



## **CONSULTATION ON THE PROPOSED AMENDMENT TO THE WELFARE OF ANIMALS (SLAUGHTER OR KILLING) REGULATIONS 1995: USE OF GAS AS A KILLING METHOD FOR BIRDS OUTSIDE OF A SLAUGHTER HOUSE**

### **COMMENTS BY ADVOCATES FOR ANIMALS**

#### **Introduction**

Advocates for Animals welcomes the consultation on the proposed amendment to the Welfare of Animals (Slaughter or Killing) Regulations 1995, to provide for the use of gas as a method of killing large numbers of birds under certain specific conditions.

We note that the use of gas is already permitted for killing birds outside of a slaughterhouse, for disease control purposes, but not for situations that may arise as a result of disease control measures (such as movement restrictions), or other emergencies (such as flooding).

We note also that the permitted gas mixtures are comparable to the mixtures already available for stunning/killing birds in a slaughterhouse. We do, however, have comments on the comparative appropriateness of the different mixtures, and these are given below.

We have referred to the recent review of different gaseous methods, supported by the Scottish Executive, and published in the Veterinary Record in August 2006<sup>i</sup>; however we note that this refers only to methods suitable for disease control purposes, which implies in situations of some urgency. Solutions which might possibly be tolerated for use in the short-term or in an emergency, but do not offer optimum welfare, must not become routine.

Advocates notes that while one purpose of the amendment is to enhance provision for the welfare of the birds, there may also be cost savings to the industry where end-of-lay hens are concerned. This makes it likely that the use of gas will come to be a preferred option. Should this be the case, it is essential that the choice of mixture is that which is proven to be the most humane, and that authorisations under the proposed Regulation are designed to ensure this.

While our comments on appropriate mixtures of gases are generic, the choice of mixture will depend on whether the proposed killing is urgent, or a matter of routine.

Advocates for Animals notes that one purpose of the amendment is to improve the welfare of end-of-lay hens within the systems in which they are most commonly kept or reared. In particular, where battery cage systems for laying hens are concerned, there is a significant incidence of osteoporosis in hens kept in these systems, and they are vulnerable to injuries, including painful bone fractures, during removal from cages. Reducing the need for handling and transportation is therefore to be welcomed.

Advocates for Animals must, however, comment on the incongruity of having to provide for welfare in this way. The consultation acknowledges the lack of value that is placed on these birds by its statement that:

“they essentially constitute a by-product of the egg industry that requires disposal”.

This is an acknowledgment of a status that many would find unacceptable. Production systems which leave the birds in such a state of fragility that they cannot safely be handled should not be tolerated.

We note that the amendment will permit gas to be used both within poultry sheds and in containers, following removal of the birds from their cages or sheds. At the risk of stating the obvious, we would mention that the latter reduces any intended welfare benefit to be gained from the avoidance of handling.

### **Responses to key questions**

Generic responses to the key questions are set out below. They are not differentiated according to whether the killing is of end-of-lay hens, or for disease control or related purposes. It is our view that the technical aspects are the same, although, as stated above, the context of the killing must influence what is considered to be the best method for the birds' welfare.

Advocates for Animals is grateful to Compassion in World Farming (CIWF) for guidance on some technical aspects regarding gas mixtures.

### **Response to Question: Is gas a suitable culling method in the circumstances outlined in this document?**

Advocates for Animals accepts that gas can be a suitable culling method in the circumstances outlined in Chapters 1 and 2 of the consultation. However, we have serious concerns about some of the proposed gas mixtures and exposure times (see below for details).

## **Response to Question: Are the gases, gas mixtures and means of application of those gases outlined appropriate?**

### Use of carbon dioxide (CO<sub>2</sub>) on its own

We note that the consultation document states that the concentration proposed for the use of carbon dioxide in air is a minimum of 45 per cent by volume.

Advocates for Animals is opposed to the proposed use of carbon dioxide (CO<sub>2</sub>) on its own (we accept its use as 20% of a mixture with argon). The consultation document claims that inhaling carbon dioxide is only mildly to moderately aversive to poultry. We find this difficult to accept.

Raj et al<sup>ii</sup> state: "...CO<sub>2</sub> has an anaesthetic effect, but when it is inhaled at the concentrations (40 per cent v/v or more) required to kill poultry it can be unpleasant, due to its pungent odour, acidic properties, which cause irritation and pain to the mucosa, and because it causes feelings of breathlessness..."

The 2004 EFSA report states: "The concentration of carbon dioxide that becomes aversive to poultry is likely to be considerably lower [than in mammals] because, unlike mammals, the lungs of birds have intrapulmonary chemoreceptors that are acutely sensitive to carbon dioxide and insensitive to hypoxia (Ludders, 2001). The EFSA report stresses that "Therefore, the use of gas mixtures containing carbon dioxide for stunning or stun / killing of poultry raises welfare concerns" and that "Concentrations [of CO<sub>2</sub>] higher than 40 or 55% seem to cause pain or a higher unpleasantness [in broilers]".

Crucially, the EFSA report states that: "Scientific evidence suggests that concentrations of more than 40% carbon dioxide is aversive and induction of unconsciousness with a high concentration of this gas is distressing to poultry. Hypoxia induced with inert gases appears to be the best option on birds' welfare grounds."

On the basis of this scientific evidence, we request that the amendment will not permit the use of carbon dioxide on its own for the slaughter of poultry in any non-emergency circumstances.

If its use is to be permitted in emergency killing, the welfare cost must be set against any welfare benefit to be gained from avoiding other sources of suffering, for example, that caused by disease or by other, potentially slower or more distressing methods of killing.

We note that Chapter 2 (welfare killing as a consequence of disease control methods) states that authorisation will be issued by the State Veterinary Service and that this will "ensure that appropriate gases are used with appropriate delivery mechanisms". We would accordingly urge that authorisation should not be given for the use of CO<sub>2</sub> on its own, unless in exceptional circumstances; and that the amendment should specify this.

### Use of inert gases

We believe that the use of inert gases with a maximum concentration of 2% oxygen by volume, if properly applied, can result in acceptable welfare.

### Mixture of inert gas and carbon dioxide

We are pleased that SEERAD proposes that the proportion of CO<sub>2</sub> must not exceed 20%. We are, however, concerned that the final oxygen concentration can be as high as 5% by volume. This could lead to a delay in onset of unconsciousness. We believe that the final maximum permitted oxygen concentration should be 2% by volume. The EFSA report recommends that, when a mixture of an inert gas and CO<sub>2</sub> is used, the residual oxygen concentration must not exceed 2% by volume

Schedule 7 to WASK, which deals with the use of gas in a slaughterhouse, stipulates that when a mixture of an inert gas and CO<sub>2</sub> is used the oxygen concentration must not exceed 2% by volume. In our view it is inconsistent to permit a higher oxygen concentration outwith a slaughterhouse than in a slaughterhouse.

The consultation document (page 15) argues that the variation in permitted maximum terminal oxygen levels when using the argon / carbon dioxide mixture rather than inert gases alone (5% rather than 2%) “reflects the fact that a less stringent level of anoxia is required as the carbon dioxide component of the mixture speeds unconsciousness and death”. This argument is unconvincing in light of the fact that: (i) WASK requires a maximum of 2% terminal oxygen level when an inert gas/CO<sub>2</sub> mixture is used in a slaughterhouse and (ii) the EFSA report recommends a maximum 2% residual oxygen concentration.

### Insufficient exposure times

Although the SEERAD consultation does not include a draft Regulation, the draft Regulation for England, published in the equivalent DEFRA consultation, sets out a minimum exposure time of 60 seconds for CO<sub>2</sub> used on its own and for the inert gas/CO<sub>2</sub> mixture. Advocates believes that these exposure times would be too short and would entail a real risk of birds regaining consciousness after removal from the gas.

The exposure times proposed by DEFRA are substantially shorter than those recommended by the EFSA report. EFSA recommended:

- a minimum exposure time of 2 minutes for 45-55% carbon dioxide in air
- a minimum exposure time of 2 minutes for an inert gas/CO<sub>2</sub> mixture.

Advocates hopes that SEERAD will increase the minimum exposure times to at least the times recommended by the EFSA report.

**Response to Question: Will requiring a licensed slaughterman to supervise the killing, and notification to and random checks by the SVS, ensure that killing is done to adequate welfare standards?**

Ensuring adequate welfare standards will depend on more than the presence of a slaughterman experienced in the technical aspects of gassing birds. It will depend on the reasons for the cull; the condition of the birds in question; the decision whether to gas in-house or in containers; and the choice of gas mixture.

Nonetheless, we believe that the requirement that a licensed slaughterman must supervise the killing, and the requirement for notification to and random checks by the SVS, can play an important part in securing adequate welfare.

Finally, we draw attention to the concern of our colleagues in CIWF regarding the draft Regulation published for England by DEFRA. CIWF noted that the requirement did not seem to be in the text of the proposed Regulation. This is presumably an area for further attention.

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<sup>i</sup> RAJ, A.B.M., SANDILANDS, V. & SPARKS N.H.C. : Review of gaseous methods of killing poultry on-farm for disease control purposes. *Veterinary Record* (2006) **159**, 229 - 235

<sup>ii</sup> *ibid*