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Dear Sue

UPRIGHT BOVINE RESTRAINING PENS FOR NON STUNNED SLAUGHTER – DESIGN AND OPERATING CRITERIA

The Farm Animal Welfare Committee's Welfare at Killing Standing Committee was asked to review existing science and evidence in relation to the technical specifications and operation of upright bovine restraining pens used for slaughter without stunning of cattle and from this to make recommendations in relation to the parameters relevant to the process of approval of such pens, including optimum design, monitoring, operating procedures and training that will ensure optimum animal welfare protection.

To date we have:

- Reviewed the literature for current evidence and information on the welfare aspects of current upright restraining pen design and use;
- Drawn on the practical experience of the Welfare at Killing Standing Committee members in this domain; and
- Consulted informally with external experts.

The objective has been to ensure that approved upright restraining pens and their operation do not cause avoidable pain, suffering, agitation, injuries or contusions to the animals restrained.

The actual number of approved upright restraining pens in use or currently envisaged in the UK remains small, generally estimated at being fewer than 10. However, given the known welfare issues associated with non-stun slaughter and under the terms of the principal objective of the Welfare at Killing Committee - being to seek appropriately high levels of animal welfare in all systems of animal slaughter – we recommend that specific attention be paid to the parameters identified below.

1. CHANGES TO THE APPROVAL PROCESS

With the enactment of domestic legislation to implement EC Regulation 1099/2009 on the protection of animals at the time of killing (The Welfare of Animals at the Time of Killing Regulations), the process of approval of all new upright restraining pens used for non-stun slaughter of cattle will pass to the Food Standards Agency (FSA). Currently, the on-site Official Veterinarian (OV) is required by legislation to monitor the subsequent condition and operation of existing approved upright restraining pens. Training has been given to Veterinary Managers in recognition of the necessary parameters of design and use. If the OV has concerns he/she will be able to call in the FSA veterinary manager to review the approval and if a pen is not compliant with the regulations then the OV can prevent its use by serving a notice (equivalent to a Remedial Action Notice or Improvement Notice).

2. WELFARE CONSIDERATIONS

Upright restraint pens are essential in forms of religious slaughter without pre-stunning to hold the animal in a comfortable but secure way to ensure that the neck cut and subsequent bleed can be achieved in line with the legislation (see previous FAWC advice on upright slaughter). The restraint needs to hold the animal securely but without unnecessary suffering, distress or pain, and allow the slaughterman uninhibited access to the animal's neck. There must be minimal delay between the secure restraint of the animal and the cutting of the neck. The restraint must hold the animal securely and for as short a period as necessary before the cut without causing pain, discomfort or suffering. After the cut, the restraint must support the animal in an upright position as it passes into unconsciousness while permitting the unrestricted flow of blood from the wound.

3. CURRENT LEGISLATIVE CONTEXT

A 'restraining pen' is defined in the Welfare of Animals (Slaughter or Killing) Regulations 1995 (Part 1, section 2), as a pen or compartment which is -

- a. *"suitable for restraining for slaughter by a religious method (as defined in paragraph 2 of Schedule 12) in an upright position any ox, bullock, cow, heifer or steer or any calf which is too large to be restrained manually on a cradle or on a table;*
- b. *constructed so as to permit one animal at a time to be confined in it without discomfort and so as to prevent any substantial movement of the animal forwards, backwards or sideways once it has been placed in position for slaughter; and*
- c. *approved by the Minister under paragraph 3 of Schedule 12;"*

The Welfare of Animals (Slaughter or Killing) Regulations 1995 (WASK), Schedule 12 (Part II) states, with respect to the slaughter of bovine animals by a religious method:

"3.—(1) Subject to sub-paragraph (3) below, no person shall slaughter, or cause or permit to be slaughtered, any bovine animal in a slaughterhouse by a religious method unless the animal is in an upright position in a restraining pen which has been approved by the Minister and which the Minister is satisfied has been installed in such a manner as to ensure that it will operate efficiently."

“(2) The Minister may, for the purposes of sub-paragraph (1) above, give his approval to a restraining pen, but he shall not give any such approval unless he is satisfied that the pen is of such a size and design, and is able to be so operated, as to protect a bovine animal from any avoidable pain, suffering, agitation, injuries or contusions while confined in it or while entering it and, in particular, unless he is satisfied that the pen -

(a) contains an effective means of restraining any bovine animal confined in it (including a suitable head restraint for that purpose); and

(b) contains means of support which will take the weight of the animal during and following slaughter in it.”

“(3) Sub-paragraphs (1) and (2) above shall not apply where the bovine animal is stunned before slaughter, but in such cases any bovine animal shall be restrained before stunning in accordance with paragraph 3(a) of Schedule 4.”

Council Regulation (EC) No. 1099/2009 on the protection of animals at the time of killing requires that:

“Business operators shall ensure that all animals that are killed in accordance with Article 4(4) without prior stunning are individually restrained; ruminants shall be mechanically restrained” (Article 15.2)

Annex 2 of Council Regulation (EC) No. 1099/2009 requires that:

“3.1. Restraining equipment and facilities shall be designed, built and maintained to:

(a) optimise the application of the stunning or killing method;

(b) prevent injury or contusions to the animals;

(c) minimise struggle and vocalisation when animals are restrained;

(d) minimise the time of restraint.”

“3.2. For animals of bovine species, restraining boxes used in conjunction with a pneumatic captive bolt shall be fitted with a device that restricts both the lateral and vertical movement of the head of the animal.”

4. RECOMMENDATIONS FOR DESIGN AND OPERATING CRITERIA

4.1 Overall box design

No	Feature	Condition	Parameter
1	Accommodation of the animal	Pens must be constructed to permit a single animal of the appropriate size to be restrained without discomfort and to prevent any substantial movement of the animal forwards, backward or sideways once it has been placed in position for slaughter.	Appropriate height, length and width of pen; design/shape of legally required tail pusher or tailgate (which should avoid sharp edges or surfaces or pressure points and should not permit the excessive pushing or crowding the animal once inside pen). Pushers should be set to a level of 'optimal' pressure for each animal.
2	Slaughterman access	Pens should allow unrestricted access for the slaughterman to perform the cut and to visualise the success or otherwise of the neck cut.	Unrestricted access to the neck of the animal in restrained position with ventral cutting point presented unhindered.
3	Adaptability to different sizes of animal	Pens should be adjustable so that animals of different size can be made to feel reasonably comfortable and secure.	The pen should be designed so that the animal cannot turn around. The pen should be designed so that the animal can be slaughtered in the animal's normal body posture.
4	Position of Pen	The pen should be so located and positioned that the animal is not discouraged from entering.	The 'horizon' of the pen, as seen by the animal upon entering should not discourage entry and the pen should appear as a continuation of the raceway.
5	Floor	The floor of pen should not disrupt the handling of the animal and should be designed to facilitate the animal's entry into the pen.	Floor should be level and made of a non-slip surface. There should be minimal colour/surface shading difference between pen floor and race floor.
6	Box sides	There should be no points at which the animal can be subjected to localised pressure, cut or pinched when in the box prior to the neck cut.	The belly support must offer full support to the animal during collapse. There should be no gap between the support and the sides of the pen that might let part of the animal's body slip through.
7	Tail pusher	Tail pusher should prevent avoidable pain, agitation, injuries or contusions.	The shape of the tail pusher should be appropriately designed not to cause localised pressure (which should be evenly distributed), discomfort or injury.
8	Control mechanisms	Accessible and easy-to-operate control mechanisms.	<ul style="list-style-type: none"> The different parameters of the box should be adjustable and should be adjusted for each animal of different size and shape; Their operation should be smooth and allow the operator to "fine tune" distances for optimal adjustment;

			<ul style="list-style-type: none"> Hydraulic mechanisms should have working clutches to rapidly withdraw pressure on animals when necessary; Controls should allow the limiting of pressure applied to the different parts of the animal; and The noise of compressors and hydraulic systems should not constitute a source of fear for the animal.
9	Head restraint	Hold the head without unnecessary distress, suffering or pain.	Should lift the animal's head upwards without overstretching the neck, allowing the slaughterman unrestricted access to the neck.
10	Box release	Allow the animal to bleed out without additional discomfort and pressure on open wound.	Pens should be designed to support animal upright post-cut, until insensible and beyond the point of recovery, before release.
11	Monitoring	Allow the operator to view the full animal's body whilst in the pen.	<ul style="list-style-type: none"> Should allow unobstructed visual access to the animals body for monitoring purposes and to ensure different parts of the pen are operated without causing unnecessary pain, suffering or distress; and Should allow suitable access for the AWO, veterinarian and others to observe the area where neck cutting takes places and to monitor the animal's responses.
12	Lighting	Allow full and clear operation and monitoring.	Of appropriate strength and positioning to allow the operator to perform accurate cut and the monitors to observe slaughter operation clearly.

4.2 Head Restraint

No	Feature	Condition	Parameter
1	Neck stretching	Should not cause hyperextension of animal's neck through excessive pressure.	<ul style="list-style-type: none"> • Height of head restraint should be adjustable and designed to limit pressure; • The head stopper, where present, should be smooth and designed so as to prevent points of pressure, avoid causing pain and allow slaughterman access; and • Should be fully adjustable to different animal sizes.
2	Head movement	Should prevent the animal from moving the head forwards, backwards and laterally.	Once the animal's head has passed into the restraint, it should not be able to retract it.
3	Monitoring of unconsciousness	Allow the eyes, nostrils and mouth of the animal to be monitored for assessment of consciousness.	Unobstructed view of the animal's head and eyes from the slaughterman's position.
4	Neck position	Should allow the operator to ensure that the neck is in the correct position for cuts to effectively reach both carotid arteries.	The slaughterman should have easy access to the animals' head prior to cut. The construction of the head restraint should not impede the action of the cut.
5	Bleeding	Should not inhibit post-cut bleed-out or cause post-cut contact of neck wound with restraint pen surfaces prior to release, which can be a source of pain and suffering.	Must restrain animal in the upright position post-cut without allowing cut area to become occluded (i.e. by neck movement) or come in contact with restraint equipment.
6	Stun position access	Should not inhibit immediate post-cut stunning if neck cut is ineffective.	The overall design of the head restraint should allow the head of the animal to be positioned in such a way as to allow easy access for immediate post-cut stunning.

4.3 Belly Support

No	Feature	Condition	Parameter
1	Access to pen	Belly support should not obstruct the animal's entry into the box or lead to difficulties in handling.	The belly support should be flush with the pen when not in use offering no protrusions, sharp edges, surfaces or pressure points.
2	Body support	Belly support should not be a source of unnecessary pressure, and thus unnecessary distress, discomfort or pain, on the animal.	The belly support should allow for an even distribution of the animal's weight without localised points of pressure which could lead to unnecessary distress, discomfort or pain.
3	Dimensions	Avoid suffering, agitation, injuries or contusions from belly plate.	<ul style="list-style-type: none"> • The support should be of sufficient size and width to support the weight of the animal post-cut without pinching; • The belly support should have no sharp edges or protrusions.
4	Position	Where possible, the belly support should be adaptable to the height of the animal.	The height of the support should be adjustable to different animal heights.
5	Strength	Post-cut restraint.	The belly support must be strong enough to support the weight of the animal post-cut until insensible.
6	Bleeding position	The belly support should not inhibit post-cut bleeding.	The support should allow the animal to be held in the upright position with the head restrained.
7	Monitoring	The operator must be able to ensure that the belly support is in the correct position.	The belly support should be visible and accessible when the animal is in the pen.

5. MONITORING AND OPERATION

- 5.1 It is a legal requirement that Standard Operating Procedures, are available for consultation and should be fit for purpose.
- 5.2 Manufacturer recommendations, including those relating to pen maintenance should be provided and followed and be available for consultation.
- 5.3. It is a legal requirement that the personnel operating the pen must be knowledgeable and appropriately qualified.
- 5.4. It is a legal requirement that neck cutting should take place rapidly following the animal's restraint within the pen.
- 5.5. EC Regulation 1099/2009 requires that restraining equipment and facilities shall be designed, built and maintained to "minimise the time of restraint" (Annex 2, para 3.1).
- 5.6. It is a legal requirement that animals should be restrained until unconscious. FAWC believes that the time delay for no possibility of recovery could be extended to 60 seconds in such systems.
- 5.7. Operators should avoid any unnecessary delay between the animal entering the restraining pen and neck cutting.

6. ASSESSING UNCONSCIOUSNESS

It is a legal requirement that animals be completely unconscious before release from the upright pen, both for the welfare of the animal and for the slaughtermen and abattoir staff. However, we recognize that state of unconsciousness assessment is not systematically undertaken in the same way, by the same people, from the same position. Loss of posture, collapse and absence of rhythmic breathing cannot always be taken as unrecoverable insensibility. False aneurisms can lead to consciousness being regained and some animals may drift in and out of consciousness before death. Moreover, as research has shown, there is considerable variability in the time from neck cut to insensibility amongst non-stunned animals.

Repeated checks which involve contact with the animal (i.e. eye reflex tests) of animal consciousness post-cut may cause avoidable suffering. We therefore recommend that rhythmic breathing should cease before other checks, such as corneal reflex, are carried out.

We maintain that every person engaged in religious slaughter and its monitoring should be trained and competent to identify the indicators for unconsciousness and death as required by EC Regulation 1099 (Article 16, para 2b).

To protect the animal from suffering, operators should be trained in assessing how much time should be allowed to lapse before post-cut stunning is initiated. Operators should use collapse-time as an indicator of the late onset of unconsciousness. FAWC considers that, if no collapse occurs within 20 seconds, a post-cut stun should be administered.

We would like to see the drawing up of Standard Operating Procedures for the different operatives of upright non-stun slaughter

Finally, we believe that, as a matter of principle, a post-cut stun should be initiated as soon as possible following the neck cut.

7. FURTHER RESEARCH

We would like to see it ensured that those designing new pens for upright slaughter without stunning are aware of the existing research evidence relating to pen design and handling to facilitate animal restraint.

However, the specific evidence base for the impact of upright slaughter pen design upon the welfare of animals subject to religious slaughter is limited. We would like to see more research to improve the design and operation of upright slaughter pens used in religious slaughter.

With kind regards,

Yours sincerely

A handwritten signature in black ink on a light blue background. The signature is cursive and appears to read 'Peter Jinman'.

Peter Jinman
Chairman, Farm Animal Welfare Committee

cc Food Standards Agency
Scottish Government
Welsh Government
Department for Agriculture and Rural Development, Northern Ireland
FAWC Secretariat