

The **A P C**
Animal Procedures Committee

3rd Floor, South West Quarter, Seacole, 2 Marsham Street, SW1P 4DF
Direct Line 020 7035 4788/4776/4777 Fax 0870 336 9155

email: apc.secretariat@homeoffice.gsi.gov.uk web-site: www.apc.gov.uk

From the Chairman
Ms Sara Nathan

Our Ref
Your Ref
Date 11 April 2012

Dr Judy MacArthur Clark
Animals in Science Regulation Unit
Home Office
4th floor, South West
Seacole building
2 Marsham Street
London SW1P 4DF

Dear Judy,

TRANSPPOSITION OF EUROPEAN DIRECTIVE 2010/63/EU ON THE PROTECTION OF ANIMALS USED FOR SCIENTIFIC PURPOSES

ARTICLE 6 AND ANNEX IV: METHODS OF KILLING

The Animal Procedures Committee welcomes the opportunity to comment on the transposition of Article 6 and Annex IV of Directive 2010/63/EU:

- We agree with the approach to use Article 2 to retain and revise Schedule 1 to the Animals (Scientific Procedures Act) 1986, rather than adopt Annex IV wholesale – some of the techniques in Annex IV are inappropriate and/or a cause for animal welfare concern.
- The revised Schedule 1 refers to associated guidance on humane killing (Para. 1) – this guidance will be critically important for ensuring widespread good practice and competence in humane killing. We presume that the guidance will take the form of a revised Code of Practice on humane killing – this should be clarified, along with the contents, status and expected publication date.
- The guidance should explain the ongoing debate about the acceptability of CO₂ as a method for killing animals and refer to sources of information and advice, including on good practice for administering CO₂ (e.g. concentrations and flow rates, place and timing of administration, possible use of prior anaesthesia). Exposure to CO₂ is a widespread method of euthanasia for rodents yet at high concentrations CO₂ is reported to cause pain, and at lower concentrations to cause distress (e.g. dyspnoea). There is not sufficient comparative evidence to support the use of alternative gaseous agents (e.g. Isoflurane, Argon) instead. Research on these issues is ongoing at Newcastle University, funded by the NC3Rs: www.nc3rs.org.uk/page.asp?id=1339
- We support inclusion of prior sedation or anaesthesia for the methods listed in Table A, provided this is in the welfare interests of the animals concerned and the method is

applied by the NVS or (or equivalent) or by a trained and competent person under the direction of the NVS (Para. 1).

- Neck dislocation may not always result in instantaneous death or permanent loss of consciousness. Therefore with respect to Paras. 2 and 3 of the revised Schedule, if animals are killed by neck dislocation there should be an additional method of confirming death. This higher standard is probably required by Para. 2 of Annex IV.
- We support the removal of CO₂ as a means of killing rabbits or neonatal rodents – these animals are likely to be resistant to hypercapnia which would prolong killing process and cause avoidable suffering (Table A, 2).
- We do not support retention of CO₂ as a means of killing birds – this method should be removed from the revised Schedule (Table A, 2). The 2006 APC review of Schedule 1 recommended that CO₂ should not be used to kill birds, based on evidence that it is aversive.
- We support the retention of current UK weight limits for CO₂, cervical dislocation and concussion where these are less than the Directive (Table A, 2-4) – this should reduce the risk of avoidable suffering.
- We agree that sedation prior to cervical dislocation of rodents over 150g, rabbits over 150g and birds over 250g should not be mandated but used case-by-case where it would not cause significantly more distress to the animal than the killing method alone (Table A, 3).
- We support the reduction of the weight limit for cervical dislocation of birds from 3kg to 1kg (Table A, 3).
- We are pleased to see that concussion/percussive blow to the head is not permitted for neonatal carnivores (Table A, 4) – this would be unacceptable due to public concern and the distress caused to operators.
- Providing it is implemented correctly, use of a Cash Poultry Killer to administer a percussive blow is thought to be a humane stun/kill method for birds considerably larger than 250g (e.g. chickens, ducks, geese) and induces immediate loss of consciousness, which cervical dislocation may not do.
- All current methods for fetal, larval and embryonic forms have been retained from the current Schedule 1 (Table B) – we support this, which addresses the omission in Annex IV of humane killing methods for these life forms.
- The revised Schedule is in accordance with the 2009 APC report on methods of humane killing for fish. As yet, there is insufficient evidence to support electrical stunning as a method for humane killing of fish.

Yours sincerely



Sara Nathan