

Department of Agriculture, Food and the Marine

Trader Notice: MH No. 15/2014

To: Slaughter Plant Operators

Subject: Official controls relating to animal welfare in slaughter plants under the supervision of the Department.

NOTE: As the awarding of Certificates of Competence and the establishment of designated Animal Welfare Officers is not completed as yet, these aspects of the SOP will not be enforced at this time. FBOs will be informed and this Trader Notice updated once these provisions are in place.

Role of the Food Business Operator

1. Animal Welfare SOP

The FBO must have an up-to-date Standard Operating Procedure (SOP) on animal welfare, detailing at least:

- Their documented systems and procedures relevant to the various areas for animal intake, lairaging and killing and their systems of own checks/controls to verify ongoing compliance with animal welfare regulations.
- The management of unloading, lairaging, restraint, stunning and slaughter facilities to ensure that animals are spared any avoidable pain, distress or suffering during their slaughter and related operations.
- Verification checks which shall be sufficient to ensure that daily observed practice relating to the various areas are fully reflective of documented procedures and that corrective actions are taken as necessary and documented accordingly
- Facilities used for killing and related operations shall be designed, constructed, maintained and operated so as to ensure compliance with legislation. These facilities; structures/design layout, stocking capacity, throughput shall be validated against the relevant industry standards and legislative requirements and this shall be included in the animal welfare SOP
- The arrangements for operatives involved in specific animal handling operations to be issued with Certificates of Competence
- The name and responsibilities of the Animal Welfare Officer.
- The monitoring procedures carried out and records kept ensuring compliance with welfare regulations.
- The slaughter method(s) to be used and the specification used for restraining and stunning equipment.
- The checks on stunning that will be carried out, including
 - frequency,
 - person(s) responsible for monitoring and verification,
 - the indicators used to evaluate effectiveness of stunning.
- The procedures in place to handle ineffective stunning.
- The checks on animal transport vehicles and on “fitness to travel” that will be carried out
- The procedure for recording of FBO animal welfare checks on Intake Documents/FCI, etc

- The procedure for dealing with injured, casualty and emergency slaughter animals with particular emphasis on the requirement to minimise unnecessary suffering.
- The procedure for non-stun slaughter of animals including systematic checks to ensure that animals do not present any signs of consciousness or sensibility before being released from restraint and do not present any signs of life before undergoing dressing or scalding.
- The checks on slaughter without prior stunning that will be carried out, including
 - frequency,
 - person(s) responsible for monitoring and verification,
 - the indicators used to evaluate unconsciousness and death
- The procedures in place where animals are not unconscious after slaughter or displaying signs of life.
- Operational rules for slaughterhouses as per Annex III Regulation (EC) 1099/2009, where appropriate.

General Welfare Obligations of FBOs

FBOs are obliged to ensure that animals presented at their premises for slaughter are:

- a. Provided with physical comfort and protection, in particular, by being kept clean, in adequate thermal conditions and prevented from falling or slipping;
- b. Protected from injury;
- c. Handled and housed taking into consideration their normal behaviour;
- d. Not showing signs of avoidable pain or fear or exhibit abnormal behaviour;
- e. Not suffering from prolonged withdrawal of feed or water; The water supply system in pens shall be designed, constructed and maintained so as to allow all animals at all times access to clean water without being injured or limited in their movements.
- f. Prevented from avoidable interaction with other animals that could harm their welfare.

On this basis, facilities used for slaughter and related operations must be designed, constructed, maintained and operated so as to ensure compliance with the obligations set out above under the expected conditions of activity of the facility throughout the year. Accordingly the FBO shall declare the stocking densities, throughput rates, staffing requirements etc. and validate these against industry standards and legislative requirements and include such own checks /controls to ensure that these capacities/structures/staffing are routinely monitored and managed with the FBO SOP.

2. Certificate of Competence

The following operations can only be carried out by operatives holding a Certificate of Competence for the relevant operations:

- 1) The handling and care of animals before they are restrained;
- 2) The restraint of animals for the purpose of stunning or killing;
- 3) The stunning of animals;
- 4) The assessment of effective stunning;
- 5) The shackling or hoisting of live animals;
- 6) The bleeding of live animals;
- 7) Particular methods of slaughter prescribed by religious rites (the slaughtering in accordance with Article 4(4) of Regulation (EC) No 1099/2009).

3. Animal Welfare Officer

FBOs killing >1000 livestock units a year are legally obliged to designate an Animal Welfare Officer. The role of the Animal Welfare Officer is prescribed by EU Regulation 1099/2009 and must be written into the FBOs Animal Welfare SOP. The Animal Welfare Officer must report directly to the FBO on matters relating to the welfare of the animals.

The Animal Welfare Officer must hold a Certificate of Competence as referred to under Section 3 above, issued for all the operations taking place in the slaughterhouses for which he/she is responsible.

The FBO may appoint more than one Animal Welfare Officer provided that each holds the required Certificates of Competence for the areas for which they are responsible.

Role of the Animal Welfare Officer

1. To assist the FBO in ensuring compliance with the rules laid down in Animal Welfare Regulations
2. To require that slaughterhouse personnel carry out any remedial actions necessary to ensure compliance with the animal welfare rules.
3. To keep a record of the action taken to improve animal welfare in the slaughterhouse in which he/she carries out his/her tasks. This record shall be kept for at least one year and shall be made available to the OV on request.
4. To systematically assess the welfare conditions of each consignment of animals upon arrival at the plant in order to identify the priorities, in particular by determining which animals have specific welfare needs and the corresponding measures to be taken. This function may be delegated to a person reporting to the AWO.

4. Restraint and Stunning Equipment

- FBOs must ensure that all equipment used for restraining or stunning animals is maintained, and checked in accordance with the manufacturers' instructions by persons specifically trained for that purpose. This includes:
 - a. Calibration of electrical stunning equipment.
 - b. Calibration and measurement of gas delivery systems
- FBOs must maintain a record of maintenance and keep these records for at least one year. The FBO must make this record available to the OV upon request.
- FBOs must ensure that during stunning operations appropriate, well maintained back-up equipment is immediately available on the spot and is used in the case of failure of the stunning equipment initially used. The back-up method may differ from that first used.
- FBOs must ensure that animals are not placed in restraining equipment, including head restraints, until the person in charge of stunning or bleeding is ready to stun or bleed them.
- FBO's must ensure that where an electrical stunner is used, there is an indicator device that measures Current, Voltage and Time to ensure adequate stun. This device must have a visual and audible indication when sufficient stun has been reached.
- In addition, any new electrical stunning device purchased after 1st January 2013 must be fitted with a device which displays **and records** the details of the electrical key parameters for each animal stunned. The device shall be placed so as to be clearly visible to the personnel and shall give a clearly visible and audible warning if the duration of exposure falls below the

required level. Records which are subject to official audit and inspection must be kept for at least one year. *(After 8th December 2019 the requirements detailed in this paragraph must be met by all electrical stunning devices used).*

5. CCTV

- **Where CCTV is used in slaughter plant lairages and slaughter points, the resulting footage must be made available to DAFM staff on request, to allow DAFM staff verify compliance with legislative requirement**

Annex 1

Slaughter without pre stunning – Implementing the derogation permitted in Regulation 1099/2009 Article 4 (4)

Scope:

This Annex applies only to Ruminants and Poultry that are slaughtered without being stunned prior to being bled (as allowed for in derogation to the legislative requirement to stun).

It does **not** apply in cases where animals are stunned prior to being bled (even if it is destined for the Halal, Kosher or other religious markets).

Background:

Slaughter without pre stunning is permitted in legislation, under derogation. It is to be used as an exception and only when required by certain religious rites.

Legislation:

Article 4 of Regulation (EC) 1099/2009 states that in the case of animals subject to particular methods of slaughter prescribed by religious rites, the requirements of paragraph 1¹, shall not apply provided that the slaughter takes place in a slaughterhouse.

1. All FBOs must be approved to carry out slaughter without pre stunning

1.1 Approval Procedure for Food Business Operator Commencing Slaughter without pre stunning in a slaughter plant for the first time

Where a FBO intends to commence slaughter without pre stunning for the first time he/she must provide appropriate documentation and put in place the following requirements prior to commencing slaughter without pre stunning:

¹ Paragraph 1 of Article 4 states that animals shall only be killed after stunning and that the loss of consciousness and sensibility shall be maintained until the death of the animal

The FBO must:

1. Complete an *Application to Commence Slaughter without pre stunning Form* in Appendix 1 indicating their intention to carry out slaughter without pre stunning. This form will be submitted to the OV in charge along with the associated documentation detailed in points 2 to 6 below.
2. Draw up an SOP in compliance with the details of this Annex and associated Trader Notice.
3. Ensure the structural requirements in place are in compliance with this Annex and associated Trader Notice and must comply with Annex II of Regulation (EC) 1099/2009.
4. Provide letters from Customer, which clearly state their requirement that they will only accept animals which have been slaughtered without pre stunning.
5. Provide order forms (both provisional and confirmed) from customers detailing the weight/amount of product required to be produced from animals which have been slaughtered without pre stunning.
6. Ensure relevant staff holds Certificates of Competence in slaughter without pre stunning and related activities (with associated documentation).

Slaughter without pre stunning may not commence until the *Application to Commence Slaughter without pre stunning Form* has been returned to the FBO with a positive decision from the OV and RSVI (signatures of both VI and RSVI required in Part B of the form).

1.2 Approval Procedure for Food Business Operators where Slaughter without pre stunning is currently taking place

This procedure will be the same as detailed above for those applying for slaughter without pre stunning for the first time (in points 1-6 above) but the FBO may continue slaughter without pre stunning until the form is returned by the OV, at which time they must follow the instruction/decision of the OV. The structural requirements detailed in Annex II of Reg. (EC) 1099/2009 must be complied with after January 1st 2019 for slaughter plants with existing structures for slaughter without pre stunning already in place.

2. Ongoing procedures for FBOs that have been approved to slaughter without pre stunning

2.1 FBO must keep the following records;

- a. Letters from Customer clearly stating their requirement that they will only accept animals which have been slaughtered without pre stunning.
- b. Order forms from customers detailing the weight/amount of product required to be produced from animals which have been slaughtered without pre stunning.
- c. Record of FBO estimate of numbers of animals required to meet the weight or amount of product required on order forms.
- d. Record of numbers of animals slaughtered without pre stunning

2.2 The FBO must carry out a weekly reconciliation of the estimated number of animals (as per point 2.1c) deemed necessary to produce the weights/amounts of product on the order documents versus the number of animals' slaughter without pre stunning and present findings to OV together with a documented reason for discrepancies.

2.3 Any changes to the SOP on slaughter without pre stunning must be discussed with and approved by the OV.

- 2.4 The FBO must monitor the practice of slaughter without pre stunning with sufficient frequency to ensure that the operator is complying with relevant legislation and their SOP.
- 2.5 If the slaughter without pre stunning technique is considered unsatisfactory at any time, immediate action **by plant management** (e.g. intervention with stunning and further training) must be taken. A stand-by method of stunning (usually a captive bolt) must be available and immediately at hand and must be used by a competent licensed slaughter man.

3. Minimum requirements to be addressed by FBO in SOP

- 4.1 Procedures as detailed in Section 2 of this Annex
- 4.2 The means by which animals are pre-selected in lairage (Choosing animals with suitable conformation to meet the market requirements/standards of the customers etc.) to minimise the amount of animals slaughter without pre stunning.
- 4.3 The slaughter man must demonstrate his/her competence in welfare, hygiene and slaughter technique. When slaughter without pre stunning is commencing for the first time in a slaughter plant, the slaughter man technique should be assessed by the OV. All people involved in slaughter without pre stunning must have a corresponding Certificate of Competency for tasks they are involved.
- 4.4 Once restrained, the animal should be slaughtered as soon as possible.
- 4.5 The animal must not enter the restraint device until the slaughter-man is ready to slaughter the animal.
- 4.6 The animal should be slaughtered with a single swift cutting movement (one continuous back and forward motion is also acceptable) to the neck with a sharp knife achieving rapid bleed out through the severed blood vessels (both carotid arteries and both jugular veins must be cut).
- 4.7 The knife should be twice the width of the animal's neck and should be cleaned and, if necessary sharpened, after every cut.
- 4.8 The animal must not be released from restraint until unconscious. The FBO must detail the checks they will carry out to determine that the animal is unconscious (See footnotes and Appendix 2). The animal must be unconscious before dragging/shackling.
- 4.9 No further dressing must take place until the animal is completely insensible (See footnotes and Appendix 2). The FBO must detail the checks they will carry out to determine when an animal is insensible.
- 4.10 A time period of **at least** 20 seconds for sheep and 50 seconds for cattle should elapse between the cutting of the animal's throat and shackling the animal on the slaughter-line. This is the **minimum time** that should elapse before hoisting the animal on to the slaughter-line. Notwithstanding this, the FBO must determine that each animal is unconscious² (See footnotes and

² "Unconsciousness occurs when the cerebral cortex, the brainstem, or both, cease to function" "Within the context of the slaughtering process, the foremost sign of unconsciousness is supervening physical collapse and the termination of gross purposeful movements. This indicates that the association functions of the cerebral cortex, which integrate posture and movement, have ceased and that the cerebral cortex no longer operates"

Consciousness: Its ability to feel emotions and control its voluntary mobility. Animal presumed unconscious when it loses its natural standing position, is not awake and does not show signs of emotions such as fear or excitement

Sensitivity: Its ability to feel pain. Animal presumed insensitive when it does not show any reflexes or reactions to stimulus such as sound, odour, light or physical contact.

Appendix 2) after this time frame elapses (see Appendix 2) and before releasing the animal from restraint and shackling and hoisting the animal.

- 4.11 If the slaughter without pre stunning technique is not performed correctly, the FBO must have checks in place to detect the inadequacy and must ensure its immediate correction. Slaughter without pre stunning must cease immediately where the official veterinarian (OV) determines the slaughter without pre stunning technique is not performed in accordance with this Annex.
- 4.12 A stand-by method of stunning should always be present and immediately at hand and must only be used by a competent licensed slaughter-man when required.
- 4.13 The FBO must ensure that a properly trained operative regularly checks (at a predetermined agreed rate with the OV) the implementation of the slaughter without pre stunning technique and records the outcome of such checks. Such checks must include checks on the infrastructure and equipment necessary for slaughter without pre stunning.

Specific Requirements for Slaughter without pre stunning of Ruminants:

- 4.14 In plants where slaughter without pre stunning is undertaken, the use of mechanical means for the restraint of the animal's body and head (for cattle) are mandatory.
 - 4.15 Apparatus that clamps the feet or hoists or drags the sensible animal by the head, feet, or legs must not be used. If the animal's feet are lifted off the ground, prior to being unconscious it is important that the animal's body is fully supported
 - 4.16 The restraining device, including both the body and head restrainers and method must suit the size, species and type of animal slaughtered and must be well maintained.
 - 4.17 Noise (metal clanging/pneumatic pump hissing) levels should be at a minimum.
 - 4.18 Due care must be taken during the loading of the animal into the restraining system to minimize stress and injury. Every effort should be made to avoid use of any electric prods.
 - 4.19 The restraint device and surrounding area must have adequate lighting (lighting should be designed to encourage animals to naturally enter the restraint device), flooring should be non-slip and the parts in contact with the animal should have smooth, rounded surfaces. These surfaces should be inspected at least daily to ensure that worn-out and protruding parts are replaced promptly. The restraint equipment must hold the animal in a comfortable position before and during slaughter without pre stunning. All restraining devices should use the concept of optimal pressure. The device must hold the animal firmly enough to facilitate slaughter without struggle or undue delay.
 - 4.20 Excessive pressure that would cause discomfort to the animal should be avoided. All moving parts of the restraint device should have a smooth, steady movement and jerky motion should be avoided. All mechanized parts of the restraint apparatus that press against the animal should be equipped with pressure limiting devices that will automatically prevent excessive pressure from being applied to the animal. Optimal pressure might be assessed by the absence of struggling behaviour and vocalization during the restraint, and the absence of any injuries and bruises caused by the restraining method.
 - 4.21 The head restraint must be such that it provides good access to the neck for effective neck cutting and bleeding out and it must be such that it is set with the proper amount of neck tension to optimize slaughter.
 - 4.22 The head restraint must be designed to avoid mechanical stimuli (such as physical contact or scraping) and chemical stimuli (such as contamination with stomach content) on the surface of the wound during the conscious period.
 - 4.23 When rotary pens are used, the head of the animal must be restrained before the start of the turning process. The turning operation should proceed smoothly and quickly without interruption to reduce as much as possible the period of animals being restrained in unnatural positions.
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- 4.24 During neck cutting, the head of sheep may be stretched manually in addition to the mechanical restraining of the body. However, to maximize blood loss and minimize mechanical impact (scraping or touching) on the wound following the cut, until the animal is unconscious; it is recommended that the head continues to be supported during the early stages of bleeding.
- 4.25 When using an upright restraint for cattle the belly plate, if used, must be operated according to the concept of optimal pressure to support the animal without lifting it off the ground.
- 4.26 During bleeding, the animals shall be held secure but as relaxed as possible, e.g. the head holder and rump pusher should be partially released immediately after the throat cut but not to an extent where blood flow is impeded.
- 4.27 The cut for ruminants should be made in the Cervical 1 position – close to the jaw bone. The position of the cut can be important in minimising the suffering of the ruminant. Cutting in the Cervical 1 position (close to the jaw bone) will eliminate the transmission of "potentially unpleasant sensory signals associated with blood contaminating the upper and lower respiratory tract" as the sensory nerve to the respiratory tract is severed. Cutting in this position has also been shown to help prevent prolonged periods of sensibility caused by sealing off of the artery ends.

Specific Requirements for Slaughter without pre stunning of Poultry

- 4.28 The restraining device or method must suit the type, size and species of the animals being slaughtered (e.g. the size and design of shackles and cones must be appropriate).
- 4.29 The time of shackling poultry before neck cutting without stunning should be kept to a minimum (maximum one minute). The use of blue lights and a breast comforter to calm the animals during shackling is highly recommended.

Appendix 1 Application to Commence Ritual Slaughter Form

(Using the derogation allowed for in Regulation (EC) 1099/2009, Article 4(4) and Associated Activities)

Part A: To be completed by Food Business Operators and given to VI in charge

Date:

Name and EU number of Approved Establishment:

Species to which application for derogation applies:

Type of Ritual Slaughter Proposed: (Halal or Kosher)

Please indicate the following documentation accompanies this application by ticking in the relevant Yes/No box as appropriate. (If all required documents are not attached the form will be returned):

Documentation	Yes	No
Proposed FBO documented procedures on Slaughter without pre stunning		
Details of Structural requirements in place to deal with proposed slaughter without pre stunning and ancillary activities (e.g. Purging Facilities etc)		
Letters from Customers clearly stating their requirement that they will not accept Animals slaughtered with a pre stun		
Order forms from customers detailing the weight/amount of product required to be produced from animals that have been slaughtered without pre stunning.		
Details of staff training in relation to slaughter without pre stunning and welfare checks		
Other documentation that is deemed necessary in support of your application		

Name of Person in Charge:

Signature of Person in Charge:

Part B: To be completed by VI in charge and signed by VI and RSVI

Has all relevant documentation been received? Yes/No

Decision (Indicating whether the derogation has been approved or not) and justification where appropriate:

Signature of OV:

Signature of RSVI:

A copy of this form, once completed should be given to the FBO. The original should be maintained on file in the OV office in the Ritual Slaughter File.

ANNEX 2

Casualty, Injured, and Emergency Slaughter animals intended for slaughter for Human consumption

This Annex applies mainly to cattle and to a lesser extent to other species.

For the purpose of clarity it has been decided to revise the categorisation of animals that are slaughtered before the end of their normal production cycle (formerly referred to as casualty, injured and emergency slaughter animals):

1. **Type 1** – animals that have been slaughtered *on farm* as a result of traumatic injury and cannot be transferred to the slaughterhouse on animal welfare grounds (see **VPN 01/2013 - Assessment of On-Farm Emergency slaughtered animals at DAFM approved slaughterhouses**)
2. **Type 2** – animals suffering from acute traumatic injury and have been transported to the plant for slaughter.
3. **Type 3** – animals suffering from sub acute/chronic conditions that require TSE and/or residue sampling.
4. **Type 4** – animals suffering from sub acute/chronic conditions that **do not** require TSE and/or residue sampling.

The scope of this Annex relates only to the welfare of these animals and not their fitness for slaughter or fitness for human consumption.

Role of the Food Business Operator

Food business operators are obliged under EU Reg 853/2004 to have an Animal Intake/Animal Welfare SOP which details their **HACCP based intake/welfare procedures**. These must include an animal acceptance procedure that:

“... must guarantee that each animal or, where appropriate, each lot of animals accepted onto the slaughterhouse premises...”

*(f) is in a satisfactory state as regards **welfare** on arrival at the slaughterhouse”*

FBOs are obliged to ensure that nothing in their procurement or animal acceptance procedures could be seen as promoting or encouraging the transport of injured animals that are clearly unfit to travel.

The FBO's SOP must contain procedures for the management of animals which are presented as Type 2, Type 3 or Type 4. If any animal is presented which is suffering the FBO is obliged to inform the OV immediately. The FBO must co-operate fully any measures directed by the OV to alleviate the suffering of the animal (s) including immediate slaughter or euthanasia.

The **Animal Welfare Officer** (or a person reporting directly to the animal welfare officer) is required to systematically assess all animals on arrival in order to identify the priorities; in particular by determining which animals have specific welfare needs and the corresponding measures to be taken. This would apply in particular to injured animals

Reminder of loading densities for poultry

Loading Densities Council Regulation (EC) No 1/2005, European Communities (Animal Transport And Control Post) Regulations 2006, SI 675 Of 2006		
Adult Birds	Floor Area Required	Birds / crate
Weight categories of birds in kg	cm² / kg of bird	Standard Crate 111 X 71 cm = 7881 cm ²
< 1.6	180 — 200	24 — 27
1,6 to < 3	160	16 — 31
3 to < 5	115	14 — 23
> 5	105	15 maximum

Farmed Deer Specific

- Unloading facilities and walkways must be properly designed and constructed with gently sloping solid sides of adequate height. Posts must be constructed outside the fence to prevent injury.
- Deer should be unloaded in a quiet orderly manner directly into the reception and lairage pens. Deer reluctant to unload should be given time to become familiar with their surroundings. As deer move more readily for dark to light the lairage should be lit at this stage but in such a way that deer are not faced with a direct light source.
- Subsequent to unloading the deer should be allowed sufficient time to settle before being handled further. If necessary the lights should be dimmed. If they are suffering from heat stress they may benefit from spraying with water.

Section on Lairage Handling

- Are all the pens provided with drinking water? Are the drinkers functional?
- Are there facilities to allow animals be fed if required?
- Are passageways sufficiently wide to allow animals move without forcing?
- If passageways are directed round 90° turns, could this result injury to animals moving under pressure?
- Are the floor surfaces of passageways in good condition?
- In slatted lairages, are floor surfaces in good repair, and without damage, this is particular significance in slatted sheep lairages, where individual animals could suffer limb injuries.
- Is there evidence of overloading of pens?
- Is animal feed and adequate water available for animals held overnight?

Poultry Specific

- Are the floor surfaces in good condition?
- Is the lairage covered and does it protect the birds

Farmed Deer Specific

- Pen sides should be solid with no projections and be of adequate height to prevent escape and injury. Posts must be constructed outside the fence to prevent injury.

Section on Movement To Stun

- Is the race provided with non-return gates to prevent backward movement of animals?
- Is there excessive use of force during the movement of sheep to restrainer / stun area?
- Is there excessive use of the Goad?
- Are restrainers in use for the movement and control of sheep and pigs to the stunning point?
- Is there excessive vocalisation?
- Are there unnecessary delays?
- Are animals being left in race/stunner over breaks?

Poultry Specific

- Birds should be killed without undue delay.
- Is hang-on carried out so that birds are handled gently, caught by both legs and both legs are moved down into the bottom of the shackles?
- Hang-on to stun should be in dim lighting
- Interval to stun should not exceed 60 seconds in broilers and 2 minutes in turkeys ducks and geese.
- Breast comfort bars should be fitted all the way to entry to the stun bath
- The leg-shackle spray should wet the contact between the leg and the shackle to allow for optimum stun
- The level of the water-bath stunner should be adjusted between loads so as to ensure bird's heads are submerged
- Undersized birds should not be placed in the shackles as they will not reach the water level and will not be stunned. These birds must be euthanized without delay in the hang on area.
- Runts should not be loaded at the growing farm.

Fallen & escaped birds

- Birds that escape from crates should be caught as soon as possible and hung on before the end of the load
- Birds that fall off the line after hang on and before slaughter should be caught and re-hung before the end of the load
- Birds that fall off at entry to the water bath stunner are often wet and may suffer hypothermia, shock and should be re-hung at intervals sufficient to avoid unnecessary suffering
- Where a bird falls into or at the exit from the water bath stunner and is alive, the lairage/killhouse operative will stop the line, retrieve the bird, taking into account

health and safety and either hang the bird on again or if necessary euthanize the bird if moribund.

Line Breakdown

- Broilers should be removed after 60 seconds of a breakdown and 2 minutes for turkeys, ducks and geese
- When the breakdown has been resolved killing should only resumes when machinery and personnel are ready.

Farmed Deer Specific

- After settling, deer should be slaughtered within the shortest possible time. In general, they should not be left in the lairage for more than 3 hours. They should not be kept overnight except in an emergency in which case they should not be penned in close confinement since fighting can occur when they are left undisturbed.

Section on Slaughter Procedure

- Are the stunning box/ restrainer of a size compatible with the type of animal slaughtered at the plant?
- Is effective head restraint (where necessary) possible to facilitate the proper use of captive bolt pistols/electrical stunning, where used?
- Does the operative have ready and easy access to the animal?
- Is the stunner correctly applied?
- Is there an adequate stun (immediate collapse, fixed eyes, no rhythmic breathing, no corneal reflex)?
- In the case of captive bolt or electrical stunning equipment, is stand by equipment readily available?
- Where electrical slaughter is used is there an indicator device that measures Current, Voltage and Time to ensure adequate stun and is there a visual and audible indicator when sufficient stun has been reached. The requirement to record electrical parameters does not apply to equipment in place prior to January 2013 and only applies to new equipment purchased up to December 2019 after which all equipment must be compliant. However the FBO must be able to demonstrate that the correct electrical parameters are being applied in accordance with 1099/2009.

In bovine/equine slaughter plants the easiest procedure* for monitoring the efficiency of captive bolt stunning is a visual inspection of the skinned heads after removal from the carcase. Such an inspection will allow for

- Appraisal of the siting of the captive bolt pistol
- Whether a single shot or multiple shots were used to stun the animal (possibly indicative of a box with poor operative access or lack of operator skill).

*This procedure for monitoring must be carried out in addition to observing the clinical signs when stunning is in operation.

Pig Specific

- In the case of pigs does the chamber allow the animals to remain upright until they lose consciousness?

- In the case of electrical head only stunning, do the electrodes span the brain and adaptable to its size; is the minimum current greater or equal to 1.3 amps?
- Is the concentration of carbon Dioxide >80%
- Is the chamber fitted with a device for measuring the gas concentration at the point of maximum exposure and which gives a visible / audible warning in the event of CO2 falling below the required level?
- Pigs should be conveyed as rapidly as possible from the entrance to chamber to the point of maximum concentration of gas and shall be exposed to it for long enough to ensure that they remain unconscious until they have been killed.

Farmed Deer Specific

- The animals must be suitably restrained at stunning, using a stunning box approved by the competent authority which is the correct size and height for the intended animals.

Farmed Deer and Pig Specific

- The front of the box should have a diffused light source to which the deer/pig will be attracted. The light should not shine directly into the eyes of the deer/pig.

Poultry Specific

- Birds must not be subjected to pre-stun shocks
- Observe that water bath is at correct level so that all birds heads are submerged. Birds must be unconscious or dead from stun to completion of bleed-out. This can be verified by signs of death as detailed in Animal Welfare SOP
- Neck cutting should follow stunning immediately. A manual back-up to automatic neck-cutting must always be present
- Birds should be exposed to the current for a minimum duration of at least 4 seconds
- Both carotid arteries must be severed, resulting in profuse bleeding
- Check that birds are not being missed at neck cut and that they are dead before the head puller and before they enter the scald tank.

Electrical requirements for water bath stunning equipment

COUNCIL REGULATION (EC) No 1099/2009 Electrical requirements for water bath stunning equipment (average values per animal)				
Frequency in Hz	Current in mA			
	Chickens	Turkeys	Ducks and Geese	Quails
< 200	100	250	150	45
200 - 400	150	400	Not permitted	Not permitted
400 - 1500	200	400	Not permitted	Not permitted

Signs of live stunned, dead and recovering birds

LIVE STUNNED	DEAD
Rigid carcase	Limp carcase
Body tremors	
Neck arched with head extended upwards may not work in hens	Head and neck hanging limply
Wings held close to body	
Rigidly extended legs	
No breathing movements for 15 – 20 seconds	No breathing movements
Eyes open	No nictitating membrane reflex
	Pupil dilated
RECOVERY	NO RECOVERY
Return of rhythmic breathing	
Return of neck muscle tone	
Body relaxes	

Sections on Stun to Stick/Bleeding Interval and Sticking/Bleeding

Is the “stun to stick/Bleeding” time interval sufficiently short to ensure that the animal is not regaining consciousness prior to being bled out?

Is Sticking/ Bleeding carried out satisfactorily?

Section on Stick/ Bleeding to Dress Interval

Is the “Stick/Bleeding to Dress” time interval sufficiently long to ensure that Further dressing or scalding shall only be performed once the “absence of signs of life “of the animal has been verified

Section on Slaughter without Prior Stunning

Is slaughter without prior stunning carried out in compliance with the requirements detailed in Annex 3 of this Animal Welfare SOP?

Annex 3

Guidelines on signs of Unconsciousness and Death in Animals at slaughter

According to Council Regulation (EC) No 1099/2009, on the protection of the animals at the time of killing, animals must be rendered unconscious and insensible by the stunning method and they must remain so until death occurs through bleeding. One way of achieving this animal welfare requirement would be to monitor the state of consciousness/sensibility and unconsciousness/insensibility in animals during three key stages: (1) immediately after stunning, (2) at the time of neck cutting or sticking and (3) during bleeding until death occurs. Within the scope of this Regulation, it is the responsibility of the Food Business Operator (FBO) to ensure that animal welfare is not compromised from the time of their arrival until they are slaughtered.

- The individuals performing stunning must have a certificate of competence awarded after training and assessment by independent organisations, of his / her knowledge and skills required to recognise the signs of both effective and ineffective stunning and, in the event of a failure, re-stun the animal.
- Secondly, the individuals performing slaughter (neck cutting or sticking) should also have certificate of competence that would require the person to be aware and have the skills required to perform checks for the signs of recovery of consciousness and sensibility prior to neck cutting or sticking to ensure that every animal is unconscious at the time of neck cutting or sticking. This operator should also be able to ascertain the possibility or potential for recovery of consciousness in animals during bleeding and take action, if necessary (e.g. use back up stunner).
- Finally, the person in-charge of the overall animal welfare at slaughter (e.g. Animal Welfare Officer) should be able to monitor the animals during bleeding and ensure that they do not show any signs of consciousness and sensibility and also death occurs before further carcass dressing operations begin. Operators need to be aware and have necessary skills to recognise signs of unconsciousness, consciousness and death.

The following table is a summary of the signs of unconsciousness and death in animals:

SIGNS OF UNCONSCIOUSNESS	
1. Immediate collapse	
2. Immediate onset and sustained absence of rhythmic breathing	(Effective stunning will result in immediate and sustained absence of rhythmic breathing (apnoea): absence of respiratory cycle (inspiration and expiration occurring usually through the nose). It will be indicated by absence of regular flank and/or mouth and nostrils movement.)
3. Immediate onset of tonic seizure, followed by clonic seizures	(Tonic-clonic seizures are caused with

correct electrical stunning. They are divided into two phases: (i) Tonic phase: Immediate loss of consciousness, skeletal muscles will tense, lasts a few seconds (recognized by arched back and rigidly flexed legs under the body in cattle) and (ii) Clonic phase: Skeletal muscles contract and relax rapidly
4. No responses to a nose (muzzle) prick or ear pinch (unconscious animals will not show a reaction to a painful stimulus such as a pin prick to the muzzle (area between external nostrils) or the ear with a sharp instrument)
5. No responses to comb or toe pinching (poultry)
6. No righting reflex (i.e. attempts to regain posture)
7. No attempts to raise the head
8. Loss of muscle tone (Unconscious animals will show loss of muscle tone in ears, jaws, tail and protrusion of tongue. The ears, jaws and tail are hanging, floppy - without any muscle tone- and tongue is protruding out of the mouth.)
9. No regular gagging
10. No wing flapping
11. Completely relaxed body
12. No vocalisation
13. Dilating pupils (Unconscious animals show gradual widening of pupils)
14. Fixed eyes (Correctly stunned animals will show fixed eyes: they are wide open and glassy, and no nystagmus (spontaneous rapid side to side (twitching) movements of the eyeballs). They will also not show eyeball rotation, in which the eyeball rolls so mostly pink sclera can be seen and little or no iris.)
15. No palpebral reflex (blinking (fast or slow) in response to stimulus of the palpebrae)
16. No corneal reflex (blinking (fast or slow) in response to stimulus of the cornea).
17. No spontaneous blinking

SIGNS OF DEATH	
1. Dilated pupils	
2. Absence of breathing	
3. Complete loss of muscle tone (In dead animals there is a loss of muscle tone. This involves a loss of posture: the body is floppy and limp, the animal will not actively stretch or withdraw head or extremities.)	
4. No response to nose prick	
5. Permanent collapse of the animal	
6. End of bleeding (In dead animals the blood from the exsanguination cut is no longer flowing, only minor dripping can be seen)	
7. Absence of heart beating	
8. Absence of pulse	
9. Absence of gagging-gasping	

Meat Hygiene Division

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