

Pigmeat Quality Assurance Scheme

Pig Producer Standard

Revision 04, July 2014



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I. Introduction

1. Introduction

The Pigmeat Quality Assurance Scheme was developed by a Technical Advisory Committee representing Bord Bia – Irish Food Board; Teagasc; the Food Safety Authority of Ireland; the Department of Agriculture, Food and the Marine; industry (producers and processors) and technical experts.

This Producer Standard replaces the previous Producer Code of Practice (Revision 02, issued in January 2006).

1.1 OBJECTIVES

The primary objectives of this Standard are:

- To set out the requirements for best practice in pig production at farm level,
- To provide a uniform mechanism for recording and monitoring pig quality assurance criteria on the farm with a view to achieving continuous improvement in production standards,
- To provide a means of demonstrating best practice at producer level,
- To convey, through the use of the Bord Bia Logo, to both retailer and consumer that the pigmeat is produced to the highest standards.

1.2 PARTICIPATION

The Pigmeat Quality Assurance Scheme is voluntary and application for membership certification is open to all Producers who have a valid National Pig Identification and Tracing Scheme herd number and who wish to participate.

Certification to the standard, however, will only be granted to Producers who meet the relevant requirements (see also Section 2.2, Control and Monitoring).

1.3 LEGISLATIVE REQUIREMENTS

This Standard has been prepared bearing in mind the key legislative requirements relevant to pig production and animal welfare (see Reference Information, Appendix 1) and the requirements of the following:

- Recognised international quality management standards such as ISO 9001:2008 (Quality Management System – Requirements) and ISO 22000:2005 (Food Safety Management).
- Hazard Analysis and Critical Control Point (HACCP) as outlined by Codex Alimentarius (1997).
- Relevant national and EU legislative requirements.
- Other relevant national and international codes of practice / standards.
- EN 45011 (1998) / ISO17065 (2012) outlining general requirements for bodies operating product certification systems.

It is also recommended that producers consult with their agricultural and veterinary advisors and regulatory authorities.

1.4 DATABASE INFORMATION

The name of each certified Producer will be listed on a published Bord Bia register / database.

1.5 DEFINITIONS

Bord Bia: the Irish Food Board.

Certification Committee: the Committee to which the Quality Assurance Board has devolved responsibility and authority for all certification decisions with regard to membership of the Scheme.

Certification Period: this will be 18 months from the date of certification under the Scheme or until the next audit.

Certified Producer: a Producer that is certified under the PQAS and is shown on the PQAS register / database.

DAFM: the Department of Agriculture, Food and the Marine.

Farm: the land under the control of the participating herdowner and the pig enterprise that is operated by the herdowner.

Farm Auditor: the independent auditor carrying out the farm audits.

FAWAC: the Farm Animal Welfare Advisory Council

FQAS: the Bord Bia Feed Quality Assurance Scheme.

FSAI: the Food Safety Authority of Ireland.

HACCP: Hazard Analysis Critical Control Point, an internationally recognised system for the identification and control of hazards relating to food safety.

HACCP plan: a plan, based on HACCP principles, for the prevention and control of hazards in the food chain.

Housing Types

- **Controlled housing conditions:** a type of animal husbandry where pigs are kept indoors at all times and for their whole life under conditions controlled by the food business operator with regard to feeding, housing and biosecurity of the holding.
- **Free-range farmed:** a type of animal husbandry where pigs have free access to fields/woodland with defined boundaries for all or most of their natural life. They receive their nutritional needs from prepared natural feed or from pasture or forage depending on the season.

NPITS: National Pig Identification and Traceability Scheme

Producer: a DAFM registered Pig Producer with a valid NPITS herd number.

Producer Standard: this consists of the requirements as set out in Sections 1, 2 & 3 of the Bord Bia Pigmeat Quality Assurance Scheme: Pig Producer Standard and the associated Appendices (Section 4).

PQAS: the Bord Bia Pigmeat Quality Assurance Scheme.

PQAS Register / Database: the register / database of the current certified Producers indicating their certification status.

Pig Unit¹: the pig production building or group of buildings that are under the common management of a herdowner that have a same herd number and that are located on a single site.

Quality Assurance Board: an independent subsidiary board within Bord Bia that has overall responsibility for policy, certification and appeals within the Bord Bia Quality Assurance Schemes.

Residues:

- Residues can arise from the use of products that are:
 - Unauthorised where administering of the substances or products to animals is prohibited under European Community legislation;
 - Authorised where the substances or products are authorised under European Community legislation, but result in a residue that is above the maximum residue level (MRL) for the meat.
- Residue means a residue of substances having a pharmacological action, of their metabolites and of other substances transmitted to animal products and likely to be harmful to human health.

Scheme: the Pigmeat Quality Assurance Scheme consists of two elements:

- The Producer Standard (PQAS Revision 04, July 2014),
- The process for ensuring that the requirements as set out in the Standard are met (through auditing, certification, etc.).

Teagasc: the Agriculture and Food Development Authority.

VWD: a Veterinary Written Directive – a document created by a veterinarian containing the details required to authorise the administration of an animal remedy to an animal or group of animals.

1.6 CAUTIONARY NOTES

Although every effort has been made to ensure the accuracy of this Standard, Bord Bia cannot accept any responsibility for errors or omissions.

Compliance with this Standard does not guarantee compliance with all relevant legislation.

Bord Bia is not liable for any costs or potential or estimated loss of earnings resulting from having to comply with any requirement of this scheme or in regard to the consequences of being found to be in breach of any requirement.

All references to legislation in the text of this Standard are given on an “as amended basis”.

¹ Note Re Definition of Pig Unit:

- S.I. No 341 of 2002 – Diseases of Animals Act 1966 (National Pig Identification and Tracing System) Order 2002 defines a (pig) ‘holding’ as “land, including any building thereon, used for or in connection with keeping pigs for breeding or food production but does not include parcels of land that are not contiguous” (Regulation 2(1)).
- Council Directive 2008/71/EC on the identification and registration of pigs defines a holding as “any establishment, construction or, in the case of an open air farm, any place in which animals are held, kept or handled”; (Article 2 (b)).

2. Scheme Regulations

2. Scheme Regulations

This section contains important general information and Producers should read and fully understand this section.

2.1 MEMBERSHIP REQUIREMENTS

2.1.1 *Application Process*

Producers seeking membership must apply to Bord Bia. This can also be done through the Meat Processor. An application form will need to be completed. On receipt, the application will be evaluated by Bord Bia and where appropriate, a full independent audit will be carried out. As part of the audit the Producer will be required to complete a Declaration Form (see Appendix 2).

When the Producer is deemed to have complied with the requirements of the Standard, as determined through the independent audit, the Producer will be considered for certification under the Scheme (See Section 2.5). If certified, the Producer will be issued with a certificate of compliance.

2.1.2 *Producer Eligibility*

Producers that have been convicted of an offence under legislation relating to animal health, animal welfare, animal remedies, animal identification, animal feeds, animal carcass disposal / by-products, environmental pollution or farm safety will be excluded from participation in the Scheme for a period of 3 years after conviction.

In addition, if, during the period of validity of the certificate, the Producer is convicted of such an offence the producer is obliged to advise Bord Bia. The Certificate will be revoked and the Producer will be withdrawn from the Scheme. Failure to inform Bord Bia of a conviction will also be deemed as not having met the conditions of membership.

Applicants must be able to demonstrate that the unit / herd is in compliance with the DAFM National pig salmonella control programme requirements where applicable and must agree to permit DAFM to advise Bord Bia of the status of the herd, on an on-going basis.

2.2 CONTROL AND MONITORING

2.2.1 *Control*

Overall control of the Scheme will be exercised by the Bord Bia Quality Assurance Board. This Board is representative of the relevant sectors of the food industry and collaborates with the Technical Advisory Committee, which is responsible for drafting the standard and formulating required amendments.

The decision of the Quality Assurance Board on any matter relating to the control or operation of the Scheme is final.

2.2.2 *Monitoring*

Monitoring of Producer compliance with the requirements of the Producer Standard will be carried out by Bord Bia or its nominated agents through audit.

Each Producer will be independently audited at determined intervals. The maximum interval between successive audits will be 18 months. Independent auditors with relevant sectoral experience will carry out these audits and a report will be issued directly to the Producer.

Bord Bia (or its appointed agents) reserves the right to carry out unscheduled audits on an announced or unannounced basis for the purpose of verifying compliance with the requirements of the Standard or to

determine that corrective / preventive actions specified during audit are in place. Failure to permit access to such an auditor may result in the suspension of the herd from the Scheme.

Bord Bia (or its appointed agents) reserves the right to remove samples for independent analysis (feed, water, animal tissues, etc.) to establish compliance with the Standard.

Auditors are entitled to seek access to relevant regulatory reports.

The full onus of responsibility for compliance with the requirements of this Producer Standard is on Producers participating in the Scheme and not on Bord Bia or its agents or any other third party.

2.3 REQUIREMENT CATEGORIES AND APPLICATION OF NON-COMPLIANCES

2.3.1 Requirement Categories

Requirements of this standard are classified as “Critical” or “General” (see Section 3).

Critical requirement: Critical requirements are printed in bold, underlined typeface and identified in the text as **Critical**, they relate to areas of high significance (e.g. food safety and traceability).

General requirement: A general requirement is printed in normal typeface. General requirements are core best practice requirements

2.3.2 Application of Non-Compliances

Critical Where a non-compliance against a **Critical** requirement is identified, applicants cannot be certified to this Standard and existing certified Producers cannot continue to supply pigs under the Pigmeat Quality Assurance Scheme.

Note: the Producer can re-apply when evidence is available that the problem has been rectified.

General For existing certified Producers, where one (or more) non-compliance against a General requirement is identified, the Producer must give an immediate commitment in writing to the auditor to implement corrective action and must be able to demonstrate that each such non-compliance has been addressed, within a 2 month period.

In the case of new applicant Producers, all General non-compliances must be closed out to be eligible for certification.

Bord Bia reserves the right to carry out independent verification of the implementation of such corrective action.

2.4 RECOMMENDATIONS FOR BEST PRACTICE

There are a number of recommendations for best practice included in this standard (see Section 3, Producer Requirements). These are printed in italics with a green background and are numbered (R 1, R 2, etc.).

Compliance with these requirements is not mandatory for certification. This may be revised at a future date in consultation with the Technical Advisory Committee.

2.5 CERTIFICATION DECISIONS

The decision to grant, extend, withdraw or suspend certification to / from a Producer is made by the Certification Committee. This decision is made primarily on the basis of the audit findings, but other factors, which may be recorded by the auditor or may come to light after the audit (such as failure to meet regulatory compliance), may be taken into consideration. The decision is published on the PQAS database and the current status of the herd can be verified by entering the herd number in the following link: <https://qas.bordbia.ie/Pig/Verify/>

In addition, a certificate may be printed from the PQAS database which can be used as evidence of certification under the PQAS, but may not be used for any other purpose without the permission of Bord Bia. In the event that certification is withdrawn, the certificate must be returned and the Producer will be removed from the register of certified Producers.

Certificates are issued subject to the following conditions:

- That farmers may make claims regarding certification only in respect of the scope for which the herd has been certified;
- That certification is not used in such a manner as to bring Bord Bia into disrepute and farmers must not make any statement regarding the herd certification which Bord Bia may consider misleading or unauthorised;
- That no certificate, report, or any part thereof is used in a misleading manner;
- That farmers comply with the requirements of Bord Bia where reference is made to Bord Bia certification in any communication media such as documents, brochures or advertising.

2.6 APPEALS

The Producer may appeal decisions in relation to certification status by writing to Bord Bia within two weeks of the date of issue of the audit result.

The request to appeal will be acknowledged and followed up by Bord Bia, however, the final decision in relation to the appeal will be made by the Bord Bia Appeal Committee.

2.7 COMPLAINTS

The Producer may complain with regard to the audits or any other aspect of the operation of the Scheme. All complaints must be in writing and must be addressed to Bord Bia. All such complaints will be acknowledged and investigated.

2.8 REVISION UPDATES

Users should note that only this latest edition (Revision 03) now applies. When future changes occur, updates will be issued in whole or in part and the obsolete sections must be destroyed.

2.9 NOTIFICATION OF CHANGE

In the event that the status of the certified Producer changes (e.g. change of ownership, change of herd number, change of scope of operation), Bord Bia must be immediately informed and will decide upon the appropriate actions required (e.g. re-audit, extension etc.).

3. Producer Requirements

3. Producer Requirements

All requirements against which compliance will be determined through independent audit are listed in this section (Section 3: Requirements) and are numbered in the following manner 3.1.a; 3.5.d; etc. Where the requirement is categorised as “**Critical**”, it is printed in bold, underlined typeface and identified in the text as (Critical). Where the requirement is categorised as “General”, it is printed in normal typeface.

All recommendations are numbered as R1, R2, etc. and are presented in green shaded panels. Compliance with these recommendations is not mandatory.

Background information is presented in blue shaded panels and this information is intended to give the context of the requirements that follow. No requirements against which audits will be conducted are contained in the background information panels.

Appendices are listed in Section 4 and these may contain guidelines for information purposes, or may be mandatory as indicated in the text of the relevant requirement below.

3.1 OVERALL REQUIREMENTS

- a) **If a non-compliance in a Critical requirement is identified during routine checks or at any other time, Bord Bia must be notified immediately (Critical).**
- b) All pig producers must be registered with DAFM under the National Pig Identification and Tracing Scheme (NPITS) or the equivalent body in other jurisdictions. Evidence of this registration must be available.
- c) All incoming weaners or store pigs must be sourced from Bord Bia certified farms.
- d) Only assured pigs are permitted on a certified farm.
- e) Weaners or store pigs intended for finishing or slaughter as assured pigs must not be purchased from marts or from pig dealers at any stage.

3.2 RETENTION OF RECORDS

Background Information

This Standard reflects the current requirements of customers of Irish pork and bacon. The requirements relate to production standards, animal health, animal welfare, food safety and traceability.

Applicants will be audited against the requirements of the Standard, and during the audit the auditor will seek to establish through observation, questioning and the assessment of relevant records that the producer meets all the requirements. The retention of good records is a vital prerequisite to participation in the Scheme.

- a) All specified herd records (as specified in this standard) must be retained for a minimum period of 3 years; Veterinary Written Directives (VWD) (i.e. prescriptions) and animal remedy records (both purchase and usage) must be retained for 5 years.

- b) Records must be readily available at all times and must be complete and without gaps since joining the scheme.
- c) Each pig producer must have up to date plans that include Health and Welfare, Salmonella Control Policies, HACCP plan, and Hygiene Plan and these must be equivalent to Appendix 3 at a minimum (see also 3.8.f regarding veterinary involvement).
- d) The producer must maintain and have available for inspection all Processor notifications particularly those relating to illegible slap marking / identification, carcass bruising, cleanliness of pigs and broken needles.
- e) Evidence must be available that a corrective action programme was put in place to address the issues raised in the Processor notification(s).
- f) Producers must retain a copy of and be conversant with the contents of the Bord Bia PQAS Producer Standard.
- g) A site map must be maintained and be available for inspection.

3.3 IDENTIFICATION AND TRACEABILITY

Background Information

This Standard seeks to assure the retailer and the consumer regarding the traceability of the meat back to the source farm. Producers must be aware of the importance of being able to establish full traceability for all pigs reared on their farms. Producers must be registered with the National Pig Identification and Tracing Scheme (NPITS) and guidelines are available from DAFM website.

- a) A record of all pig sales and all on-off farm movements must be maintained in accordance with the NPITS requirements.
- b) Where pigs are transferred to another unit with a different owner, they must be ear tagged or slap marked with the herd no. of the farm of origin and the transfer recorded in accordance with the NPITS requirements.
- c) Animals must be identified clearly (using slap markers or ear tags) in manner that ensures that the herd no. is clearly legible in the abattoir.

3.4 MANAGEMENT RESPONSIBILITY

Background Information

The availability of trained and competent staff is essential to achieving good standards of production.

- a) Each pig producer must appoint a designated person with responsibility for the implementation of the requirements of this Standard.
- b) The designated person must have undertaken welfare training provided by DAFM or Teagasc or a Bord Bia approved trainer.
- c) The experience, qualifications and training of all stockpersons employed by the producer, either full-time or part-time, must be recorded.

R 1. Ensure that staff members with limited competency in the English language have relevant training materials and documentation available in a language in which they are competent.

3.5 ANIMAL REMEDIES

Background Information

All animal remedies approved for use in food producing animals in Ireland are currently authorised by the Irish Medicines Board (IMB) or by the European Medicines Evaluation Agency (EMA) and they carry a formal approval number.

Care should be taken to follow veterinary recommendations and/or label instructions to ensure optimum results and to avoid risks to livestock, producers and consumers. Irish and EU law requires farmers to keep separate records of animal remedies purchased or received and animal remedies administered or used. This requirement applies to all remedies, both prescription remedies and non-prescription products like anthelmintics.

Producers will be aware that random and targeted testing of both live pigs and carcasses is routinely conducted under the relevant regulations to check for the presence of residues including animal remedy residues.

Good farming practice includes the correct storage of animal medicines in a locked store and the safe disposal of unused/empty/expired animal medicine containers and used needles and syringes. The storage requirements are detailed on the product label or package insert. Disposal involves collecting and storing all hazardous waste in a suitable clearly labelled container that is separated from other waste and disposed of in a safe and environmentally friendly manner. This may be at a local authority facility or through a licensed collection service or a veterinary surgeon or pharmacy who may dispose of expired/unused remedies for clients. See Waste Management Act 1996 as amended 2001 or contact your local authority for further information. See also Environmental Protection Agency (EPA) Waste Catalogue and Hazardous Waste List on the EPA website.

- a) Records must be available indicating effective on going contact with the nominated veterinary practitioner in accordance with the animal remedies regulations.
- b) **Only authorised remedies, including vaccines, that carry a VPA, EU or other official approval number and were purchased from legally approved sources are permitted to be used on the farm (Critical).**
- c) **Animal remedy purchase and usage records must be available (Critical).**

- d) To ensure that all animal remedies purchased are clearly and readily traceable the following information must be recorded and retained:
- i. Date of purchase;
 - ii. Product name;
 - iii. Quantity purchased;
 - iv. Batch number of the product;
 - v. Product expiry date;
 - vi. Name of supplier of the remedy.
- e) Label instructions with respect to target species, dosage rates and withdrawal periods must be strictly observed to ensure successful administration and to avoid any risk to livestock, workers, consumers or the environment. This must be verified via the animal remedy records.
- f) For each remedy administration, the following information must be recorded and retained:
- i. Date of administration;
 - ii. Authorised name and quantity of the remedy administered;
 - iii. Identity of the animal/animals to which the remedy was administered (for group administrations the records must clearly identify the pen number of the pigs that were treated and the number of pigs);
 - iv. Date on which the withdrawal period ends;
 - v. Name of the person administering the remedy;
 - vi. Name of prescribing vet if applicable;
 - vii. Name of supplier of the animal remedy.
- g) **Records must demonstrate that where animal remedies were administered either directly or through feed / water, the animals were not dispatched for slaughter before the expiry of the withdrawal period (Critical).**
- h) If pigs are fed medicated feed, either purchased or home mixed, the producer must retain for 5 years and make available for inspection the relevant VWD (i.e. prescriptions).
- i) **Where feed is medicated on site a current licence must be available from DAFM (Critical)**
- j) All animal medicines must be maintained in a dedicated (i.e. isolated from other products such as farm chemicals) locked store and must be returned to the store immediately after use.
- k) All medicines must be retained in their original labelled container, with a visible approval number.
- l) All vaccines must be stored in a dedicated refrigerator, maintained at 2 - 8°C.
- m) All expired animal remedies, or those that have been stored inappropriately, must not be used and must be removed from the medicines store and stored securely pending safe disposal.
- n) The quantity of unused/expired medicines returned to the supplier for disposal must be recorded in the animal remedy records.
- o) Sharps and empty medicine bottles/containers must be controlled pending safe disposal in clearly labelled containers.
- p) Where a hypodermic needle breaks and remains in the injection site, the following procedure must be observed:
- i. The pig must be tagged or marked and the number recorded;
 - ii. The producer must notify the processor via the Food Chain Information form;
 - iii. A copy of the notification must be retained in the farm records.

Note: 3.5.g above re withdrawal period.

- q) All medical equipment must be stored separate to farm chemicals and other hazardous products and maintained in a safe and clean environment.

R 2 Ensure that all persons involved in the administration of animal remedies are competent based on experience and/or training to perform the tasks required.

3.6 RESIDUE PREVENTION

Background Information

Producers will be aware of the need to ensure that pigmeat is free of undesirable residues. This is achieved through control and through education to ensure that all staff are fully aware of the factors that contribute to the incidence of undesirable residues. All products with a withdrawal period must be considered – antibiotics, vaccines, acaricides (mange), vitamins, anthelmintics, etc.

Producers will also be aware of the importance of avoiding low level medication through inadvertent dosing or medicating for less than the prescribed period, as this may result in the development of anti-microbial resistance in pigs.

- a) Producers who engage in on-farm mixing of feed must be registered by DAFM and approved by Bord Bia. Documentary evidence of this registration and approval must be available for inspection.
- b) Home mixers who incorporate medicinal additives under VWD (i.e. prescription) must be licensed by DAFM. A copy of the current licence must be available for inspection.
- c) All bulk feed storage bins and feed bags must be clearly numbered / labelled and those containing medicated feed must be clearly identifiable.
- d) Where medicated feed is fed to pigs for slaughter the withdrawal feed must be stored in a separate bin or compartment.
- e) Where medicated feed is supplied to a target group of pigs, steps must be taken to prevent the medicines being inadvertently administered to any other pigs.
- f) A schedule of dosage rates and withdrawal periods for all products that have a withdrawal period must be displayed in an area where it is clearly visible to all staff (ideally on a notice board beside the medicine store).
- g) All pigs receiving medication must be clearly identifiable until the withdrawal period for the product in use has expired.
- h) **The use of all medicinal feed additives, including antibiotic based growth promoters and digestive enhancers, for non-therapeutic purposes is prohibited (Critical).**
- i) Where a residue was suspected based on the screening test, evidence must be available that the producer involved his veterinary surgeon to investigate the situation and to establish a corrective action programme.
- j) **If a sample taken during residue sampling¹ is confirmed to contain a residue (or unauthorised substances or products exceeding the maximum residue level), the producer must immediately cease to supply pigs under the PQAS and advise the relevant meat processors and Bord Bia. (Critical)**

¹ Sample taken as per EU Residue Directive (EC) 96/23 in Appendix 1.

3.7 ANIMAL FEED AND WATER

Background Information

Producers will be aware of the need to design feed and water delivery systems to avoid the effects of bullying due to design inadequacy, and to ensure that all pigs over two weeks of age have permanent access to a sufficient quantity of fresh water.

Correct nutrition of the animal is vital to good health and food safety. Producers will be aware of the need to ensure that the feed regime of all pigs is maintained during unexpected events or unplanned absences. Producers will also be aware that random and targeted testing of live animals, carcasses and feedstuffs is routinely conducted by DAFM to check for the presence of residues.

Feed

- a) The producer must maintain compound feed delivery records/home mixed feed production records that show the list of ingredients, batch number, quantity, delivery/production date, mill licence number, expiry date and nutritional data for each feed type.
- b) **Producers must only purchase compound feed/ feed ingredients for home mixing, other than farm to farm cereal purchases, from DAFM registered suppliers that are also certified under the Bord Bia Feed Quality Assurance Scheme (FQAS) (when introduced) (Critical).**
- c) **Where food industry by-products are fed to pigs on the farm, documentation that demonstrates the identification and traceability of these products to Bord Bia FQAS approved sources must be available (Critical).**
- d) All producers engaged in the home mixing of feed on the farm must maintain appropriate production records.
- e) **The use of all animal proteins, with the exception of milk and egg protein products, is prohibited in pig feeds, however, fishmeal and blood based products may be used if clear evidence of a current DAFM licence / approval for their use is available for inspection. (Critical)**
- f) All feed must be readily identifiable and stored separated by type in clean dry conditions to prevent deterioration or contamination.
- g) Medicated feed must be separated from non-medicated feed and must be clearly labelled and identified
- h) The contamination of feed by domestic animals and birds must be prevented.
- i) All pig feed must be used before its expiry date.
- j) In the event that a feed or feed ingredient delivery is unsuitable, the rejection of this delivery and the appropriate corrective action taken must be recorded (in accordance with the HACCP Plan).
- k) **The feeding of swill is prohibited (Critical).**
- l) Where feed ingredients are purchased for home mixing, Producers must comply with the requirements of the FQAS (when introduced); feed samples that are labelled with the name of the ingredient, the supplier and the delivery date, must be retained for 3 months in a vermin proof container.
- m) Chemicals, oils and other potentially toxic substances including paints, preservatives, detergents, disinfectants, etc. must be kept isolated from pig feed to prevent any accidental spillage contaminating the feeds.

- n) A system must be in place to ensure that the feed and water requirements of the stock are maintained in the event of a power failure. The primary water supply source must have an alarm.
- o) All stock must have adequate access to appropriate feed and to a continuous supply of fresh, clean drinking water. The diet must be adequate and appropriate to the production status and body condition of the pig.
- p) Dry/ pregnant sows and gilts must be supplied with feed of a high fibre content to maintain a suitable body condition score, to satisfy their nutritional requirements and to minimise stereotypical behaviour.
- q) Total copper levels in pig diets must not exceed the maximum levels outlined in the current regulations as amended: 170mg/kg in complete feed for pigs up to 12 weeks of age and 25mg/kg in complete feed for pigs over 12 weeks of age.
- r) Producers must ensure that pig feed is withdrawn for a minimum of 12 hours prior to slaughter.

Water

- s) The water supply must be capable of delivering continuous clean drinking water to all pigs over 2 weeks of age in accordance with Appendix 14.
- t) A water sample must be tested annually and also whenever the source of water is changed. The test results, which must be negative for both Enterococci and *E.coli*, must be retained.
- u) Where Enterococci or *E.coli* is detected, corrective measures must be taken and the supply re-tested after 1 month. Where two consecutive failures occur, a water treatment process must be initiated.
- v) Where the water supply comes from a well, the well-head must be sealed and the area around the well-head must be maintained to prevent water contamination.
- w) The water storage tank must be covered at all times to ensure a fresh supply of clean water and cleaned on a regular basis to ensure that any contamination is minimised.
- x) The water storage tank must hold a sufficient quantity of water to supply each pig house with clean water for a 24 hour period.

R 3 Ensure that bulk feed bins, ideally sited at the perimeter of the pig unit, mixing tanks and feed lines are emptied and cleaned on a regular basis.

R 4 Ensure that machinery and equipment used for handling and mixing feed, and for distributing and transporting feed, as well as the mixing tank of wet feeding systems, is suitable for purpose, is in good working order and is maintained in a clean and serviceable condition. Particular care must be given to the cleanliness of dual purpose loaders to prevent cross contamination.

3.8 ANIMAL HEALTH AND WELFARE

Background Information

The health and welfare of pigs depends on the implementation of good stockmanship, biosecurity, husbandry methods and a suitable environment. Producers will be aware of the need to have suitable systems in place to ensure that all animals can thrive and remain in good health.

The health of the animals is crucial to food safety and productivity on the farm. A good working relationship with the veterinary surgeon helps to prevent animal health and welfare problems.

Producers will also be aware that certain diseases are notifiable and that incidences of such diseases must be reported to the local DVO. A list of zoonotic diseases is provided in Appendix 13, Zoonoses.

- a) The pig farm must be under the routine care of a named veterinary surgeon or veterinary practice that is registered under the scheme.
- b) The producer must have a copy of the Farm Animal Welfare Advisory Council (FAWAC) publications (Best Practice for the Welfare of Animals during Transport; and Code of Practice for the Welfare of Pigs) and be conversant with their recommendations.
- c) **A salmonella control plan to comply with the DAFM regulations must be in place and this plan must meet the minimum requirements as outlined in the Appendix 3 (Critical).**
- d) The salmonella control plan must be communicated to DAFM, and the salmonella prevalence of the herd must be determined in accordance with the legislation (on-farm sampling, through the abattoir or other DAFM approved means).
- e) **The unit / herd must be in compliance with the DAFM National pig salmonella control programme requirements² (Critical).**
- f) The Health and Welfare Plans (see Appendix 3) must have been compiled in consultation with the veterinary surgeon and must be reviewed annually; the plans must be farm specific and be made available to all staff (see also 3.2.c).
- g) Only personnel deemed competent by the veterinary surgeon may perform injections. These personnel must be listed in the Health and Welfare Plans.
- h) Producers must have a documented Hygiene plan (see Appendix 3 which includes an illustrative Hygiene plan) which outlines the method and frequency of cleaning, and the type and concentration of disinfectant used for each pig production stage (see also 3.2.c).
- i) Producers must have a documented HACCP plan based on HACCP principles (see Appendix 3 which includes an illustrative HACCP plan) which outlines the controls required at the relevant production steps.
- j) A manufacturers declaration, usually made on the label, must be available for each disinfectant or cleaning agent used, stating its suitability for the application.
- k) Producers must carry out a daily check at a minimum to ensure that the animals are adequately fed, maintained in good health and vigour, and that their welfare requirements are met and in particular attention must be given to animals close to farrowing, young pigs, and sick pigs.

² Note the Salmonella Control Programme is published on the DAFM website:
<http://www.agriculture.gov.ie/animalhealthwelfare/diseasecontrol/pigsalmonellacontrolprogramme/> The relevant legislation is S.I. No. 522 of 2009 – Diseases of Animals Act 1966 (Control of Salmonella in Swine) Order 2009

- l) Hospital accommodation must be provided to house sick or injured pigs including sows; acutely sick animals must be isolated immediately from others and treated promptly.

Note: Guidelines for hospital accommodation are given in Appendix 4.

- m) All casualty pigs must be accompanied to the abattoir by documentation indicating the nature of the casualty and a copy of the document must be retained on the farm.
- n) Pig boards or paddles must be used at all times to move pigs to avoid injury and minimise stress and the application of pain (e.g. through the use of electric goads, sticks and plastic pipes) for handling pigs including during loading / unloading is prohibited.
- o) Where a problem with vices occurs (e.g. tail, flank, or ear biting), an investigation must be carried out by the veterinary surgeon or farm adviser and a documented control programme agreed with the producer.
- p) All pigs must have permanent access to sufficient quantities of materials (e.g. straw, hay, wood, sawdust, peat or mushroom compost, or a mixture of these materials) to enable pigs natural investigation and manipulation activity.

Note: Tyres containing metal or wire must not be used. Chains alone are not acceptable. Footballs and plastic piping are only satisfactory if they satisfy investigation and manipulation activities.

- q) Producers must comply with the implementation of the DAFM requirements on the removal of tethers.
- r) Pigs must not be weaned before 28 days of age unless they are to be moved to an all-in all-out weaner house that has been thoroughly cleaned and disinfected.
- s) Pigs must not be weaned before 21 days of age except in rare circumstances like the death of the sow.
- t) Surgical castration of male pigs is not permitted.
- u) Teeth clipping and tail docking are not permitted unless recommended by the veterinary surgeon on welfare grounds in the Health and Welfare Plan. These procedures may only be carried out by competent trained operators (as listed in the Health and Welfare plan) on piglets under 1 week of age.
- v) Pig movement at loading and unloading must be managed to minimise carcase bruising and losses due to improper handling.
- w) Where there is evidence from processor notifications or from auditor observations that pigs for slaughter are not clean enough to meet the cleanliness standard, a corrective action programme must be put in place in consultation with the veterinary surgeon or farm adviser.
- x) If an animal fails to respond to treatment, or if it is not appropriate to treat the animal, it must be humanely culled. The procedure outlined in the Health and Welfare Plan for dealing with casualty pigs, or the recommendations of the FAWAC publication "Code of Practice for the Welfare of Pigs" must be followed.

Note: the Pig Veterinary Society booklet "The Casualty Pig" also has useful guidelines.

- y) Pigs must not be exposed to constant or sudden noise and noise levels above 85dBA must be avoided in that part of any building where pigs are kept.

Note: The siting of machinery such as feed milling units must be appropriate to minimise the noise impact on housed stock.

- R 5 *Ensure that the nutrition of the sow is managed to minimise body condition loss during lactation. Body condition scoring of sows should be carried out at defined intervals as per the guidelines in Appendix 5. A minimum score of 2 is required for optimum production and the target condition score at farrowing is 3.5.*
- R 6 *Quarterly reports from the veterinary surgeon to the producer should be available for each pig farm.*
- R 7 *Records of the health and performance of all stock should be maintained and monitored for signs of disease or production disorders. This should include:*
- *Litter size – alive, dead, mummified*
 - *Farrowing %*
 - *Sow mortality %*
 - *Piglet mortality %*
 - *Rearing mortality %*
 - *Finishing mortality %*
 - *Growth rates*
 - *Feed conversion ratio*
 - *Processor dead-on-arrivals*
 - *Processor condemnations.*

3.9 BIOSECURITY

Background Information

The operation of a strict bio-security system helps to protect and maintain the health status of pig units and prevent the spread of disease. Producers will be conscious of the need to minimise the risk of diseases being introduced to the farm and will have a visitor log, hygiene policy, disinfecting facilities and protective clothing and footwear available at the farm.

Producers will also be aware that access to the unit should be controlled and will also give attention to vehicles transporting slurry, livestock or feed.

- a) Dead pigs and placentae must be stored in a leak-proof covered skip prior to collection by a licensed collector and a record of the collections maintained. Where possible, the skip must be sited at the perimeter of the pig unit.
- b) Personnel entry and traffic movement must be kept to a minimum and a notice that unauthorised visitors are not allowed on-site must be displayed at the farm entrance.
- c) A visitor log must be maintained and must record at a minimum:
 - i. Date;
 - ii. Time of visit;
 - iii. Name of visitor;
 - iv. Organisation;
 - v. Interval since previous contact with pigs;
 - vi. Vehicle registration.

Note: Service vehicles like delivery trucks or manure spreaders can be excluded.

- d) There must be a procedure to allow essential visitor access to the pig production areas and full protective clothing and footwear must be provided.

Note: This procedure may include showering in and out and requirements on the disinfection of footwear, etc.

- e) Footbath disinfectant must be approved for the species and replenished at least once weekly.
- f) Farm dogs and cats must be excluded from the houses.
- g) Pig loading bays, ideally constructed of concrete, must be sited at the perimeter of the premises and must be power-washed and disinfected after each loading.
- h) To prevent the introduction of disease the consumption of pig meat products on the pig farm is forbidden.

R 8 Ensure that all transport vehicles entering the farm are clean and disinfected so as not to compromise farm biosecurity. Feed delivery drivers should remain outside the pig production area.

R 9 Ensure that feral cats and other wild animals are excluded from the pig unit(s).

R 10 Quarantine purchased breeding stock for a minimum period of 28 days.

R 11 The site should be isolated from other farm enterprises and protected by a physical barrier that precludes the entry of other farm animals.

3.10 GENETICS

Background Information

Producers will be aware that pigmeat quality is influenced by the genetic make-up of the parent and grandparent stock of the pigs for slaughter. PSE pork (Pale, soft, exudative) is associated at producer level with susceptibility to stress and improper handling shortly before slaughter. Processors are required to notify Producers of incidences of this problem. DFD pork (dark, firm, dry) occurs when pigs are stressed for longer periods and are fatigued at slaughter. Producers will be aware of these conditions and will adopt management/handling techniques to minimise them.

Bord Bia, together with farming associations, have embarked on a programme to ensure that meat marketed under the PQAS is only obtained from animals that are DNA traceable to a DNA tested boar. Farmers will be aware that the status of boars on the farms will be monitored through the PQAS database and verified during farm audits.

- a) Producers records must be able to demonstrate that the farm breeding programme, or that of the source farm, is designed to avoid the production of stress positive slaughter pigs.
- b) **Pigs, including outdoor pigs, supplied under the PQAS must only be the progeny of DNA tested boars in accordance with the Bord Bia programme (Critical).**
- c) Producers must maintain and produce at any time clearly documented evidence that all boars in use on the farm are DNA tested.
- d) **Producers using AI must only source semen from Bord Bia registered suppliers. (Critical).**

3.11 PEST CONTROL

Background Information

Producers will be aware that birds and rodents can act as vectors of some pig diseases, and need to be controlled to avoid the spread of disease within the unit and between farms, particularly by the contamination of feedstuffs.

- a) Each producer must operate and maintain an effective rodent control programme, and the location of all internal and external bait points must be clearly identified on a bait map.
- b) Bait points must be checked weekly and replenished where necessary.
- c) Baits must be placed in a manner that prevents the access of non-target species and minimises the risk of cross-contamination of feed and water.
- d) The pig production site must be free of all debris, vegetation and equipment so that cover is not provided for rodents.
- e) Each producer must operate and maintain an effective bird control programme that specifies how wild birds are excluded from the facility.

Note: there must be no visible evidence of bird ingress such as contamination of the feed or the feeding facilities.

- f) Each producer must operate and maintain an effective fly control programme which may be chemical or biological.

R 12 Ensure that there is a 1 metre wide clearance around the premises to avoid rodent infestation, and a double perimeter bait plan may be used which is supplemented by additional bait points in high-risk areas.

3.12 HOUSING

Background Information

Producers will be aware of the importance of building design to ensure a safe, hygienic and comfortable environment for both pigs and personnel and that tethers for sows are banned under EU regulations from 01/01/06. Space allowances in lying areas, feeding and watering areas, as well as the ventilation requirements all impact on animal health and performance.

Properly designed ventilation permits air circulation and avoids draughts at animal level, preventing the build-up of toxic gases. Poor ventilation can also lead to serious health problems.

- a) All housing must be constructed to provide a safe, secure, hygienic and comfortable environment for pigs, and must be maintained to avoid injury or distress.

Note: Unsafe features likely to cause injury to pigs or to personnel include exposed wiring, stray voltage, sharp edges or projections.

- b) Electrical fittings and wiring must be maintained in a manner that is safe and inaccessible to pigs, be properly earthed and safeguarded from rodents.

- c) The buildings must be structurally sound and vermin-proof.
- d) All roofs and external walls must be waterproof and draught proof.
- e) The floor area provided must meet or exceed the allowances as set out in Appendix 6 so that all pigs can lie at the same time without discomfort or injury.
- f) All pig contact surfaces within the house must be in good condition, smooth, durable and easy to clean and disinfect, and not treated with paints, preservatives or other chemicals that may be toxic or may leave taints.
- g) Solid floors must be constructed and maintained to provide drainage that prevents pooling, they must be non-slip, and they must be maintained to maximise pig comfort and reduce the risk of injury or distress.
- h) Where slats are installed, they must be monitored for excessive wear and replaced as required.
- i) Slat design must be in accordance with the data outlined in Appendix 7: Concrete Slat Design (this also applies, where present, to slatted floors for group-housed sows).
- j) Manure levels must be maintained at least 10cm below slat level.
- k) In loose-housed systems, sows must be kept in pens which have sides not less than 2.8m in length except for groups of less than 6 sows, pens with sides not less than 2.4m in length are acceptable. Sows must be kept in groups from 4 weeks after service to 7 days before their expected farrowing date.

Note: Regulations relating to sow housing are legally binding from January 1st 2013.

- l) Where necessary, there must be appropriate facilities for stock to give birth. To minimise stress sows must not be placed in farrowing crates more than 1 week prior to their due farrowing date.
- m) Pre-weaning piglets must be provided with a thermally comfortable and dry lying area.
- n) Natural service pens must provide a minimum space of 10sq.m. and must be designed to allow adequate movement. Bedding or non-slip flooring must be provided to prevent injury during service.
- o) The feeding system must be such that all pigs can feed comfortably.
- p) Sows and gilts kept in groups must be fed using a system which ensures that each individual animal can obtain sufficient food, even when competitors for the food are present.
- q) The ventilation system must be controlled to regulate temperature and to minimise the level of gases (carbon dioxide, ammonia and hydrogen sulphide), ensuring a safe and comfortable environment (see Appendix 8 for recommended levels).
- r) Mechanically ventilated houses must be fitted with an alarm system that:
 - i. Warns of power failure;
 - ii. Is tested at least once weekly and the test recorded;
 - iii. Has a back-up / fail-safe system in place to allow natural ventilation to take over in the event of a power failure.
- s) All pig units must have a standby power supply which is tested monthly and the test recorded.
- t) The lighting level in pig housing must allow pigs to express their natural investigative behaviour for a minimum continuous period of 8 hours per day. In addition, adequate lighting, fixed or portable, must be available for satisfactory stock inspection at any time.
- u) All electrical controllers, motors, computers and fail-safe systems must be tested annually by a competent person and any alterations or improvements must be documented.

- v) The pig housing and facilities must be designed to facilitate emergency exit in the case of fire, flooding, etc.

R 13 Ensure that after weaning pigs are kept in stable social groups with as little mixing as possible.

3.13 PIG TRANSPORT

Background Information

Animal transport must be managed to ensure that animals arrive at their destination safely and with minimal stress.

Commercial livestock hauliers, responsible for the animals during transit, are obliged to ensure that the welfare of the animals is safeguarded during transport, loading and unloading. Producers who transport their own stock have similar responsibilities while the animals are in transit.

Pig producers will be aware that the design and operation of the transport vehicles used to transport pigs is important in ensuring that the pigs arrive clean and uninjured at the abattoir.

The DAFM publications “Pig Welfare Requirements on Farm and in Transit, 2003” and “Guidelines for Animal Welfare during Transport within Ireland” have both been circulated to producers.

- a) Producers must provide adequate facilities for the loading and unloading of pigs. They must be designed, constructed, maintained and operated so as to avoid injury and suffering and ensure the safety of the animals. Pigs must be loaded/unloaded quietly using minimum force while ensuring stress is kept to a minimum.
- b) Producers must ensure that all pigs are fit to travel and that the transport is fit for purpose (including cleanliness) (See Appendix 9, Food Chain Information guidelines).
- c) Hauliers used for the transportation of animals must be registered / approved by DAFM and their transport equipment must be designed, constructed, maintained and operated so as to avoid injury and suffering and ensure the safety of the animals.
- d) Where the producers own transport is used:
 - i. All vehicles must be roadworthy and fit for purpose;
 - ii. Vehicle floors must be non-slip;
 - iii. Loading ramps must be designed to prevent pigs slipping or falling off the ramp, they must have secure sideguards, and ramps or tailgates must have a maximum slope of 1:3;
 - iv. Vehicle design and maintenance must be such as to avoid risk of injuries from sharp projections;
 - v. Vehicles must be designed for ease of regular cleaning and disinfection and must be cleaned before each load;
 - vi. Lighting must be available for loading or unloading in the dark;
 - vii. Vehicles must be covered during inclement weather and to prevent pigs escaping;
 - viii. Ventilation must be available in transit at all times;
 - ix. A thorough visual inspection of the pigs must be possible at any time during the journey;
 - x. Where vehicles are decked, they must be designed to minimise seepage onto lower deck animals.

- e) For each consignment of pigs sent for slaughter a Food Chain Information form must be completed and forwarded to the processor (see Appendix 9 for FCI Guidelines).

R 14 Ensure that stocking densities during transport prevent injury due to overloading or under-loading and do not exceed 235kg/sq.m.

R 15 Make provision to prevent the escape of manure.

Note: Pig producers will also be aware of the need to ensure that animals from the herd must be transported to the slaughter house in accordance with the requirements of the DAFM Salmonella Control Programme (as amended).

3.14 ENVIRONMENTAL PROTECTION

Background Information

Modern intensive pig farms must operate to defined environmental standards. A responsible attitude to the countryside and the environment is essential. Careful management of the storage, application and disposal of manure, slurry and effluent in accordance with current legislation and best practice will prevent pollution of the environment, contamination and the spread of disease.

Larger herds must now comply with S.I. 138 of 2013, European Union (Industrial Emissions) Regulations 2013 and an Industrial Emissions (IE) licence issued by the EPA (Environment Protection Agency) is required for units exceeding the herd size threshold.

The herd size threshold, above which an IE licence must be obtained, is as follows:

1. 750 sow places
2. 2000 production pig places

The term "sow" includes pregnant gilts and a production pig is a pig over 30kg live weight which is being produced for slaughter.

- a) All pig producers must have documentary evidence of the appropriate IE status of the pig unit.
- b) Where the unit exceeds the threshold, a current IE licence, or evidence that a licence has been applied for, must be available for inspection.
- c) Where the herd is IE licence exempt the producer must be able to demonstrate that the farm has 26 weeks manure storage capacity.
- d) In order to prevent pollution and the spread of disease there must be adequate facilities in place for collecting and storing all manures and effluents, including dirty water and yard run-off.
- e) All pig producers must maintain a record of movement of organic manure off the farm.
- f) Fuel/oil storage and dispensing facilities must be managed in order to minimise the risk of spillage and /or contamination during fuelling.
- g) Waste oils and lubricants must be collected and controlled pending disposal.
- h) All pig production facilities must be maintained in a clean and tidy manner and accumulated rubbish and redundant equipment must be kept in a controlled area pending disposal and kept separate from the livestock.

- i) All pesticides, fertilisers, paints, preservatives, disinfectants, baits, lubricants and other chemical products must be stored securely to prevent contamination and pollution.

R 16 Ensure that air emissions and odours from pig farms do not result in significant interference with the environment or with the amenities beyond the site boundary.

3.15 HEALTH AND SAFETY

Background Information

Producers with less than 3 employees will be aware of their legal responsibility to have a completed FSRA (Farm Safety Risk Assessment) on the farm. An FSS (Farm Safety Statement) is required where there are more than 3 employees. Producers will be aware that the FSRA or FSS needs to be reviewed on an ongoing basis and communicated to all staff and visitors.

Specialist advice may be required in preparing these documents. Publications are available from the HSA (Health and Safety Authority), Teagasc, farming organisations, insurance providers, etc., giving advice in this area.

- a) An up to date FSRA/FSS must be available that identifies specific hazards on the farm, assesses the risk of injury, and specifies how these risks are to be controlled. Guidelines are contained in Appendix 10.
- b) The FSRA/FSS must be displayed and be available to all visitors to the farm and to all farm workers, contractors, etc.
- c) If the FSRA/FSS is not immediately available to hand, a notice must be displayed that is visible to all visitors and workers advising of the availability of the FSRS/FSS on request.
- d) Where there are 3 or more employees on the farm, a full FSS must be available.
- e) Pig farmers must ensure that all avoidable hazards, for both livestock and humans, are eliminated: these include open/unfenced slurry lagoons, open wells, excessively low or insecure electric wiring, poorly fenced land bordering roads, inadequately protected machinery, access to/gridding of slurry agitation points, etc.
- f) When removing slurry from under slats special care must be taken to avoid fouling the air with dangerous gases like hydrogen sulphide, which can kill both humans and animals.

Note: Buildings should be empty or very well ventilated during this procedure.

- g) Care must be taken that silage effluent does not leak or run into slurry channels as this can set up a violent fermentation producing large volumes of toxic gas.
- h) All hazards on the site must be clearly identified either centrally or at the location of the hazard and appropriate protective measures adopted.
- i) All pig farms must have a written Emergency Procedure to deal with personal injury, fire, flood, power failure or the failure of feed/water supply (see Appendix 11 for minimum requirements). All staff must be familiar with the plan and it must be displayed at a central location or at the exit.
- j) Basic first aid supplies, including eyewash, disinfectant, etc., must be available on every pig farm.
- k) Fire extinguishers must be in place and renewed at a minimum every 5 years.

Note: A minimum 5kg extinguisher is recommended.

- l) A notice must be prominently displayed to the effect that eating, drinking and smoking are prohibited in any area other than the farm canteen.
- m) All chemicals must be stored and handled at a minimum in accordance with Appendix 12.
- n) The use for which each chemical is intended must be clearly identified and displayed and a Material Safety Data Sheet must be available for each chemical on site.

R 17 *Ensure that at least one member of staff or management is contactable at all times in the event of an emergency.*

3.16 FREE RANGE FARMED PIGS - ADDITIONAL REQUIREMENTS

Background information

Outdoor pig production is currently not carried out on a large scale in Ireland, however many small to medium sized pig herds operate free range / outdoor systems successfully. Climatic conditions and animal welfare issues limit free range / outdoor production on many sites (e.g. where heavy soils, land prone to flooding, high rainfall areas, exposed sites and steep slopes are present). Free draining soils, in low rainfall areas, with low frost incidence, are most suitable.

Note: Free range farmed pig producers will be aware of the need to comply with all the relevant requirements in all sections of the Pig Producer Standard.

- a) All outdoor pig production sites must be managed to minimise poaching and the producer must be in compliance with the relevant statutory requirements (including pollution control, containment of animals, planning permission, etc.).
- b) The stocking density of outdoor sites must not exceed 30 sows or 12 sows with piglets per hectare.
- c) The herd Health and Welfare Plan (See Appendix 3) must include a strategy for dealing with emergency situations such as water provision in freezing conditions and feed provision in snow or extreme wet weather.
- d) Arcs or other accommodation, with suitable bedding material, must be available to pigs and be located to provide shelter from the prevailing wind.
- e) Outdoor sows must be farrowed in thermally comfortable huts, with clean dry straw, that provide protection from wind.
- f) Farrowing arcs / huts must be moved to fresh land after each farrowing cycle and the used bedding removed.
- g) Effective measures to exclude vermin (including birds, rodents, wildlife) from the housing and area / facility used for feed storage must be in place.
- h) During warm weather, facilities must be provided to allow pigs to keep cool and to produce mud, which can prevent sunburn (i.e. wallows).
- i) Location of wallows must be moved on a regular basis to minimise occurrence of disease.
- j) Sows, gilts and boars must be allowed to become accustomed to electric fences by providing them with a training area.

- k) Nose ringing must only be permitted to prevent damage to paddocks, or where the soil type or soil stone of the accommodation could lead to injury.
- l) Feeding troughs must be kept clean and serviceable.
- m) Where ground feeding is practiced, the area used must be rotated on a daily basis.

R18 Fenders should be fitted to farrowing huts to prevent piglets from straying.

R 19 All outdoor pig production sites should be located on free-draining soils.

R 20 Where parasite control products have been used, the pigs should be moved immediately afterwards to fresh pasture and a record of this maintained.

4. Appendices

Appendix 1:

Reference Information

Note: The following is a list of references that may be found useful but it does not purport to represent a full or accurate listing of all the current relevant legislation or other documents.

All legislation must be taken on an “as amended” basis.

EUROPEAN COMMUNITY LEGISLATION

- Council Directive 96/23/EC of 29 April 1996 on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC
- European Communities (Protection of animals kept for farming purposes) Regulations, 2000
- European Communities (Animal Nutrition Inspection) Regulations, 2000 (S.I. No. 4 of 2000)
- Commission Decision 2001/93/EC of 9 November 2001 amending Directive 91/630/ EC laying down the minimum standards for the protection of pigs.
- European Communities (Welfare of Calves and Pigs) Regulations 2003 (S.I. 48: 2003)
- Council Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations and amending Directives 64/432/EEC and 93/119/EC and Regulation (EC) No 1255/97
- Council Directive (EC) No 71/2008 on the identification and registration of pigs.

IRISH LEGISLATION

- S.I. 176 of 1994 European Communities (Animal Remedies and Medicated Feedingstuffs Regulations 1994)
- Diseases of Animals (Protection of Animals during Transport) Order 1995 (S.I. 98: 1995)
- Diseases of Animals (Protection of Animals during Transport) Amendment Order 1997 (S.I. 326: 1997)
- S.I. 507 of 1998, Control of Animal Remedies and their Residues Regulations, 1998
- European Communities (Marketing of Compound Feedingstuffs) Regulations, 1999 (S.I. No. 435 of 1999)
- S.I. 93: 1999, European Communities (Environmental Impact Assessment) (Amendment) Regulations 1999.
- European Communities (Putting into Circulation of Feed Materials) Regulations, 1999, (S.I. No. 390 of 1999)
- European Communities (Processed Animal Products) Regulations 2000 (S.I. 486, 2000)
- Waste Management Act 1996 as amended 2001
- S.I. 597 of 2001: Diseases of Animals Act, 1966 (Prohibition on the Use of Swill) Order, 2001.

- S.I. 341: 2002, Diseases of Animals Act 1966 (National Pig Identification and Traceability System) Tracing Order 2002 giving effect to Council Directive 92/102/EC On The Identification And Registration Of Animals
- S.I. 278 of 2007, European Communities (Drinking Water) Regulations 2007
- S.I. 183 of 2009: European Communities (Control of Animal Remedies and their Residues) Regulations, 2009
- S.I. 432 of 2009, European Communities (Food and Feed Hygiene Regulations 2009)
- S.I. 610 2010 as amended implementing the Code of Good Agricultural Practice for the Protection of Waters Regulations 2010.

Note: for Free Range / outdoor production systems, authorised veterinary medicinal products (i.e. VPA, EU as described in Requirement 3.5.b) can include the following:

- A veterinary medicinal product authorised by DAFM under regulations 16 or 18 (e.g. import under the cascade system).
- Certain homeopathics are exempted – consult with DAFM
- Products which are regulated as dietetic feedingstuffs by DAFM
- Products used as biocides on the animals' environment (not regarded as medicinal).
- Products deemed by the IMB not to fall within the definition of a veterinary medicinal product (see guide on the IMB veterinary website www.imb.ie).

SALMONELLA CONTROL PROGRAMME

Note: The Salmonella Control Programme is published by DAFM, subject to amendment and can be accessed through the following website:

www.agriculture.gov.ie/animalhealthwelfare/diseasecontrol/pigsalmonellacontrolprogramme/

- S.I. No. 521 of 2009 - Abattoirs Act 1988 (Veterinary Examination) (Salmonella In Pigs) Regulations 2009
- S.I. No. 522 of 2009 – Diseases of Animals Act 1966 (Control of Salmonella in Swine) Order 2009

FARM ANIMAL WELFARE ADVISOR COUNCIL (FAWAC) PUBLICATIONS:

- Best Practice for the Welfare of Animals during Transport
- Code of Practice for the Welfare of Pigs.

Note: These are available from www.fawac.ie

HEALTH AND SAFETY

- The Safety, Health and Welfare at Work Act, 2005.
- European Communities (Zoonoses) Regulations, 1996 (S.I. No 2 of 1996)

TEAGASC COURSES / PUBLICATIONS / SERVICES

Details on courses and services is available at: www.teagasc.ie/training/courses/pig_courses.asp including:

- Pig Production Training (FETAC Level 6 Pig Course)
- Pig Advisory, Training & Research
- Herd Performance Analysis (PigSys)
- Development Strategy for the Irish Pig Industry (2008-2015)
- Feed & Pig Price Monitor
- Financial Planning Programmes
- National Pig Farmers' Conferences
- Pig Workshops, Newsletters, Technical Articles
- Manure Management Advice & Programmes
- Building Design & Layout
- Preparation of Scheme Applications

A list of Teagasc Publications is available at www.teagasc.ie/publications

OTHER USEFUL WEBSITES:

DAFM Website:

www.agriculture.gov.ie (Note: this includes among other things a list of approved disinfectants, and a disease control section including Salmonella)

FAWAC:

www.fawac.ie – see the publications section. www.fawac.ie/publications/animalwelfareguidelines

Teagasc:

www.teagasc.ie (note this website provides an excellent link page that lists many other relevant websites for Associations, Organisations, State Agencies etc.). Further information is available on www.teagasc.ie/pigs and www.teagasc.ie/training/courses/pig_courses.asp

Bord Bia:

www.bordbia.ie

Food Safety Authority of Ireland:

www.fsai.ie

Irish Medicines Board:

www.imb.ie/EN/Veterinary-Medicines/News-and-Publications/Frequently-asked-questions.aspx

Appendix 2: Producer Declaration Form

Note: The Bord Bia Pigmeat Quality Assurance Scheme is a voluntary Scheme.
You will be required to sign this document in the presence of the auditor during the farm audit.

Please complete in **BLOCK** capitals:

Herd Owner Name (Person in whose name the Herd No. is registered with DAFM)						
Herd Number (NPITS)						
Address						
Address for Correspondence (if different to above)						
Tel/Fax/Mob:	(Tel)		(Mob)		(Fax)	
Email						
Primary Production System (please ✓ one)	Breeding	<input type="checkbox"/>	Finisher	<input type="checkbox"/>		
	Integrated	<input type="checkbox"/>	Free Range	<input type="checkbox"/>		
Signature						
Position (please ✓ one)	Herd Owner	<input type="checkbox"/>	Manager	<input type="checkbox"/>	Herd Owners Nominee	<input type="checkbox"/>
Signed (Auditor)						
Date						

Audit Declarations

START DECLARATION

- I agree to allow DAFM to advise Bord Bia of the salmonella status of the herd, on an on-going basis.
- I declare that compound feeds for pigs will not be fed to other species and I undertake to maintain my feedstuff storage facilities in a manner that prevents cross-contamination from feedingstuffs intended for other species on the farm.
- I declare that no medicinal feed additives, antibiotic based growth promoters or digestive enhancers, will be used on the farm for non-therapeutic purposes.
- I agree to allow farm inspectors and auditors access to my farm during normal business hours and to take feed samples for test purposes.
- I undertake to abide by the conditions applicable to pig producers as laid down in the Bord Bia Pigmeat Quality Assurance Scheme: Producer Standard.
- I acknowledge having received a copy of this Producer Standard and the accompanying documentation.
- I agree to provide full and accurate details of my farming practices that relate to the Bord Bia Pigmeat Quality Assurance Scheme.
- I declare I am in compliance with the relevant statutory requirements with regard to the operation of my pig farm.
- I understand that my participation in the Scheme is a demonstration of my commitment to achieving the highest standards in the production of quality pig production and my responsibilities in the food chain.
- I agree to permit my name and PQAS membership status to be published on the PQAS Register / Database.
- I agree to permit Bord Bia to record relevant information.
- I grant permission to the Bord Bia auditor to take photographs during the audit to be used as objective evidence for certification purposes.
- Photographs will only be used for audit purposes and be kept strictly confidential by Bord Bia and its agents.
- I agree to inform Bord Bia immediately in the event of a conviction under legislation relating to any aspect of the Scheme as per Scheme Rule 2.1.2.
- I agree that the information that I am providing is, to the best of my knowledge, true and correct.
- I agree to accept contact in relation to relevant Bord Bia events.

END DECLARATION:

- I understand that this audit is sample based and that therefore any non-compliances identified cannot be construed to include all such non-compliances.
- I confirm that the auditor has no conflict of interest in carrying out this audit (i.e. has not provided individual training, consultancy, or other services that would affect the integrity or impartiality of the audit process/or recommendation).
- I agree to close out the non-compliances and in the time agreed with the auditor, as per scheme rule 2.3.

Appendix 3:

Health and Welfare Plans

1. HEALTH AND WELFARE PLAN

Areas to be addressed by the Producer's Health and Welfare plan include the following at a minimum. Documented details as required under all the headings below must be maintained.

Note: See also the requirements in the Producer Standard for those aspects which are required to be checked.

Medicated Feedstuffs

- Name of the medication used, the inclusion rate and the supplier of the medicated feedstuff.
- All Veterinary Written Directions (VWDs) supplied to the farm

Individual animal disease control

- The diseases and the products used for control of those diseases by individual treatment.

Vaccination Programmes

- Vaccines used on the farm with details of the vaccination programme specifying the diseases covered, the timing of vaccinations, the dosages and the methods of administration.

Parasite Control Programmes

- Internal and external parasites (mange, worms and lice) control programmes including names of the products and the frequency of administration.

Group Disease Control

- The group disease control and prevention programme with details of the production area in which the products are used.
- The specific salmonella control programme in operation on the farm (See page 4 of this Appendix).

Bio Security

- The methods for preventing the introduction of disease into the farm with particular emphasis on: Isolation procedures operated for purchased breeding stock; AI; Control of access to the unit by Visitors, Vehicles and Packages and Staff.

Welfare

- Mixing and grouping of pigs (so as to minimise stress due to fighting and injuries).
- Absence of signs of fear.
- The Producer's policy on teeth clipping.
- Lameness monitoring and foot care.
- Shoulder wound / sores management.

Care Of Needles And Syringes

- Sterilisation programme.
- Blunt / damaged needles control and management.
- Size of needle (length and gauge) to be used.

Prevention And Control Of Vices (where present above defined thresholds)

- Tail-biting, ear nibbling, flank biting and navel suckling.

Casualty Pigs

- Disposal of casualty pigs
- Casualty slaughter procedure

2. SALMONELLA CONTROL POLICIES

This section sets out issues that could be considered in drawing up a Salmonella Control Plan aimed at reducing the prevalence of salmonella on the farm (as determined through the DAFM Salmonella Control Programme) with the involvement of a veterinary practitioner.

Hygiene And Pig Movement

All-In All-Out: Operate farrowing, weaner and finisher houses on an all-in all-out system.

Pig Movement: Pigs should move in one direction only towards the loading ramp i.e. no pigs should be transferred against pig flow.

Pen Hygiene: Power-wash, dry, disinfect and dry again all pens between batches. Use a suitable disinfectant at the higher recommended concentration.

Pen Design: Pen partitions should be designed to prevent direct pig contact.

Hospital Accommodation: Isolated hospital accommodation is essential.

Passageways: Thoroughly power-wash and disinfect before and after moving pigs.

Personnel

Personnel Movement: Work with younger pigs before moving to older pigs.

Footbaths: Footwear should be cleaned and dipped in disinfectant on entry to each area of the unit using clean footbaths.

Visitors: Clean protective clothing and footwear must be provided for all visitors.

Personal Hygiene: Observe best personal hygiene procedures.

Stress

Stress: Avoid stress caused by overstocking, temperature fluctuations or mixing of pigs.

Control Other Diseases: Salmonella levels increase the presence of other infectious diseases.

Transport

Feeding of Slaughter Pigs: Avoid feeding within 12 hours of slaughter.

Loading Ramp Area: Thoroughly power wash and disinfect the loading ramp and collection pens following dispatch.

Transporter Hygiene: Ensure that pig transporters are thoroughly power-washed and disinfected before use.

Duration of Transport: Keep the duration of transport to the slaughter house to a minimum.

Vectors

Drinker Design: Nipple drinkers are preferable to bowls.

Feed Storage: Feed storage should be secure such that contamination by birds and other vermin is not possible.

Replacement breeding stock and purchased weaners: Source all purchased stock from low salmonella prevalence herds only and quarantine all purchased replacement stock.

Slurry Management: Ensure pigs do not come in contact with stored pig manure (slurry).

Fly Control: Use a fly control system that best suits the unit.

Rodent Control: Operate a strict rodent control programme using a double perimeter baiting system.

Vermin/Other Animal Control: No cats or dogs should be permitted on the premises.

Bird Control: Bird-proof the unit as birds can shed Salmonella in their droppings.

Water Quality: Use only potable water or chlorinate the water supply.

Feeds And Feeding

Storage Bins: Clean feed storage bins every 6 months and clean mixing tanks and equipment every 4 weeks.

The Potential Effects on Salmonella Incidence	
Reduces	Increases
Meal form	Pelleted form
Coarsely-ground \geq 3mm	Finely-ground
Barley \geq 25%	Wheat > 50%
Whey / Yeast	Water only
Organic acids	Highly buffered feed
Heat-treated feed purchased	Non-heat treated feed purchased

Table 1 - Appendix 3: The Potential Effect of feed setup on Salmonella Incidence
 (Source: National Pig Health Council May 2003)

3. ILLUSTRATIVE HACCP PLAN BASED ON HACCP PRINCIPLES

(Contingent on Compliance with Hygiene and Disease control, Animal Welfare, Housing and Environment requirements)

Step	CCP No.	Hazard (Source)	Preventive Measure	Limits	Monitoring	Corrective Action	Document Reference
Stock Sourcing	1	Possible disease carriers PSE / DFD Meat	Obtain breeding stock and AI from farms with full Vet.certification.	Obtain only maiden gilts and immature boars directly from Vet certified farms	See Producer Requirements Section 3.10	Reject non-compliant stock / sources	Stock Purchase and AI use records
Feed Sourcing	2	Product contamination due to pathogens, mycotoxins or medication misuse.	Purchase from approved supplier. Segregate medicated feed.	Use only approved suppliers. Use medication by prescription only	See Producer Requirements Section 3.7	Reject delivery. Source alternative supply. Clean bins/lines.	Delivery records Cleaning Records.
Feed Storage	3	Inadvertent contact with residues (mycotoxins, medicines, etc) of previous contents.	Label bins clearly. Clean bins annually. Staff clearly informed.	All bins labelled, no residues	See Producer Requirements Sections 3.7	Remove affected feed. Isolate and dispose of affected feed. Clean bins thoroughly	Cleaning records. Delivery records
Water sourcing and storage	4	Pathogenic organisms in water.	Use a clean supply and use covered storage.	As specified in Producer Requirements, Section 3.7	See Producer Requirements 3.7	Change or treat supply and retest as per section 3.7	Water Test reports
Medicines Sourcing Storage and Administration	5	Medicine residues Broken needles	Use only approved medicines. Store securely. Dose accurately. Keep correct medicine records. Identify and tag and notify abattoir.	As specified in Producer Requirements Section 3.5 (Residues) and Section 3.3 (Needles)	See Producer Requirements Sections 3.5 (Residues) and Section 3.3 (Needles)	Identify affected animals and ensure observance of withdrawal period. Clear tagging and notification.	Medicines usage records. Casualty Pig Notification sheet.
Transport	6	Injury, stress, cross contamination from other animals	Loading practices, transport vehicle design, stocking density, maintain social groups, feed withdrawal	0.4 m2/animal. Less than 30 per compartment. 12 hour feed withdrawal period.	Dispatch Checks See Producer Requirements 3.13	Amend the transport conditions as relevant. Hold affected pigs for 12 hours.	Dispatch and Transport documentation.

Table 2 - Appendix 3: Illustrative HACCP Plan

4. ILLUSTRATIVE HYGIENE PLAN TEMPLATE

Name: _____

Address: _____

Herd ID: _____

Location	Frequency & Method of Cleansing	All In All Out	Power Wash	Disinfectant (name and concentration)
Dry Sows		Y/N	Y/N	
Farrowing		Y/N	Y/N	
Stage 1 Weaner		Y/N	Y/N	
Stage 2 Weaner		Y/N	Y/N	
Finishing		Y/N	Y/N	

Table 3 - Appendix 3: Hygiene Plan Template

Appendix 4

Guidelines for Hospital Accommodation

HOSPITAL PEN REQUIREMENTS FOR INJURED SOWS

The pen should be 50% slatted and 50% solid floored but should in any event be appropriate to the injury to promote optimal healing.

The solid floor should be bedded so that the sows have no contact with concrete as this maximises the rate of healing of injuries. The pens should be bedded in shredded paper, straw or wood shavings.

Fully slatted pens can be conveniently converted to hospital accommodation by adopting the following guidelines:

- Use a 3 x 2 inch wooden barrier at the edge of the slatted area to prevent the shredded paper escaping onto the slatted area;
- Install concrete on a polythene sheet to create a solid area;
- Allow drainage in the centre with the surface of the concrete sloping towards the centre. A 4-inch circular drain pipe section should be installed in the centre of the solid section to facilitate drainage; or
- Alternatively, ensure a slope of 1:25 in the floor (solid floors) towards the slats.

Transfer injured sows to this area immediately, or at weaning if they have shoulder sores

Note: Treatment records need to be maintained as per Animal Remedies regulations.

HOSPITAL PEN REQUIREMENTS FOR INJURED PIGS

Design

A hospital pen should provide an environment that maximises recovery rate and minimises the spread of infection among pigs. Small group size, generous stocking rates (standard plus 50%), easy access to good quality feed, water and good lighting are essential elements of a good hospital pen.

The number of pigs per pen should not exceed six, and a stocking rate of 0.85m² per pig up to 75kg is recommended. To meet these requirements the pen dimensions should be: 3m in length; 1.5m in width; 1.5m in height at the back of the pen and; 2.15m in height at the front of the pen. At the rear of the pen a heated pad 1m x 1m and a sub-roof set at 1m in height and extending forward of the heat pad (approximately 1.35m into the pen) would provide a suitable micro-climate at the rear of the pen and prevent draughts arising from air entering through inlet set at 1.25m high in the rear wall of the pen.

Feed should be supplied by a single space wet/dry feeder incorporating a nipple drinker and water by a single bowl drinker at 30 to 45cm from the ground supplied by a header tank shared by two adjacent hospital pens would provide good access to water. Good lighting is essential to facilitate examination of pigs. The slurry system should be controlled by the bung drainage system of the 0.5m deep tank. This could be emptied regularly and would prevent draughts from the area beneath the slatted floor. Plastic slats of 15cm in width with a gap of 15 mm between slats would maximise floor comfort for lame pigs while maintaining slurry drainage. The hospital pen should be operated on an all in all out basis accompanied by thorough washing and disinfection between batches.

HOSPITAL PEN FOR INJURED PIGS DIAGRAM

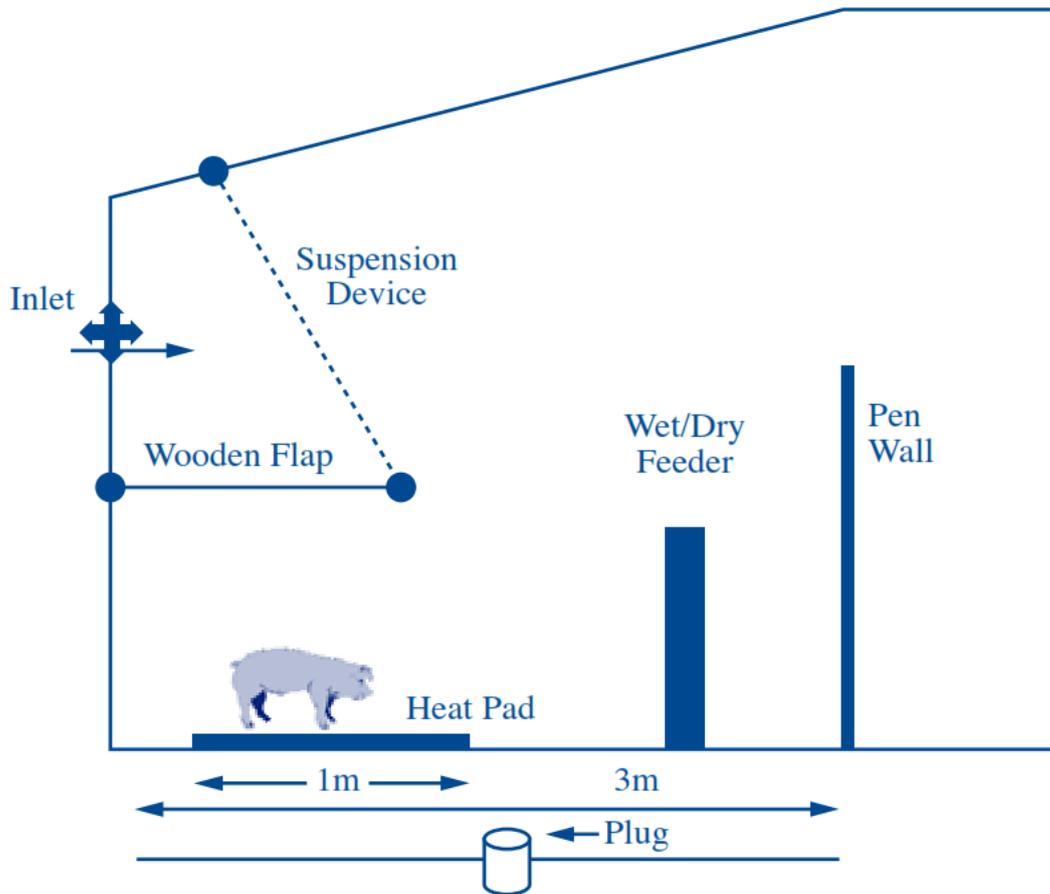


Figure 1 - Appendix 4: Hospital Pen Diagram

Appendix 5

Guidelines on Body Condition Scoring of Sows

CONDITION SCORING: FULL DESCRIPTION

Body Condition	Pelvic Bones	Loin	Vertebrae	Ribs	P2 mm
1	Pelvic bones very prominent; deep cavity around tail-head.	Loin very narrow; sharp edge on transverse spinal process; flank very hollow.	Vertebrae prominent and sharp throughout length of backbone	Individual ribs very prominent	13 or Less
2	Pelvic bones obvious but some slight cover; cavity around tail	Loin narrow; only very slight cover to edge of transverse spinal processes; flank rather hollow	Vertebrae prominent	Rib cage less apparent; difficulty in seeing individual ribs.	15
3	Pelvic bones covered	Edge of transverse spinal processes covered and round	Vertebrae visible over shoulder; some cover farther back	Ribs covered but can be felt	17
4	Pelvic bones only felt with firm pressure; no cavity around tail.	Edge of transverse spinal processes felt only with firm pressure; flank full	Vertebrae felt only with firm pressure	Rib cage not visible; very difficult to feel any ribs	20
5	Pelvic bones impossible to feel; root of tail set deep in surrounding fat.	Impossible to feel bones; flank full and rounded.	Impossible to feel vertebrae	Ribs impossible to feel	23

Table 1 - Appendix 5: Body Condition Scoring Descriptions

BODY CONDITION SCORE, ILLUSTRATION AND SHORT TEXT DESCRIPTION

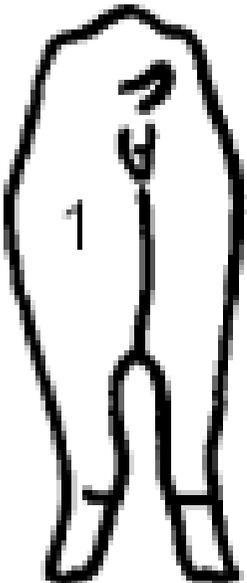
1	2	3	4	5
				
Poor: Hips and backbone prominent	Moderate: Hips and backbone easily felt without palm pressure	Good: Hips and backbone only felt with firm palm pressure	Very Good: Hips and backbone cannot be felt	Fat: Hips and backbone heavily covered

Figure 1 - Appendix 5: Body Condition Score with Illustration¹

¹ Source: Text: ADAS Condition scoring method, Illustration: Kentucky Co-operative Extension Service

Appendix 6

Floor Space Requirements

Note: As specified in S.I. 48:2003, European Communities (Welfare of Calves and Pigs) Regulations 2003

1. FLOOR AREA BY AVERAGE WEIGHT

Average Weight (Kgs)	Floor Area	
	(m ²)	(ft ²)
<= 10	0.15	1.6
10 - 20	0.2	2.15
> 20- 30	0.3	3.2
> 30 - 50	0.4	4.3
> 50 - 85	0.55	5.9
> 85 - 110	0.65	7
> 110	1	10.76

2. FLOOR AREA NUMBER OF SOWS / GILTS

Group Housed Gilts / Sows (No. Gilts / Sows per Pen)	Floor Area per Gilt (m ²)	Floor Area per Sow (m ²)
≥40	1.48	2.025
>5 <40	1.64	2.25
<6	1.81	2.475

3. FLOOR AREA FOR PENS

Other	Floor Area (m ²)
Boar Pen	6
Service Pen	10

4. FLOOR SPACE REQUIREMENTS: RECOMMENDED INTERPRETATION OF THE LEGISLATION (TEAGASC 2004)

Note: Based on Unobstructed Floor Area and Average Weight of the Pigs in the Pen

Weight kg	Floor m ²	Area ft ²												
<=10	0.15	1.6	20	0.20	2.2	30	0.30	3.2	50	0.40	4.3	85	0.55	5.9
11	0.16	1.7	21	0.21	2.3	31	0.31	3.3	51	0.40	4.4	86	0.55	6.0
12	0.16	1.7	22	0.22	2.4	32	0.31	3.3	52	0.41	4.4	87	0.56	6.0
13	0.17	1.8	23	0.23	2.5	33	0.32	3.4	53	0.41	4.4	88	0.56	6.0
14	0.17	1.8	24	0.24	2.6	34	0.32	3.4	54	0.42	4.5	89	0.57	6.1
15	0.18	1.9	25	0.25	2.7	35	0.33	3.5	55	0.42	4.5	90	0.57	6.1
16	0.18	1.9	26	0.26	2.8	36	0.33	3.6	56	0.43	4.6	91	0.57	6.2
17	0.19	2.0	27	0.27	2.9	37	0.34	3.6	57	0.43	4.6	92	0.58	6.2
18	0.19	2.0	28	0.28	3.0	38	0.34	3.7	58	0.43	4.7	93	0.58	6.3
19	0.20	2.1	29	0.29	3.1	39	0.35	3.7	59	0.44	4.7	94	0.59	6.3
						40	0.35	3.8	60	0.44	4.8	95	0.59	6.3
						41	0.36	3.8	61	0.45	4.8	96	0.59	6.4
						42	0.36	3.9	62	0.45	4.9	97	0.60	6.4
						43	0.37	3.9	63	0.46	4.9	98	0.60	6.5
						44	0.37	4.0	64	0.46	5.0	99	0.61	6.5
						45	0.38	4.0	65	0.46	5.0	100	0.61	6.6
						46	0.38	4.1	66	0.47	5.0	101	0.61	6.6
						47	0.39	4.1	67	0.47	5.1	102	0.62	6.6
						48	0.39	4.2	68	0.48	5.1	103	0.62	6.7
						49	0.40	4.3	69	0.48	5.2	104	0.63	6.7
									70	0.49	5.2	105	0.63	6.8
									71	0.49	5.3	106	0.63	6.8
									72	0.49	5.3	107	0.64	6.9
									73	0.50	5.4	108	0.64	6.9
									74	0.50	5.4	109	0.65	7.0
									75	0.51	5.5	110	0.65	7.0
									76	0.51	5.5	>110	1.00	10.8
									77	0.52	5.6			
									78	0.52	5.6			
									79	0.52	5.6			
									80	0.53	5.7			
									81	0.53	5.7			
									82	0.54	5.8			
									83	0.54	5.8			
									84	0.55	5.9			

Appendix 7:

Guidelines on Concrete Slat Design (As per EU Directive 88/2000/EC)

Type of Pig	Maximum Gap Width (mm)	Minimum Slat Width (mm)
Piglets	11*	50
Weaners	14*	50
Finishing	18**	80
Gilts After Service & Sows	20**	80 Note: it is recommended that slats for sows should be at least 120mm wide

Table 1 - Appendix 7: Concrete Slat and Gap Width Requirements

* **Note:** A tolerance of 2mm in the gap is accepted for existing installed slats for piglets and weaners.

** **Note:** A tolerance of 3mm in the gap is accepted for existing installed slats for rearing pigs, gilts after service and sows.

Appendix 8:

Gas and Temperature: Recommendations

GAS LEVEL RECOMMENDATIONS

Name of Gas	Long Term Exposure limit ppm (8 hour day) (ppm)	Short Term Exposure limit ppm (10 minutes) (ppm)
Ammonia	25	35
Carbon Monoxide	50	400
Carbon Dioxide	5,000	5,000
Hydrogen Sulphide	10	10

Table 1 - Appendix 8: Gas Level Recommendations

TEMPERATURE RECOMMENDATIONS

Type of Pig	Recommended Minimum Temperature Range Celsius (°C)
Sows / Boars	15 - 20
Suckling Pigs	25 - 30
Weaned Pigs	25 - 30
Growers	15 - 21
Finishers	13 - 18

Table 2 - Appendix 8: Temperature Recommendations

Appendix 9

Food Chain Information Guidelines

The Food Chain Information (FCI) document for animals contains a declaration from the producer concerning the identification of animals, observation of withdrawal periods of veterinary medicines, cleanliness of animals, suitability of the animals for transport and information on the health status of the animals and the farm of origin. Farmers rearing animals must therefore take all reasonable practical steps to ensure that their stock are acceptably clean (from faecal matter) at slaughter to minimise the risk to consumer health from potential infection of E. coli 0157:H7 and other potential pathogens.

There are four sections to the Food Chain Information (FCI) document each of which must be signed by the (1) producer, (2) haulier, and the (3) slaughterhouse operator (4) Official Veterinarian (OV).

Specific responsibilities are defined as follows:

1. **The Producer / Person in charge of the pigs** must complete the form filling in his/her name, herd number and the number of sows, boars and pigs loaded together with the name of the Vet in contact with the herd. A series of declarations must be signed declaring that the animals are not disease restricted, are healthy and have not tested positive, the meat is fit for human consumption, all withdrawal periods have been observed, all animals are fit for transport and the identification of animals as per NPITS have been met. The time of loading is also recorded by the Producer.
2. **The pig haulier** must sign to declare that the pigs were able to walk unaided into the transport vehicle and identify the vehicle registration and haulier number.
3. **The slaughterhouse operator** must request, receive, check and act upon the contents of the Food Chain Information document. The slaughterhouse operator must sign the food chain information document to confirm they have received and checked the requested information, and the results of these checks must be recorded. The slaughterhouse operator must make the FCI document available to the Official Veterinarian (OV)
4. **The OV** will check and analyse the FCI document and verify that the FCI document has been received and checked by the Food Business Operator (FBO).

Note: A copy of the document may be obtained from DAFM or through the abattoir.

Appendix 10

Farm Safety Statement / Farm Safety Risk Assessment Guidelines

The legislation governing occupational safety and health in the agriculture and forestry sector includes the Safety Health and Welfare at Work Act 2005 and the Safety Health and Welfare at Work (General Application Regulations) 2007.

The legislation requires a risk assessment approach, and the legal duty on employers (with more than three staff) is to prepare a written health and safety document referred to as a Farm Safety Statement.

However, since the introduction of the 2005 Safety Health & Welfare at Work Act, employers, with three or fewer employees, can fulfill this legal duty by complying with an approved, sector specific, Code of Practice / Farm Safety Risk Assessment (FSRA).

Recently an online Farm Safety Risk Assessment entitled the Farm Safety Code of Practice was launched where farmers can complete and store their risk assessment on line – see www.hsa.ie.

A Farm Safety Risk Assessment (≤ 3 employees) / Farm Safety Statement (> 3 employees) is a practical written plan aimed at minimising the risk of injury or ill health for all who work on the farm or are affected by the work. The duty of preparing and implementing the document lies with the person in control of the farm. It is strongly recommended however that a farm safety expert is consulted in the preparing of the document.

The Farm Safety Risk Assessment / Farm Safety Statement must be reviewed on a regular basis as farming conditions and activities change and new machines and new hazards are brought onto the farm. The document must be retained by the farmer and brought to the attention of all who work on the farm. The safety of all farm animals should also be a major consideration when preparing a safety statement. A defined evacuation route for all livestock in the case of fire should be included in the safety statement.

Reference should be made to the “Farm Safety Handbook” published by the Health and Safety Authority of Ireland and available from any of their offices throughout the country or through their website www.hsa.ie or through their information number (1890 289 389).

Some common issues of concern that could be addressed in the Farm Safety Risk Assessment / Farm Safety Statement are:

- Slurry agitation should only be done when the building is empty. Stay out of the building for as long as possible after agitation starts, particularly the first hour, to avoid dangers due to slurry gases. It is recommended not to enter empty slurry tanks.
- Electrical installations should be well maintained and protected from water.
- Overhead wires should be sufficiently high to avoid contact with machinery and tipping trailers. Contractors should be made aware of such hazards prior to commencing work.
- Tractor PTOs should be protected with approved guards at all times.
- If children have access to the farm yard area then a safe and secure play area should be designated
- Where applicable, fire exits should be clearly marked
- Fire extinguishers should be available and regularly serviced

- Security fencing should be erected around hazards such as open tanks, lagoons etc.
- The risk from transmissible diseases (zoonoses) relevant to the farming enterprise.
- The risk associated with hazardous chemicals usage

Note: Templates available from HSA website www.hsa.ie

Appendix 11

Emergency Procedure: Minimum Requirements

The priorities for site staff are:

- Maintenance of human life and the avoidance of situations likely to cause injury or harm to staff are paramount.
- Herd safety, health and welfare.

Each farm should:

- Carry out a risk assessment on the farm;
- Have a strategy in place to deal with the identified risks such as:
 - Gas Leak;
 - Fire;
 - Power Failure;
 - Personal Injury;
 - Equipment Failure;
 - Herd Problem.

Post a list of emergency telephone numbers beside a telephone (and near an exit) and a separate list of useful numbers nearby.

Emergency Telephone Numbers:

- **Fire Brigade:** _____
- **Doctor :** _____
- **Ambulance:** _____
- **Gardai:** _____

Useful Telephone Numbers:

- Safety Officer _____
- Site Manager _____
- Gas Service Centre _____
- Gas Service Engineer _____
- Veterinarian _____
- Electrician _____
- Other 1 _____
- Other 2 _____

Appendix 12

Storage and Safe Handling of Chemicals

Note: This is a recommendation for the safe handling of chemicals for information purposes. It is not intended as a definitive guide to the safe handling of chemicals and does not replace any applicable statutory requirement.

1. Purchase only approved chemicals.
2. Store in designated storage facilities, which are labelled and locked, and well away from food.
3. Do not transfer chemicals to other storage containers, especially soft drinks, bottles or food containers.
4. Maintain only minimum stocks of chemicals (to avoid out of date chemicals).
5. Read the label before opening the chemical and observe all safety precautions. Use chemicals in accordance with manufacturers' recommendations.
6. Wear the correct personal protection equipment for the chemical and operation involved.
7. Have a supply of clean water for washing off splashes.
8. Wash hands and exposed skin before eating or drinking and shower down after the job is complete.
9. Thoroughly rinse all equipment used, and store safely.
10. Unused chemicals should be disposed of in a safe manner and so as to prevent harm to the environment.

Appendix 13

Information on Zoonoses

Zoonoses are diseases or infections which are naturally transmissible from vertebrate animals to man. Over 200 zoonoses have been described. If you work with animals you may be at risk. Micro-organisms such as bacteria, viruses, parasites and fungi can cause illness by infecting the body when they are swallowed; breathed in or when they penetrate the skin.

Good management practices associated with the care of sick animals, the use of protective clothing, the covering of all exposed cuts and grazes and personal hygiene should form part of the prevention programme on all participating farms in the PQAS. Hands should be washed and dried before eating, drinking or smoking. Producers should request advice from their Veterinary Surgeon in relation to the prevention of zoonoses and should immediately consult their medical practitioner should they become ill with suspected zoonoses.

Disease	Causative Organism	Principal Animals Involved	Probable Means of Spread to humans
Campylobacter enteritis	<i>Campylobacter jejuni</i> <i>Campylobacter coli</i>	Cattle, pigs, poultry, dogs, cats, wild birds	Mainly food borne; also waterborne, in milk, or occupational
Clostridial diseases	<i>Clostridium perfringens</i> , type A <i>C. septicum</i> , <i>C. novyi</i>	Domestic and wild animals	Food borne; occasionally wound contaminant
Enterohemorrhagic <i>Escherichia coli</i> infections	<i>E. coli</i> O157:H7; also implicated are types O26:H11, O111:H8, O104:H21, and O48:H21	Cattle, humans	Ingestion of undercooked ground beef, or food or water contaminated with bovine faeces
Leptospirosis	<i>Leptospira interrogans</i> (200 serovars) in 23 serogroups	Domestic and wild animals, common in rodents, dogs	Occupational and recreational exposure; water and food borne
Listeriosis	<i>Listeria monocytogenes</i> types 1/2a, 1/2b, 4b	Numerous mammals, birds	Ingestion of raw contaminated milk, cheese, mud, water, and vegetables
Salmonellosis	<i>Salmonella enterica</i> (2,000 serovars)	Poultry, pigs, cattle, horses, dogs, cats, wild mammals and birds, reptiles, amphibians, crustaceans	Foodborne infection, especially in the elderly, infants, or the immune-suppressed; occupational and recreational exposure
Tetanus	<i>Clostridium tetani</i>	Principally herbivores, but all animals may be carriers	Wound infection and injections
Tuberculosis	<i>Mycobacterium bovis</i>	Cattle, pigs, and other animals	Ingestion, inhalation, occupational exposure
Toxoplasmosis	<i>Toxoplasma gondii</i>	Mammals, especially cats, food animals, birds	Ingestion of oocysts shed in faeces of infected cats or found in meat or raw milk
Ringworm Dermatophytosis	<i>Microsporum</i> , <i>Trichophyton</i> and <i>Epidermophyton</i> spp	Dogs, cats, cattle, rodents, other animals	Direct contact with infected animals, fomites
Cryptosporidiosis	<i>Cryptosporidium parvum</i>	Cattle, other animals	Occupational contact and ingestion; waterborne

Table 1 - Appendix 13: Common Zoonoses

Appendix 14

Guidelines for the Provision of Water for Pigs

In order to assist pig producers to comply with welfare regulations in relation to the provision of water to pigs the following guidelines are recommended.

Note: S.I. 311 of 2010 – states the following “All pigs over 2 weeks of age shall have permanent access to a sufficient quantity of fresh water”

1. DRY SOWS AND SERVED GILTS

Method of Housing	Watering System / Device	Flow Rate (litres per minute)	No. Pigs per Drinker	Minimum Drinkers per Pen / Notes
Stalls	Water in feed trough continuously	-	-	Water must be provided after each feed so that there is always water in the trough
	Bite	2	1	
Loose housed / Wet feeding	Bite	2	15	
	Nipple	2	15	More prone to wasting water
	Bowls	2	20	
Loose housed / Dry feeding	Bite	2	12	
	Nipple	2	12	More prone to wasting water
	Bowls	2	20	

2. BOARS

Method of Housing	Watering System / Device	Flow Rate (litres per minute)	No. Pigs per Drinker	Minimum Drinkers per Pen / Notes
Pen	Bite	2	1	Nipple increases water wastage
	Bowl	2	1	

3. GILTS

Method of Feeding	Watering System / Device	Flow Rate litres per minute	No. Pigs per Drinker	Minimum Drinkers per Pen / Notes
Wet Feeding	Bite	2	-	1
	Nipple	2	-	1
	Bowl	2	-	1
Dry Feeding – hopper	Bite	2	12	1
	Nipple	2	12	1
	Bowl	2	15	1
Wet /Dry Feeder	Nipple	2	12	Only required with one single space feeder
	Bowl	2	15	

4. SUCKLING SOWS AND PIGLETS

Method of Housing	Watering System / Device	Flow Rate litres per minute	Max. No. Pigs per Drinker	Minimum Drinkers per Pen / Notes
Farrowing Pen -Sow	Nipple	2	1	Higher flow rate is desirable
	Bowl	2	1	
Farrowing Pen -Piglets	Nipple	0.5	-	
	Bowl	0.5	-	

5. FIRST STAGE WEANERS

Method of Feeding	Watering System / Device	Flow Rate litres per minute	No. Pigs per Drinker	Minimum Drinkers per Pen / Notes
Wet Feeding - probes	Nipple	0.5	15	2
	Bowls	0.5	15	1
Dry Feeding – hoppers	Nipple	0.5	12	2
	Bowls	0.5	15	1
Single Wet / Dry Feeders	Nipple	0.5	12	Water is supplied in feeder

Note: A supplementary water source such as turkey drinkers or cube drinkers can replace the above watering devices provided that they do supply water continuously.

Note: No additional watering device is required with multi-space wet-dry feeders.

6. SECOND STAGE WEANERS

Method of Feeding	Watering System / Device	Flow Rate litres per minute	No. Pigs per Drinker	Minimum Drinkers per Pen / Notes
Wet Feeding - probes	Nipple	1	20	2
	Bowls	1	20	1
Dry Feeding – hoppers	Nipple	1	12	2
	Bite	1	12	1
	Bowls	1	15	1
Single Wet / Dry Feeding	Nipple in feeder	1	12	Water is supplied in feeder

Note: No additional watering device is required with multi-space wet-dry feeders.

7. FINISHERS

Method of Feeding	Watering System / Device	Flow Rate litres per minute	Max. No. Pigs per Drinker	Minimum Drinkers per Pen / Notes
Wet – probes	Nipple	1.5	20	1
	Bite	1.5	20	1
	Bowls	1.5	25	1
Wet –long troughs	Nipple	1.5	20	1
	Bite		20	1
Dry Feeding - hoppers - round feeders	Nipple	1.5	12	2
	Bite	1.5	12	1
	Bowl		15	1
Single Wet / Dry Feeding	Nipple in feeder	1.5	12	Water is supplied in feeder

Note: No additional watering device is required with multi-space wet-dry feeders.



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