in relation to an animal, includes a person who has an animal in that person’s possession or custody, or under that person’s care, control, or supervision.”
pest	As defined in the Act: “means – <ul style="list-style-type: none"> (a) Any animal in a wild state that, subject to subsection (2), the Minister of Conservation declares, by notice in the Gazette, to be a pest for the purposes of this Act: (b) Any member of the family Mustelidae (except where held under a licence under regulations made under the Wildlife Act 1953): (c) Any feral cat: (d) Any feral dog: (e) Any feral rodent: (f) Any feral rabbit: (g) Any feral hare: (h) Any grass carp: (i) Any Koi or European carp: (j) Any silver carp: (k) Any mosquito fish: (l) Any animal in a wild state that is a pest or unwanted organism within the meaning of the Biosecurity Act 1993.”
placement	Placing of day-old chicks in the rearing facilities or pullets in the laying facility.
point of lay	The commencement of laying by a sexually mature hen.
predator	An animal that preys on another.
pullet	Layer breed of poultry from 7 weeks of age to point of lay.
range	An outdoor area, usually pasture, used by hens.

range management plan	<p>A plan that reviews and addresses issues that can affect the quality of the range including :</p> <ul style="list-style-type: none"> • range rotation; • vegetation /pasture species on the range; • dealing with weather conditions; • disease and parasite control; • siting of the range; • shade and shelter, and • drainage.
rearing	<p>Management of the hens from day-old to point of lay (approximately 18 weeks of age).</p>
recommended best practice	<p>NAWAC takes to mean the best practice agreed at a particular time, following consideration of scientific information, accumulated experience and public submissions on this code. It is usually a higher standard of practice than the minimum standard, except where the minimum standard is best practice. It is a practice that can be varied as new information comes to light. Recommendations for best practice will be particularly appropriate where it is desirable to promote or encourage better care for animals than is provided as a minimum standard.</p> <p>Recommended best practices are identified in the text by a heading, and generally use the word “should”.</p>
scientific knowledge	<p>NAWAC takes to mean knowledge within animal-based scientific disciplines, especially those that deal with nutritional, environmental, health, behavioural and cognitive/neural functions, which are relevant to understanding the physical, health and behavioural needs of animals. Such knowledge is not haphazard or anecdotal; it is generated by rigorous and systematic application of the scientific method, and the results are objectively and critically reviewed before acceptance.</p>
winter garden/ covered veranda	<p>A well ventilated but covered area connected to the barn, which has a floor suitable for scratching and is usually available during daylight hours for the hens with provision to confine hens and protect them from predators and adverse weather.</p>

Appendix II: Legislative Requirements

The Animal Welfare Act 1999 (the Act) imposes obligations on every person who owns or is in charge of an animal. This code has been issued pursuant to section 75 of the Act and will provide guidance on how to comply with the legislative requirements. However, this code does not provide an exhaustive list of the Act's requirements, and owners and those in charge of animals should note that they must comply with the minimum standards in this code *and* the general provisions in the Act. A copy of the Act is accessible at: <http://www.legislation.govt.nz>.

Contents of Codes

Section 69 of the Act provides that a code of welfare may relate to one or more of the following:

- a species of animal
- animals used for purposes specified in the code
- animal establishments of a kind specified in the code
- types of entertainment specified in the code (being types of entertainment in which animals are used)
- the transport of animals
- the procedures and equipment used in the management, care or killing of animals or in the carrying out of surgical procedures on animals.

In deciding to issue a code of welfare, the Minister must be satisfied as to the following matters set out in section 73(1) of the Act:

- that the proposed standards are the minimum necessary to ensure that the purposes of the Act will be met
- that the recommendations for best practice (if any) are appropriate.

Despite the provisions of section 73(1), section 73(3) of the Act allows NAWAC, in exceptional circumstances, to recommend minimum standards and recommendations for best practice that do not fully meet the obligations of:

- sections 10 and 11 – obligations in relation to physical, health and behavioural needs of animals
- section 12(c) – killing an animal
- section 21(1)(b) – restriction on performance of surgical procedures
- section 22(2) – providing comfortable and secure accommodation for the transport of animals
- section 23(1) and (2) – transport of animals
- section 29(a) – ill-treating an animal.

In making a recommendation under section 73(3), section 73(4) requires NAWAC to have regard to:

- the feasibility and practicality of effecting a transition from current practices to new practices and any adverse effects that may result from such a transition
- the requirements of religious practices or cultural practices or both
- the economic effects of any transition from current practices to new practices.

This code provides for the physical, health and behavioural needs (as defined in section 4 of the Act) of layer hens. These needs include:

- proper and sufficient food and water
- adequate shelter
- opportunity to display normal patterns of behaviour

- physical handling in a manner which minimises the likelihood of unreasonable or unnecessary pain or distress
- protection from, and rapid diagnosis of, any significant injury or disease,

being a need which, in each case, is appropriate to the species, environment and circumstances of the animal.

This code also takes account of:

- good practice
- scientific knowledge
- available technology.

Legal Obligations of Owners and Persons in Charge of Animals

The owner or person in charge of an animal has overall responsibility for the welfare of the animal in his or her care. The legal obligations set out below are not an exhaustive list of the obligations in the Act.

(a) The owner or person in charge of an animal must:

- ensure that the physical, health and behavioural needs of the animal are met in a manner that is in accordance with both good practice and scientific knowledge
- where practicable, ensure that an animal that is ill or injured receives treatment that will alleviate any unreasonable or unnecessary pain or distress being suffered by the animal or that it is killed humanely.

(b) The owner or person in charge of an animal must not without reasonable excuse:

- keep an animal alive when it is in such a condition that it is suffering unreasonable or unnecessary pain or distress
- sell, attempt to sell or offer for sale, otherwise than for the express purpose of being killed, an animal, when it is suffering unreasonable or unnecessary pain or distress
- desert an animal in circumstances in which no provision is made to meet its physical, health and behavioural needs.

(c) No person may:

- ill-treat an animal
- release an animal that has been kept in captivity, in circumstances in which the animal is likely to suffer unreasonable or unnecessary pain or distress
- perform any significant surgical procedure on an animal unless that person is a veterinarian, or a veterinary student under the direct supervision of a veterinarian, or a person approved by a veterinarian
- perform on an animal a surgical procedure that is not a significant surgical procedure (as defined by the Act) in such a manner that the animal suffers unreasonable or unnecessary pain or distress
- kill an animal in such a manner that the animal suffers unreasonable or unnecessary pain or distress.

Regulations Review Committee of Parliament

Codes of welfare are deemed to be regulations for the purposes of the Regulations (Disallowance) Act 1989. As such, they are subject to the scrutiny of the Regulations Review Committee of Parliament.

Any person or organisation aggrieved at the operation of a code of welfare has the right to make a complaint to the Regulations Review Committee, Parliament Buildings, Wellington.

This is a parliamentary select committee charged with examining regulations against a set of criteria and drawing to the attention of the House of Representatives any regulation that does not meet the criteria.

Grounds for reporting to the House include:

- the regulation trespasses unduly on personal rights and freedoms;
- the regulation is not made in accordance with the general objects and intentions of the statute under which it is made; or
- the regulation was not made in compliance with the particular notice and consultation procedures prescribed by statute.

Any person or organisation wishing to make a complaint should refer to the publication *Making a Complaint to the Regulations Review Committee*, which can be obtained from the website:

<http://www.clerk.parliament.govt.nz>, or by writing to: Clerk of the Committee, Regulations Review Committee, Parliament Buildings, Wellington.

Strict Liability

In the prosecution of certain offences under the Animal Welfare Act 1999 committed after 19 December 2002, evidence that a relevant code of welfare was in existence at the time of the alleged offence and that a relevant minimum standard established by that code was not complied with is rebuttable evidence that the person charged with the offence failed to comply with, or contravened, the provision of the Animal Welfare Act to which the offence relates. (See sections 13(1A), 24(1) and 30(1A) of the Animal Welfare Act 1999, as amended by the Animal Welfare Amendment Act 2002.)

Defences

It is a defence in the prosecution of certain offences under the Animal Welfare Act 1999 if the defendant proves that there was in existence at the time of the alleged offence a relevant code of welfare and that the minimum standards established by the code of welfare were in all respects equalled or exceeded. (See sections 13(2)(c), 24(2)(b) and 30(2)(c).)

If a defendant in a prosecution intends to rely on the defence under section 13(2)(c) or 30(2)(c), the defendant must, within seven days after the service of the summons, or within such further time as the Court may allow, deliver to the prosecutor a written notice. The notice must state that the defendant intends to rely on section 13(2) or 30(2) as the case may be, and must specify the relevant code of welfare that was in existence at the time of the alleged offence, and the facts that show that the minimum standards established by that code of welfare were in all respects equalled or exceeded. This notice may be dispensed with if the Court gives leave. (See sections 13(3) and 30(3).)

The strict liability provisions and the defence of equalling or exceeding the minimum standards established by a code of welfare apply to the following offences:

- Failing to Provide

Section 12(a): A person commits an offence who, being the owner of, or a person in charge of, an animal, fails to comply, in relation to the animal, with section 10 (which provides that the owner of an animal, and every person in charge of an animal, must ensure that the physical, health and behavioural needs of the animal are met in a manner that is in accordance with both good practice and scientific knowledge).

- **Suffering Animals**

Section 12(b): A person commits an offence who, being the owner of, or a person in charge of, an animal, fails, in the case of an animal that is ill or injured, to comply, in relation to the animal, with section 11 (which provides that the owner of an animal that is ill or injured, and every person in charge of such an animal, must, where practicable, ensure that the animal receives treatment that alleviates any unreasonable or unnecessary pain or distress being suffered by the animal).

Section 12(c): A person commits an offence who, being the owner of, or a person in charge of, an animal, kills the animal in such a manner that the animal suffers unreasonable or unnecessary pain or distress.

- **Surgical Procedures**

Section 21(1)(b): A person commits an offence who, without reasonable excuse, acts in contravention of or fails to comply with section 15(4) (which provides that no person may, in performing on an animal a surgical procedure that is not a significant surgical procedure, perform that surgical procedure in such a manner that the animal suffers unreasonable or unnecessary pain or distress).

- **Transport**

Section 22(2): A person commits an offence who fails, without reasonable excuse, to comply with any provision of section 22(1) (which provides that every person in charge of a vehicle or an aircraft, and the master of or, if there is no master, the person in charge of, a ship, being a vehicle, aircraft or ship in or on which an animal is being transported, must ensure that the welfare of the animal is properly attended to, and that, in particular, the animal is provided with reasonably comfortable and secure accommodation and is supplied with proper and sufficient food and water).

Section 23(1): A person commits an offence who, without reasonable excuse, confines or transports an animal in a manner or position that causes the animal unreasonable or unnecessary pain or distress.

Section 23(2): A person commits an offence who, being the owner of, or the person in charge of, an animal, permits that animal, without reasonable excuse, to be driven or led on a road, or to be ridden, or to be transported in or on a vehicle, an aircraft, or a ship while the condition or health of the animal is such as to render it unfit to be so driven, led, ridden or transported.

- **Ill-treatment**

Section 29(a): A person commits an offence who ill-treats an animal.

Inspection of Premises

Section 127(1): Inspectors appointed under the Animal Welfare Act 1999 have the power to enter any land or premises (with the exceptions of dwellings and marae), or any vehicle, aircraft or vessel, at any reasonable time, for the purpose of inspecting any animal.

Inspectors include officers of MPI, inspectors from approved organisations (e.g. Royal New Zealand SPCA) appointed by the Minister, and the Police.

Liability of employers, principals, directors and officers of bodies corporate

Sections 164 and 165 of the Animal Welfare Act lay out further provisions relating to offences committed by employers and charges against bodies corporate.

Appendix III: Codes of Welfare

Codes of Welfare

- Animal Welfare (Rodeos) Code of Welfare 2003
- Animal Welfare (Zoos) Code of Welfare 2005
- Animal Welfare (Circuses) Code of Welfare 2005
- Animal Welfare (Painful Husbandry Procedures) Code of Welfare 2005
- Animal Welfare (Companion Cats) Code of Welfare 2007
- Animal Welfare (Deer) Code of Welfare 2007
- Animal Welfare (Dairy Cattle) Code of Welfare 2010
- Animal Welfare (Commercial Slaughter) Code of Welfare 2010
- Animal Welfare (Dogs) Code of Welfare 2010
- Animal Welfare (Sheep and Beef Cattle) Code of Welfare 2010
- Animal Welfare (Pigs) Code of Welfare 2010
- Animal Welfare (Transport within New Zealand) Code of Welfare 2011
- Animal Welfare (Goats) Code of Welfare 2012
- Animal Welfare (Meat Chickens) Code of Welfare 2012

Codes of Recommendations and Minimum Standards

- Sea Transport of Sheep from New Zealand, September 1991
- Welfare of Deer During the Removal of Antlers, July 1992, amended August 1994, August 1997
- Welfare of Horses, February 1993
- Care of Animals in Boarding Establishments, August 1993
- Sale of Companion Animals, September 1994
- Welfare of Animals at Saleyards, May 1995
- Emergency Slaughter of Farm Livestock, December 1996
- Welfare of Ostrich and Emu, September 1999

Guidelines

- Welfare of Stock from which Blood is Harvested for Commercial and Research Purposes, March 2009
- Welfare of Yearling Fallow Deer During the Use of Rubber Rings to Prevent Antler/Pedicle Growth, September 1997
- Welfare of Red and Wapiti Yearling Stags During the Use of Rubber Rings to Induce Analgesia for the Removal of Spiker Velvet, September 1998

<p>Codes and Guidelines may be obtained from:</p> <p><i>Animal Welfare Standards</i> <i>Ministry for Primary Industries</i> <i>PO Box 2526</i> <i>WELLINGTON 6140</i></p> <p><i>email: animalwelfare@mpi.govt.nz</i></p>	<p>Or can be inspected at:</p> <p><i>Animal Welfare Standards</i> <i>Ministry for Primary Industries</i> <i>Pastoral House</i> <i>Reception, Level 4</i> <i>25 The Terrace</i> <i>WELLINGTON 6011</i></p>
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Codes and Guidelines are available on the Ministry's website.

The web page address is: <http://www.mpi.govt.nz/biosecurity-animal-welfare/animal-welfare>