

Sustainable Dairy Assurance Scheme

Producer Standard

Revision 01, December 2013

Contents

1. INTRODUCTION

- 1.1 Development
- 1.2 Scheme Overview
- 1.3 Objectives
- 1.4 Scheme Detail
- 1.5 Benefits from Participation in the SDAS
- 1.6 Sustainability Information Collection
- 1.7 Normative References of the Standard
- 1.8 Definitions
- 1.9 Cautionary Notes

2. SCHEME REGULATIONS

- 2.1 Scope and Membership
- 2.2 Database Information
- 2.3 Herd and Milk Eligibility
- 2.4 Control and Monitoring
- 2.5 Criteria Categories and Application
- 2.6 Recommendations for Best Practice
- 2.7 Application, Audit and Certification Process
- 2.8 Certification Decisions
- 2.9 Appeals
- 2.10 Complaints
- 2.11 Revision Updates
- 2.12 Notification of Change

3. PRODUCER CRITERIA

- 3.0 Foreword and Layout
- 3.1 Overview and Retention of Records
- 3.2 Producer Capability and Competence
- 3.3 Identification and Traceability
- 3.4 Animal Remedies
- 3.5 Animal Feeds and Water
- 3.6 Land Management
- 3.7 Specified Management Tasks:
 - Dairy Animals
- 3.8 Animal Health and Welfare
- 3.9 Biosecurity and Pest Control
- 3.10 Housing
- 3.11 Transport
- 3.12 Environment
- 3.13 Farm Personnel: Health & Safety and Social Sustainability
- 3.14 Dairy – General
- 3.15 Dairy
- 3.16 Milking Parlour
- 3.17 Milk Storage & Collection
- 3.18 Milking Equipment
- 3.19 General Hygiene
- 3.20 Chemicals, Pesticides and Herbicides

4. APPENDICES

- Appendix 1 Reference Information
- Appendix 2 Dairy Producer Declaration
- Appendix 3 Supply and Sale of Animal Remedies
- Appendix 4a Animal Remedies Purchases Record
- Appendix 4b Animal Remedies Usage Record
- Appendix 4c Tube Register
- Appendix 5a Feed Purchases Record
- Appendix 5b Own Farm Feeds Record
- Appendix 6 Biosecurity Guidelines
- Appendix 7 Animal Health Plan
- Appendix 8 Zoonoses and Notifiable Diseases
- Appendix 9 Medicine Storage Guidelines
- Appendix 10 Dairy Animal Housing, Space & Transportation
- Appendix 11 Farm Safety Risk Assessment Safety Statement
- Appendix 12 Chemicals Handling and Storage
- Appendix 13 Teagasc Dairy Manual on Energy Use
- Appendix 14 Guideline for Organic Material Application
- Appendix 15 Restricted Access Signage Guideline
- Appendix 16 Welfare in the Workplace

1. Introduction



1. Introduction

1.1 Development

The Sustainable Dairy Assurance Scheme (SDAS) was developed by a Technical Advisory Committee (TAC) representing Bord Bia – the Irish Food Board; Teagasc; the Food Safety Authority of Ireland (FSAI); the Department of Agriculture, Food and the Marine (DAFM); industry (producers and processors) and other technical experts. The criteria were established taking into account HACCP principles as they apply to the production on milk on a farm.

1.2 Scheme Overview

The SDAS has been developed in response to the demands of the marketplace. Increasingly purchasers of Irish dairy products are requiring proof that the milk is produced sustainably on farms that are certified members of an accredited quality assurance scheme. Irish dairy farms already produce milk sustainably according to a European Union (EU) survey¹ which reported that Ireland has the joint lowest carbon footprint for milk in the EU (27 countries). The SDAS has been designed to assess and record data to demonstrate the sustainability of Irish dairying in a systematic way at individual farm level and will therefore provide the necessary proof to customers of dairy products that milk has been produced under the Sustainability and Quality Assurance criteria. The farm visit is conducted by an independent auditor on every member's farm at 18 month intervals and a comprehensive report is produced on the performance of the farm under the Sustainability and Quality Assurance criteria.

1.3 Objectives

The primary objectives of the Sustainable Dairy Assurance Scheme are:

- To demonstrate to customers of dairy products that milk is produced sustainably under an accredited scheme;
- To provide a uniform mechanism for recording and monitoring:
 - Dairy farm quality assurance criteria and;
 - The sustainability criteria of the farm.
- To set out the criteria for best practice in Irish dairy farming;
- To provide an on-going means of demonstrating best practice at Producer level.

1.4 Scheme Detail

The two main components of the SDAS are Sustainability and Quality Assurance.

Sustainability

Sustainable agriculture is defined as “the productive, competitive and efficient production of safe agricultural products, while protecting and improving the natural environment and the socio-economic conditions of farmers and local communities.” In other words sustainability is about ensuring that not only do we farm efficiently but that we pass the land on to the next generation in as good or indeed better condition than when we inherited it.

In the dairy sector most of the leading multinational customers are looking for suppliers who have credibility in sustainable production. In order to retain and grow long-lasting business relationships with these customers, sustainability initiatives (in areas such as minimising greenhouse gas emissions, conservation of water, good soil management and improving biodiversity) are required.

During the farm visit the auditor will collect additional information about the farming enterprise that will enable milk processors to substantiate claims with regard to carbon footprint, water use, etc. and this information will be used by Bord Bia to assess the sustainability performance of the farm.

Quality Assurance

The Scheme is accredited to the European Standard for Product Certification (ISO² 17065: 2012), as are all other Bord Bia National Quality Assurance Schemes. This means that they have been independently assessed and judged to be as good as or better than leading schemes in other countries. During the Bord Bia farm visit, Members' compliance in areas relating to legal, quality and customer requirements including farm safety and welfare, food safety, traceability and animal welfare is assessed.

1.5 Benefits from Participation in the SDAS

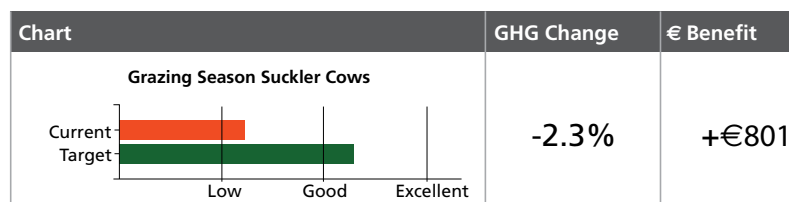
On farm benefits

Sustainable milk production and efficient milk production go hand in hand. At farm level, sustainability involves minimising the amount of resources (e.g. electricity, feed, water, etc.) used to produce a kg of milk solids. However, implementing measures that enhance the environmental performance of a farm will also typically deliver economic benefits through lower costs of production. On farm benefits of efficiency and sustainability include:

- Every 1 day increase in grazing season length reduces carbon footprint by 0.17% per kg of milk and increases profitability by €2.70 per cow on a typical farm.
- Every 1 unit increase in Economic Breeding Index (EBI) reduces the carbon footprint by 0.2% per kg of milk and increases profitability by Euro Sans 2/EBI unit increase on a typical farm.
- Every additional 100 litres of milk produced per cow through improved productivity or better use of grass is worth Euro Sans 30 based on a milk price of 30c/litre while also reducing methane emissions per kg of milk.
- The criteria in the SDAS incorporate the key requirements of the Dairy Hygiene legislation.

Bord Bia and Teagasc have developed a Carbon Navigator tool that farmers can use to improve financial performance while reducing the carbon footprint of their farms. The sustainability information collected on grazing season length, breeding details, calving intervals, fertiliser & energy use, manure management and milk production will provide information to farmers on their current performance. Using the Carbon Navigator farmers can set themselves targets in each key area and see the potential impact of reaching these targets in terms of reduced costs and enhanced environmental performance.

An example from the Navigator tool in the chart to the right shows that the farm in question could cut emissions by 2% and reduce production costs by €800 annually by increasing the length of the grazing season for their cows by three weeks.



Example Farm Navigator Chart

Industry benefits:

- Access to markets that demand on farm certification
- Capability to benchmark Irish milk production internationally
- Assurance for customers regarding sustainable production of quality milk
- Ability to demonstrate the commitment of Irish dairy farms to "green" farming practices

1.6 Sustainability Information Collection

In preparation for the Bord Bia farm visit and to reduce as much as possible the need to collect data on the farm, important information will be obtained from existing sources once consent from each farmer has been obtained. It is envisaged that the following sources will provide valuable information to assist in assessing the performance measures contained within the sustainability criteria:

1. **Department of Agriculture, Food and the Marine** – A full livestock profile for each herd can be obtained from the Animal Identification and Movements database (AIM). This will provide a complete picture of numbers in different animal categories, and also of births, deaths and movements of animals in and out of the herd over the course of the previous year.
2. **Irish Cattle Breeding Federation (ICBF)** – Bord Bia has reached an agreement with ICBF to obtain specific herd information with the consent of each herd owner. This includes the following farm performance information:
 - Number and breeds of dairy cows
 - Number of calves registered
 - Calving rate
 - Average calving interval
 - Age at first calving
 - Replacement rates
 - Average Economic Breeding Index (EBI) of cows & replacements
 - Average milk yields
 - Average lactation length
3. **The Milk Purchaser** – In order to minimise the time required for the Bord Bia farm visit, Bord Bia intends to require the milk purchaser to provide the following information with the consent of the herd owner for :
 - Milk sales volume per month for the previous 12 months
 - Fat, protein and lactose %
 - Milk collection temperature data
 - Herd health certificate details
 - Water analysis (where available and where relevant)
 - Milking equipment servicing details

The information collected on the farm during the Bord Bia visit will improve the quality of the feedback to the farmer and provide better information on the performance of the enterprise.

1.7 Normative References of the Standard

This standard incorporates the key legislative requirements relevant to Dairy farming. However, it is also recommended that Producers consult other best practice guidelines and legislation referenced in Producer Reference Information, Appendix 1.

The Scheme is based on the requirements of existing legislation and standards including:

- European hygiene legislation (including (EC No.s 178 of 2002; 852 and 853 of 2004).
- ISO 17065 (2012) Conformity assessment — Requirements for certification bodies certifying products, processes and services (replacing EN 45011 (by ISO 17065).
- Codex Alimentarius: Recommended International Code Of Practice General Principles Of Food Hygiene (Cac/Rcp 1-1969, Rev. 4-2003).
- Other legislation and codes of practice as set out in Appendix 1.

Note: compliance with this standard does not guarantee compliance with all relevant legislation.

1.8 Definitions

AIM: the DAFM Animal Identification & Movement database (formerly called CMMS) for recording cattle and sheep movements.

Assessment: where used in the Standard means that a trained assessor will determine to what extent the farmer / herd meets the sustainability criteria set out in the Standard.

Audit: : where used in the Standard means that a qualified auditor will, during a Bord Bia farm visit, determine whether the farmer / herd complies with the Regulations (as set out in the Standard: Section 2, Scheme Regulations) and the Scheme Criteria (as set out in the Standard: Section 3, Producer Criteria).

Bord Bia: the Irish Food Board.

Certification Body: the Body / Committee to which the Bord Bia 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.

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

EBI: Economic Breeding Index for breeding animals in Ireland.

Farm: the land under the control of the participating herd owner and the farm enterprise that is operated by the herd owner whose herd is certified.

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.

Herd Number: a unique number assigned to the herd / holding of the keeper of animals.

Member: a Producer that is certified under the SDAS and is shown on the Bord Bia register / database.

Participant: a farm / herd that has applied for membership and is awaiting audit under the Standard.

Producer: a dairy farmer / herdowner with a valid herd number.

Producer Standard: this consists of the criteria as set out in Sections 1 (Introduction), 2 (Scheme Rules), 3 (Producer Criteria), 4 (the associated Appendices) of the Bord Bia Sustainable Dairy Assurance Standard.

Quality Assurance Board: an independent subsidiary Board within Bord Bia which has overall responsibility for policy in relation to the operation of the Assurance Scheme.

Register / Database: the Bord Bia register / database of the current certified members indicating the membership status

Residues: a 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 Sustainable Dairy Assurance Scheme consists of the following elements:

- The SDAS standard (this Standard),
 - The process for ensuring that the Criteria as set out in the Standard are met (through independent auditing) and that the relevant details are published.
 - The process for collecting and analysing the data under the Sustainable Assessment Criteria.
 - The certification process whereby all the data collected is evaluated for compliance with the Standard.
-

SDAS: the Bord Bia Sustainable Dairy Assurance Scheme.

Sustainability: the productive, competitive and efficient production of safe agricultural products, while protecting and improving the natural environment and social/economic conditions of farmers and local communities

Teagasc: The Agriculture and Food Development Authority.

Veterinary Prescription: a written prescription (containing the information specified in S.I. 786: 2007, Schedule 3) issued by a registered veterinary practitioner in respect of an animal under his / her care that provides for the administration of an animal remedy to the animal.

1.9 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.

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



2. Scheme Regulations



2. Scheme Regulations

This section contains important general information for Producers. It is crucial that Producers take sufficient time to read and fully understand this section of the Standard.

2.1 Scope and Membership

This Standard applies to milk produced from bovines only.

Membership of the Scheme is open to all dairy Producers that have valid herd registration with the competent authority.

During the Bord Bia farm visit, the performance of the farm under Sustainability and Quality Assurance criteria will be assessed and the herd must submit to both.

Where there is mention of a body (competent authority or otherwise) in the text, this is to be taken to also mean "or equivalent in Northern Ireland".

2.2 Database Information

A Bord Bia database / register indicating the status of all certified Producers in the Scheme will be maintained.

Bord Bia records all relevant / applicable data during the Bord Bia farm visit by the auditor. All data is maintained on a confidential basis on the database in accordance with the data protection act (see Appendix 1, reference Information).

The Bord Bia database performs a number of functions.

- Recording details of the farm that permits the Producer to be contacted for audit purposes (name, address, phone numbers, directions to the farm)
- Recording the enterprises that are present on the farm (main production types / systems, other enterprises present (e.g. tillage), presence of an outside farm, size of the farm / enterprises, etc.) as relevant to the Sustainability or Quality Assurance criteria.
- Recording and collating data collected as part of the farm surveys for the purpose of calculating the carbon footprint of the farm and for the purposes of establishing the performance of the farm against the sustainability criteria or survey, etc.
- Recording the results of the audits carried out by Bord Bia appointed auditing personnel and communicating those results as needed to the Producer and the Milk Purchaser.

The Bord Bia database is linked to the Bord Bia public website through which, various links are available e.g. checking herd certification status and downloading documentation relating to the Schemes (Standard, templates, other information relevant to the scheme, etc.).

The Bord Bia database is accessible directly by Participants, Members and Milk Purchasers for application purposes and for the purposes of providing information on closeout of audit non-compliances. Access to the database is provided only on an as-required basis. In each case, the Participant / Member / Milk Purchaser will need a username and password to be able to access the information relevant to the assessment of the herd.

Milk Purchasers are registered on the database and their representatives (i.e. Field Officers) are trained by Bord Bia to be able to provide assistance to Producers with applications for participation, and with providing closeout evidence where required (with the Producers consent). The Milk Purchaser and its representatives are also permitted to access the database to view assessment results.

Access to Bord Bia documentation relevant to the scheme (Application forms, Standard, Farm Book) is available on the Bord Bia public website: www.bordbia.ie.

2.3 Herd and Milk Eligibility

Application for participation / membership of the Sustainable Dairy Assurance Scheme is open to all dairy Producers that are in compliance with the legislation relevant to dairy farming and milk production. Certification to the standard, however, will only be granted to Producers who meet the relevant criteria of the Standard.

Where Producers (Members or Participants) have been convicted of an offence under legislation relevant to dairy farming in the previous 3 years, application for participation in the scheme may be denied and certification under the scheme may be terminated based on an evaluation of the available information by the Certification Committee (see also Section 2.9 Appeals).

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 and Participation / Membership Certificate may be revoked and the Producer may be withdrawn from the Scheme after due process. Failure to inform Bord Bia of a conviction will also be deemed as not having met the conditions of membership.

2.4 Control And Monitoring

2.4.1 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 has delegated the responsibility to the Technical Advisory Committee for drafting the Standard and subsequently formulating any required amendments.

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

2.4.2 Monitoring

Monitoring of Producer's compliance with the standard will be carried out by Bord Bia or its nominated agents. Independent auditors with relevant experience of the sector will carry out these audits and a full report will be issued directly to the Producer and to the nominated Milk Purchaser.

After initial certification, each herd will be independently audited at determined intervals. The maximum interval between successive audits will be 18 months.

Bord Bia (or its appointed agents) reserves the right to carry out unscheduled audits for the purpose of verifying compliance with the standard or to determine that corrective / preventive actions specified during audit are in place. Failure to permit access to such an audit may result in the suspension of the herd from the Scheme.

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

Auditors are entitled to seek access to relevant regulatory reports.

Producers must supply any information relevant to establishing compliance with the Standard as requested by the auditor.

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

2.5 Criteria Categories and Application

2.5.1 Categories

The Quality Assurance criteria where compliance with the Standard is required (black text surrounded by a black frame in Section 3 Producer Criteria) are classified as Critical and General.

Critical: These criteria are printed in **bold** typeface and are identified in the text (in Section 3 Producer Criteria) as **(Critical)**. These relate to areas of high significance (e.g. food safety and traceability) and to Scheme rules.

General: These criteria are printed in normal typeface in the text (in Section 3 Producer Criteria). They relate to core best practice.

The Sustainability Criteria under which information will be collected during the Bord Bia farm visit are printed on green background and are used in calculating the sustainability performance of the farm but are not used in the calculation of the audit score.

2.5.2 Compliance / non-compliances

During the audit where compliance is required, the auditor will identify the performance as follows:

- **Compliance:** There is full compliance with the criterion (e.g. the record is available, correctly completed and up to date) and the performance is rated as 2;
- **Minor non-compliance:** The criterion is being met in some respects, but not in other respects (e.g. there is a record, but several entries are incorrect or missing) and the performance is rated as 1;
- **Major non-compliance:** There is a complete failure to meet the criterion (e.g. there is no record of the activity) and the performance is rated as 0;
- **Not applicable:** the criterion does not apply on this farm (e.g. there is no out-wintering of dairy animals);

Note: There are 170 criteria in total (i.e. black text surrounded by a black frame) of which 7 are critical criteria and 163 are general criteria.

For a farm to be eligible for certification it must:

- Have full compliance with all critical criteria, and
- Obtain a score of 60% or greater in the general criteria.

The score calculation can be illustrated with the following example:

- Total general criteria = 163.
- Total not applicable criteria for this herd: 10
- Total applicable general criteria = 153 (the maximum score achievable = 306)
- The actual score achieved = 280 (this could arise where there were 5 major non-compliances (score 0) and 16 minor non-compliances (score 1))
- The actual overall score = 91.5%.

The overall % performance of the farm is calculated in this way only when the audit is completed.

2.5.3 Addressing Non-Compliances

The following section identifies how non-compliances (major or minor) that are identified during the audit must be managed in order for the herd to be eligible for certification:

Critical:

Where a Critical non-compliance is identified during audit, the Producer is advised at the audit and the Milk Purchaser is advised immediately. A response must be recorded on the Bord Bia database within 48 hours of the completion of the audit setting out the corrective action proposed. Where the critical non-compliance is then closed out, a re-audit can be scheduled.

General:

Where the overall score is 60% or less, the major non-compliances must be closed out in the period as agreed between the Producer and the auditor (maximum 2 months) and sufficient minor non-compliances must be closed out to achieve a minimum overall score of 60%. The Milk Purchaser may then advise Bord Bia when this situation has been achieved so that a re-audit of the herd can be scheduled.

Where the overall score is greater than 60% and the non-compliances identified include major non-compliances, the major non-compliances must be closed out in the period as agreed between the Producer and the auditor (maximum 1 month). Evidence of the closeout of each such major non-compliance must be uploaded to the Bord Bia database. This evidence will be reviewed by Bord Bia and if it is acceptable and closeout is deemed to have been completed, the audit can be considered for certification. Otherwise, the audit will be referred back to the auditor.

Where minor non-compliances were identified, the Producer must give an undertaking to address these issues prior to the next audit. Where the overall score is greater than 60% and no major non-compliances are identified, the Producer must give an undertaking to address these issues prior to the next audit.

Bord Bia reserves the right to verify, through unscheduled audit, that the corrective actions are being implemented.

A schematic representing this process is presented in the Figure 1 below.

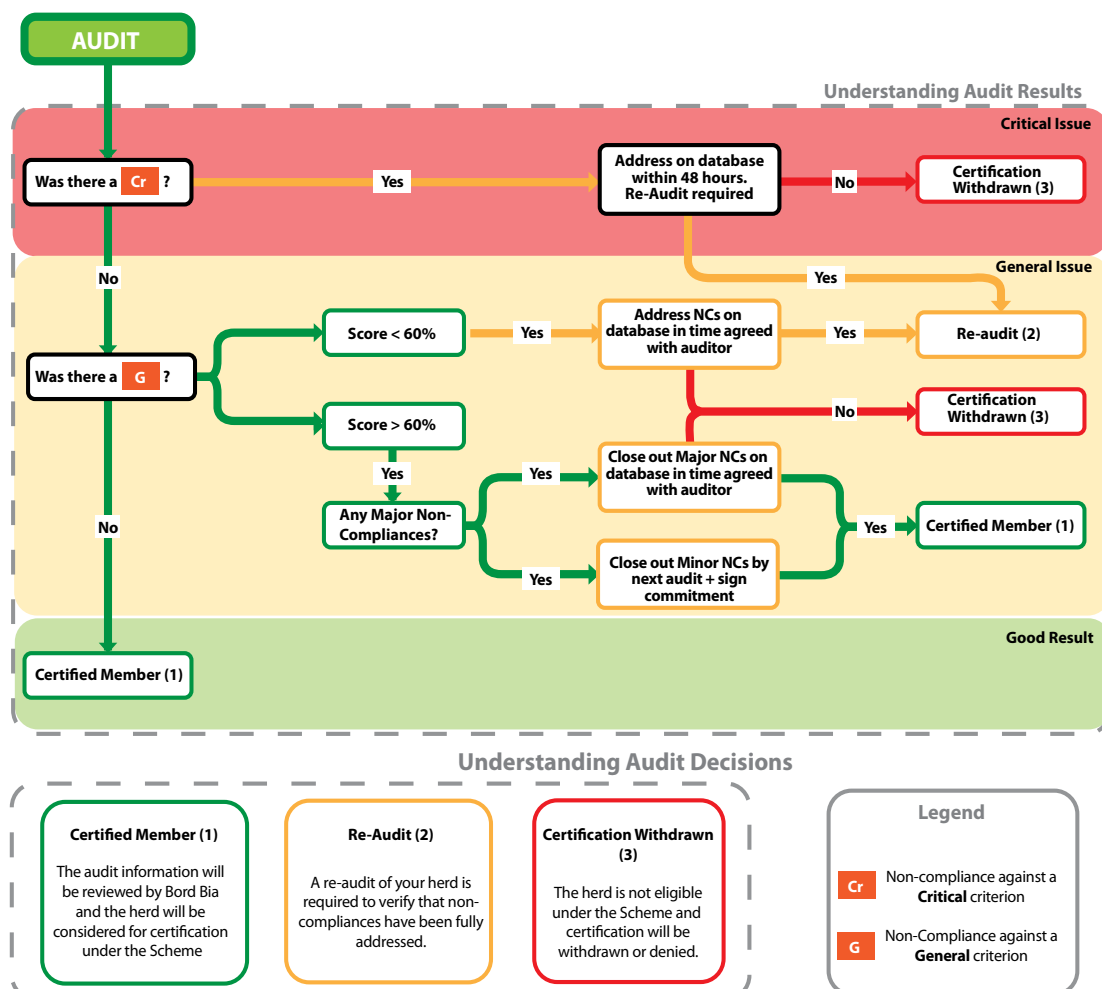


Figure 1: Understanding Audit Results

2.5.4 Closeout Process

Where non-compliances are identified during audit, the nominated Milk Purchaser will be informed so as to ensure that assistance with addressing the non-compliances can be offered to the Producer. However it is the Producer's responsibility to ensure that the non-compliances are addressed as agreed with the auditor. In all cases, the Producer will receive a written report from Bord Bia outlining all the non-compliances and identifying the closeout process.

Non-compliances must be addressed through the database. If this is not possible, the Producer or his/her representative may obtain permission from Bord Bia to supply the information through another route.

Failure to respond within the required time or failure to close out the non-compliance in the required period will result in the herd being suspended from the Scheme.

Where non-compliances are identified, the Bord Bia auditor will advise the Producer of each non-compliance and will brief the Producer on the type of evidence that could be submitted in closeout and how this evidence can be supplied. The Producer must understand however that the auditor is precluded from providing advice on what action to take to close out the non-compliance.

2.6 Recommendations for Best Practice

There are a number of recommendations for best practice included in this standard (these are printed in orange in Section 3). Compliance with these recommendations is not mandatory for certification however, during audit, these issues may be evaluated and the result recorded.

2.7 Application, Audit and Certification Process

2.7.1 Participation

Existing milk Producers seeking membership must initially apply in writing. The application form can be downloaded from the Bord Bia website (qas.bordbia.ie/dairy) and posted directly to Bord Bia. Alternatively, the application form can be obtained by writing to or phoning Bord Bia, or through a participating Milk Purchaser. An Application Form must be completed which includes a commitment to becoming certified under the scheme within 18 months of application. The application form also contains consent forms permitting the release of relevant data from DAFM's database (Animal identification and Movements – AIM), Irish Cattle Breeding Federation (ICBF), and the Milk Purchaser to Bord Bia for verification of compliance with certain audit criteria and for sustainability evaluation purposes. On receipt of the completed Application form and commitment, the Producer's herd will be deemed to be a Participant under the Scheme (see Definitions in section 1.4).

Producers who commence milk production after the commencement date can also apply for Participation as above.

2.7.2 First Audit / Pre-Assessment

After application, the Participant will be offered a certification audit. Where it is apparent early in the audit that the herd is not fully prepared for the audit, the Bord Bia auditor will advise that the audit can continue on a pre-assessment basis with the farmer's permission. The auditor will then create a report listing any issues that would need to be addressed in order to be eligible for certification. However, if during the audit the Participant can demonstrate compliance directly or after a closeout period (this is optional and must be agreed with the auditor), the audit can be treated as a normal certification audit and the closeout process can be completed as outlined in sub-section 2.5.2 – 2.5.4 above.

Until the closeout is completed, the herd remains a Participant.

2.7.3 Certification / Renewal Audit

The certification is normally issued for an 18 month period. Existing members will be contacted to arrange the re-audit approximately 14 months after last certificate issue date to allow time for a closeout process and this will be notified by Bord Bia in advance of the audit.

2.8 Certification Decisions

The decision to grant, extend, withdraw or suspend certification to / from a Producer is made by the Bord Bia 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 in arriving at the certification decision.

The decision is published on the Bord Bia database and the current status of the herd can be verified by entering the herd number in the following link: <https://qas.bordbia.ie/Dairy/Verify/>

All certification decisions are notified in writing to the Producer and a certificate is made available online. This certificate can be used as evidence of certification under the SDAS, 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 under the following conditions:

- That Producers 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 Producers 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 Producers comply with the criteria of the Bord Bia Scheme where reference is made to Bord Bia certification in any communication media such as documents, brochures or advertising.

2.9 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 certification decision communication.

The request to appeal will be acknowledged and followed up by Bord Bia. However, the decision of Bord Bia's Appeals Committee in relation to the appeal will be final.

2.10 Complaints

The Producer may complain at any time 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 by Bord Bia.

2.11 Revision Updates

Users should note that only this edition (Revision 01) now applies. When future changes occur, updates will be issued in whole or in part to all Applicants, Participants and Members who are responsible for ensuring that the obsolete sections are replaced.

2.12 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).

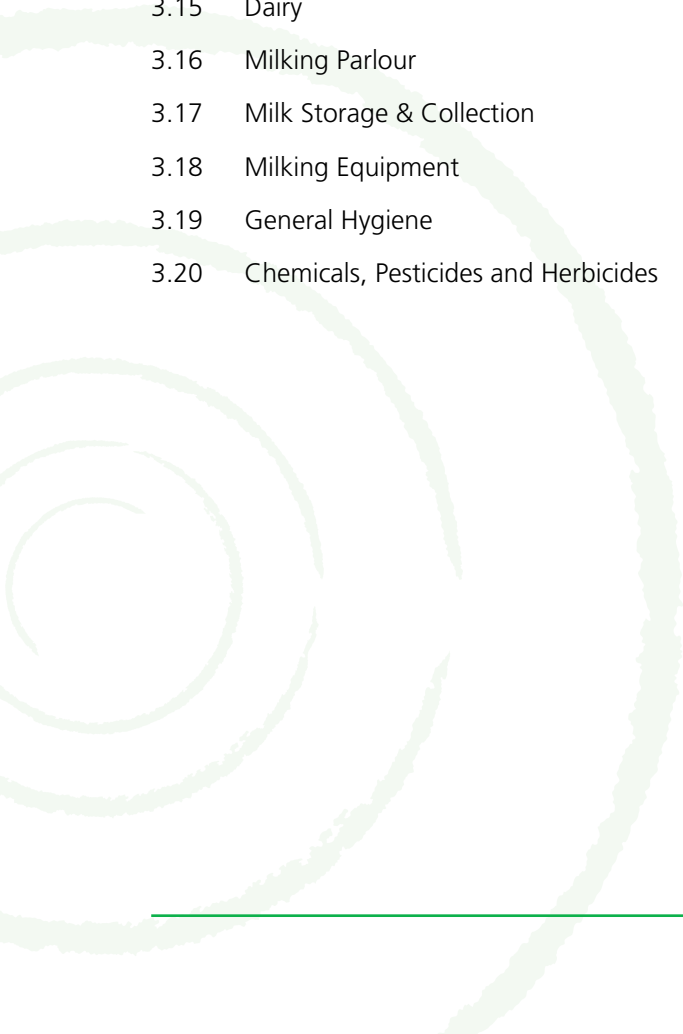
3. Producer Criteria



3. Producer Criteria

Contents:

3.0	Foreword and Layout	2
3.1	Overview and Retention of Records	3
3.2	Producer Capability and Competence	3
3.3	Identification and Traceability	4
3.4	Animal Remedies	5
3.5	Animal Feeds and Water	7
3.6	Land Management	9
3.7	Specified Management Tasks: Dairy Animals	9
3.8	Animal Health and Welfare	11
3.9	Biosecurity and Pest Control	13
3.10	Housing	14
3.11	Transport	15
3.12	Environment	15
3.13	Farm Personnel: Health, Safety and Social Sustainability	17
3.14	Dairy – General	18
3.15	Dairy	19
3.16	Milking Parlour	20
3.17	Milk Storage & Collection	21
3.18	Milking Equipment	22
3.19	General Hygiene	22
3.20	Chemicals, Pesticides and Herbicides	23



3.0 Foreword and Layout

The Bord Bia Sustainable Dairy Assurance Scheme is a voluntary scheme open to all farmers producing milk from bovines that wish to participate. The Scheme is accredited to the International standard for product certification (ISO 17065: 2012). This Standard sets out the various criteria in panels as follows:

Background Text

The blue text sets out the context of the criteria in the sub-section and this is presented for information purposes only.

Quality Assurance Criteria

The black text surrounded by a black frame sets out the criteria under which the Producers compliance will be assessed. These are identified as a list within each section with a lower case letter as follows: a), b), c), etc. Compliance with these criteria (as set out in full detail in the Scheme Regulations Section 2.5) is required to be eligible for certification under the scheme as a milk Producer.


Sustainability Criteria

The green text sets out the criteria that will be surveyed during the Bord Bia farm visit. These are identified as an overall list with an uppercase letter and number as follows: S1 – S30. Data and information on these will be collected during the visit to permit other aspects of the sustainability performance of the farm to be assessed. Implementing measures to address these criteria will improve the farms sustainability performance. Compliance with these criteria is not required for certification.


Best Practice Recommendations


The orange text sets out the recommendations for best practice. These are identified as an overall list with an uppercase letter and number as follows: R1, R2, R3 ... R26. Compliance with these criteria is not required for certification.

All this information will be used to provide feedback to the Producer and can also be compiled for benchmarking purposes.

 **Blue Text:**
For information only.
Score not affected.

 **Black Frame & Text:**
Required for certification.
Assessed for score.

 **Green Text:**
Information is collected only.
Score not affected.

 **Orange Text:**
Recommendations only.
Score not affected.

3.1 Overview and Retention of Records

Background Information

During the Bord Bia farm visit, the auditor will seek to establish (through observation, questioning and the assessment of relevant records) that the Producer meets all the requirements of the Standard. The retention of good records is therefore a vital prerequisite to eligibility for certification under the Scheme and is an important means for demonstrating on-going compliance.

Producers will also be informed of the value of assessment of the environmental and economic performance of their farm that could help identify areas for improvement. Data on the measures below will be collected to enable this.

- a) All records required under this scheme must be retained for a minimum of 3 years.
- b) Prescriptions and animal remedy records (both purchase and usage) must be retained for 5 years
- c) Records must be available to the auditor and must be complete (i.e. without unexplained gaps) as in 3.1.a&b or since joining the scheme (whichever is the shorter).

Maintain records of the following:

- S1. Turnout and housing dates for cows.
- S2. Harvest dates and quality of grass based and other forages used on farm.
- S3. Feeds (concentrates and forages) fed to cows during the year (types and quantities).
- S4. Use of chemical fertilisers (e.g. date, material, quantity used).
- S5. Manure spreading and application method.

3.2 Producer Capability and Competence

Background Information

Producers will be aware of the many sources of information on best practice on the farm. Sources such as Teagasc, the Farm Animal Welfare Advisory Council (FAWAC) and their publications provide guidelines. The emphasis on family farming with land in most cases in the same family for a number of generations is almost unique to Ireland. The economic viability of the farm business itself is vital. Producers will be aware of the need to plan ahead, assess current performance, identify potential opportunities and prioritise expenditure to ensure the economic efficiency and viability of the farm and source supplies locally where possible.

- a) The Producer must be able to demonstrate competence in stockmanship through on-farm working with an experienced person; having a minimum of 5 years relevant on-farm experience in milk production or be able to demonstrate that training was received in at least one of the following:
 - i. Teagasc Courses/seminars/public events (both national and local);
 - ii. Agricultural College certificate/diploma/degree;
 - iii. Work experience on master farms;
 - iv. Farm apprenticeship courses.
- b) To demonstrate their understanding of animal welfare issues, Producers must be conversant with principles of best practice in animal welfare ¹

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

1- The publications are available from FAWAC include Animal Welfare Guidelines for Dairy Farmers; Animal Welfare Guidelines for Managing Acutely Injured Livestock on Farm; Best Practice for the Welfare of Animals During Transport, and are available from www.fawac.ie. – See Appendix 1 Reference Information.

Consider implementing measures to address the following as appropriate to your enterprise:

- S6. Obtain and understand relevant to up to date technical information through farming publications, membership of a farming union, participation in a formal discussion group, attendance at events of interest to farming, attendance at animal health information meetings, attendance at co-op advisory meetings, etc.
- S7. Establish and maintain access to qualified advisors.
- S8. Conduct an on-going review of farm to identify opportunities for improvement (e.g. participation in the CellCheck programme, or other Milk Purchaser initiatives), and to accommodate future developments in conjunction with a qualified advisor.
- S9. Make sure that the person responsible for determining pesticide and herbicide applications has a minimum of 5 years relevant on-farm experience in grassland management or has attended appropriate training or received qualifications.

3.3 Identification and Traceability

Background Information

The SDAS Standard seeks to assure the consumer with regards traceability on the farm. Producers will be therefore aware of the importance of being able to establish full traceability for all cattle on their farm(s). The central system for ensuring identification and traceability of livestock on farms is the DAFM Animal Identification & Movement system (AIM) on which all movements are finally recorded.

a) Each participant must have a valid DAFM herd number and a current valid herd register (Critical).

Each participant must have a system for recording bovine movements² that meets the regulatory requirements.

- b) There must be a current listing of all bovines on the holding.
- c) All animal movements onto and off the farm must be recorded with AIM Compliance Certificates and where relevant retained.
- d) Records of all bovine births and deaths must be retained.
- e) All cattle on the farm must be tagged with two (matching) official ear tags by 20 days of age.
- f) All calves must be registered on AIM within 7 days of tagging using the Calf Registration form or other approved means.
- g) There must be a valid passport (or approved alternative) available for each animal within 40 days of birth.
- h) The disposal of dead cattle must be done in compliance with the current DAFM requirements and the required disposal evidence must be available (e.g. receipt for collection / AIM record).

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

3.4 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 carry an IMB Veterinary Product Approval (VPA) or EMA approval number. Producers should note that remedies purchased outside the state or over the internet may not be approved for usage in Ireland (for further details please see Appendix 3 Supply and Sale of Animal Remedies).

Great care should be taken to follow veterinary instructions and / or label instructions to ensure optimum results and avoid risks to livestock, Producers and consumers. Producers should note that under Irish and EU law, there is a requirement to keep separate records of animal remedies purchased / received AND remedies administered / used. The requirement to keep records applies to all animal remedies (both prescription and non-prescription) including intramammarys, doses, drenches, anthelmintics, etc.

Correct storage and disposal of unused / empty / expired animal medicines and veterinary waste materials (e.g. used containers, used needles / syringes, etc.) is an essential part of good farming practice. It is therefore important to observe label directions for storage and disposal.

Note: please contact the relevant local authority for information on proper disposal.

For further information, see Waste Management Act 1996 and 2002; see also Environmental Protection Agency (EPA) Waste Catalogue and Hazardous Waste List available on the EPA website www.epa.ie.

Purchase, Administration and Records

- a) **Only authorised remedies that carry a VPA, EMA or other official approval number that were purchased from approved sources are permitted (Critical).**
- b) To ensure that all animal remedies purchased are clearly and readily traceable, all the purchasing information, (including name and address of supplier, date of purchase/receipt, authorised name of the animal remedy, quantity) must be recorded in one of the following ways:
 - i. Retention of all invoices/purchase records provided they contain ALL the necessary detail (above);
 - ii. Computer based records containing the above details and these are clearly accessible to inspection;
 - iii. Details entered in the Bord Bia Farm Book, Animal Remedies Purchases Record (see Appendix 4a, Animal Remedies Purchases Record).
- c) Label instructions / prescriptions with respect to target species / class of livestock, dosage rates, treatment duration and withdrawal periods, must be observed and this will be subject to verification via the Animal Remedy Records (ARR).
- d) An up-to-date register of remedy usage, on an individual animal or group basis must be maintained in one of the following formats:
 - i. The ARR section of the Bovine Herd Register (BHR). (Note: some of the BHR books issued do not have an ARR section, hence options ii or iii must be used);
 - ii. The Bord Bia Remedies Usage Record in the Bord Bia Farm Book (See Appendix 4b, Animal Remedies Usage Records) and the Bord Bia Tube Usage Register (See Appendix 4c);
 - iii. Computer based records provided these are easily accessible for inspection;
 - iv. Other means satisfying legal requirements.
- e) For each administration, the following information must be recorded:
 - i. Date of administration;
 - ii. Authorised name and quantity of the animal remedy administered;
 - iii. Identity of animal to which the remedy was administered including ear tag number if appropriate OR for group administrations, the identity of the group of animals treated;

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.


Orange Text:
Recommendations only.
Score not affected.

- iv. Date on which the withdrawal period ends;
 - v. Name of person administering remedy;
 - vi. Name of prescribing veterinarian (if applicable).
- f) Clear measures must be in place to ensure that milk is not sold before the date of end of the remedy withdrawal period.

Animal Remedies - Storage and Disposal


- g) A medicine store must be provided which is secured in a manner so as to be accessible only to the person(s) responsible for the herd (see Appendix 9 Medicine Storage Guidelines).
- h) All expired animal remedies must be removed from the medicines store or segregated and clearly identified within the store and controlled pending safe disposal, and any quantity of unused/expired medicines returned to the supplier for disposal must be recorded in the Animal Remedy Records.
- i) All animal remedies (including pour-on remedies, etc.) must be retained in their original labelled container, stored in isolation from other products such as farm chemicals and where requiring refrigerated storage (e.g. vaccines and other remedies) stored in a suitable fridge.
- j) All veterinary equipment must be stored separate from farm chemicals and other hazardous products and maintained in a safe and clean environment.
- k) All used needles and syringes must be controlled pending safe disposal in suitable labelled receptacles / boxes / containers.

R1. Follow veterinary guidelines in the use of antibiotic products and in using them to achieve optimum therapeutic efficacy and to minimise the build-up of resistant bacterial strains.

 **Blue Text:**
For information only.
Score not affected.

 **Black Frame & Text:**
Required for certification.
Assessed for score.

 **Green Text:**
Information is collected only.
Score not affected.

 **Orange Text:**
Recommendations only.
Score not affected.

3.5 Animal Feeds

Background Information

Correct nutrition of the animal is vital to good animal health and to food safety. In Ireland, dairy animals are largely fed on diets based on grass or grass silage. However, it is common practice to supplement this with purchased feedstuffs particularly during the winter period. Producers will also provide dairy animals with ready access at all times to clean water and will be aware of the need to ensure that the feed regime of all animals is maintained in the event of unexpected events / unplanned absences.

Purchase, Administration and Records

- a) There must be sufficient feed / fodder (grass, forage, roots, etc.) and clean water available to maintain the health and welfare status of the animals.
- b) Dairy animals must derive the bulk of their feed throughout their lifetime from grass and grass based forages.
- c) Only animal proteins derived from milk, egg and non-ruminant gelatine may be used in dairy feeds (Critical).**
- d) Feedstuffs, other than farm to farm cereal / fodder purchases, must only be sourced from suppliers approved by the competent authority and in accordance with the Feed Quality Assurance Scheme when introduced³(Critical).**

Note: Under the legislation, the use of all medicinal feed additives (including antibiotic growth promoters) for non-therapeutic purposes is prohibited⁴.

- e) Dairy feeds must be manufactured without the incorporation of tallow.

Note: This can be determined from the feed labels (compositional detail).

- f) Feed delivery documentation / label information must be retained for examination for all feed deliveries.

Note: While this is the feed supplier's responsibility primarily, the Producer is responsible to ensure that the information is provided and that the feed label or accompanying documentation contains the following information: the species of animal for which the feed is intended; a list of ingredients or category in descending order of inclusion; the name, address and licence number (DAFM or equivalent approval number) of the manufacturer; a declaration of nutritional composition.

- g) For farm to farm cereal / fodder purchases, the details of the purchase (which could include name of supplier, herd / tillage number, date of purchase, product purchased, quantity, and any other relevant information) must be recorded.

Note: This can be recorded in the Bord Bia Farm Book (see Appendix 5a Feed Purchases Record). Other recording systems which capture the same information will be acceptable.

- h) The types of feeds produced on the farm and fed to the dairy animals must be identified.

Note: This can be recorded in the Bord Bia Farm Book (see Appendix 5b Own Farm Feeds Record). Other recording systems which capture the same information will be acceptable.

- i) Producers who carry out on-farm mixing and are incorporating specific ingredients (e.g. anthelmintics or other additives specified by DAFM) must have a current license for this activity from DAFM, and must be approved under the Bord Bia Feed Quality Assurance Scheme (FQAS) when introduced.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

³ A full list of the approved feed suppliers will be published on the Bord Bia website


⁴ Refer to (EC) No 1831:2003 in Appendix 1, Reference Information


Note: Where Producers carry out home mixing, this activity may need to be certified under the Feed Quality Assurance Scheme (details of the relevant sections of the FQAS are available from Bord Bia).

- j) Producers must be able to identify the feed storage areas / facility and this must be maintained in a clean, dry state and protected to minimise contamination from sources such as rodents, birds, cats, insects, moulds and dampness.
- k) Chemicals and oils and other potentially toxic substances (including paints, preservatives, detergents, disinfectants, etc.) must be kept isolated from animal feeding-stuffs to prevent any accidental contamination of the feeds.
- l) Producers must ensure that all feeding equipment (including receptacles, feed troughs, bins, mixing equipment, areas where mixing occurs) and vehicles are maintained in a manner that minimises cross-contamination (e.g. from chemicals, oils, other farm wastes and manures).
- m) Watering devices including drinkers and storage facilities must be kept clean and regularly inspected to ensure they are in good working order and sited so as to minimise risk of fouling and freezing in cold weather.
- n) Dairy Animals must not be fed non ruminant feeds and feed storage facilities must be managed so as to prevent cross contamination of the dairy animals rations with feed rations intended for other species (Critical).**
- o) Where feeds for animals of different species are handled, separate feed handling equipment must be used or else the handling equipment must be thoroughly cleaned between each use.


R2. Take steps to minimise exposure of stock to poisonous plants (e.g. yew, ragwort, fox glove, hemlock, deadly nightshade, etc.).

R3. Ensure that livestock feeds are wholesome and free from contamination.

 **Blue Text:**
For information only.
Score not affected.

 **Black Frame & Text:**
Required for certification.
Assessed for score.

 **Green Text:**
Information is collected only.
Score not affected.

 **Orange Text:**
Recommendations only.
Score not affected.

3.6 Land Management

Background Information

Producers will be aware of the need to manage the land available to their farming enterprise(s) so as to optimise production from the land while maintaining or improving the environment. Producers will also be aware of the need to comply with the Nitrates Directive (S.I. No. 378 of 2006, European Communities (Good Agricultural Practice for Protection of Waters) Regulations 2006 on nitrate fertilisation of the soil.

- a) **Raw or treated sewage / sludges are prohibited from being used on Bord Bia certified farms (Critical).**
- b) Where stock is out-wintered, the Producer must avoid placing livestock on poorly drained land and steps must be taken to minimise poaching particularly near watercourses. Producers must comply with the regulatory requirements / restrictions relating to areas of special conservation under their control.

Consider implementing measures to address the following as appropriate to your enterprise:

- S10. Monitor field conditions and take appropriate action to minimise soil erosion / poaching or compaction.
- S11. Use grassland management techniques to minimise risk of parasites.
- S12. Ensure that the person responsible for determining fertiliser applications has experience of implementing a nutrient management plans through having a minimum of 5 years relevant on-farm experience in grassland management or by attending appropriate training or by having received a qualification.
- S13. Incorporate clover into grassland swards where possible to aid nitrogen (N) fixation and reduce the need for chemical N.
- S14. Carry out soil testing for pH, P and K at least every 5 years and ensure that pH balance and fertility levels are maintained at optimum levels.

3.7 Specified Management Tasks: Dairy Animals

Background Information

Producers realise the value of having suitable training and experience in animal husbandry, health and welfare. This includes having a knowledge of the following: maintaining healthy, stress free, and properly nourished animals; appropriate animal feeding and grassland management; good animal housing; good animal husbandry and handling; maintaining normal animal behaviour; a planned herd health programme; prompt treatment of sick animals; responsible use of animal medicines.

- a) Where stock bulls (including vasectomised animals) are housed individually, they must have sight of other farm animals or other farm activity.
- b) Calving facilities must be available that permit cows to be restrained promptly and safely as required.
- c) Calves under 8 weeks may only be housed in individual pens where they have direct and visual contact with other calves. Calves over 8 weeks must only be individually penned where under veterinary supervision / treatment.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

- d) Calving pens must be maintained in a hygienic and safe condition so as to minimise risk of infection and injury during calving.
- e) Where castration using a clamp (e.g. Burdizzo) is carried out, it must be completed before 6 months of age, or if older by a veterinary surgeon.
- f) Where castration is carried out using rubber rings, it must only be carried out in the first week of life.
- g) Disbudding of calves without veterinary intervention must be carried out before 2 weeks of age and must be done in a competent manner that minimises pain.
- h) Dehorning of older dairy animals must only be carried out by a veterinary surgeon using appropriate anaesthesia and analgesia (pain killing drugs).
- i) Routine tethering of calves is prohibited.
- j) Siring (either by stock bulls or AI) must be managed to minimise calving difficulties (particularly for heifers).
- k) Tail docking of cows and calves is prohibited.
- l) Documentation must be available to demonstrate that synchronisation of oestrus, where practiced, was carried out under veterinary supervision.
- m) Routine induction of calving is prohibited.

Consider implementing measures to address the following as appropriate to your enterprise:

S15. Set out the main focus of the replacement breeding strategy.

R4. Ideally castration, using a clamp (e.g. Burdizzo), should be carried out between 2 and 3 months of age to minimise stress.

R5. Source replacement breeding animals (heifers, cows) from Bord Bia assured herds.

R6. Ensure that new born calves receive colostrum during the first 6 hours and ideally within one hour of birth and have access to a source of long fibre from 10 days of age.

R7. Ensure that the breeding programme in place on the farm takes Teagasc / Breeding Index (EBI) for dairy cattle or equivalent considerations into account.

R8. Ensure that prompt treatment is given to any cow experiencing difficult calving.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

3.8 Animal Health and Welfare

Background Information

Producers will also be aware of the need to produce milk that meets or exceeds the Milk Purchasers' requirements in terms of product safety and quality while adhering to good animal welfare standards and protecting the environment. Consumers also are increasingly conscious of animal health and welfare issues and require assurance that best practices are used in the farming since maintaining the health and welfare of dairy animals is an important consideration in milk quality and safety. Stockmanship is therefore a key factor in animal welfare.

Producers will be aware that the health of the animals is crucial to food safety and productivity on the farm. Producers have a close relationship with their veterinary surgeon and will be conscious of the need to try to prevent animal health and welfare problems.

Producers will also be aware that certain diseases are transmissible to humans. These diseases are notifiable and that incidences of such diseases must be reported to the local District Veterinary Office (DVO). A list of common notifiable diseases is provided in Appendix 8, Zoonoses and Notifiable Diseases.

- a) To verify that the welfare requirements of the animals are being met, Producers must have a regular inspection routine (including inspection during milking) for all animals and the frequency of inspections must be increased during vulnerable periods including calving, adverse weather conditions and other relevant times.
- b) Producers must have animal handling facilities for the management of their livestock (e.g. a pen, crush, restraining gate where relevant). These facilities must be appropriate to the enterprise, permit animals to be restrained to minimise risk of injury and stress and must be maintained in a manner that ensures the safety of both the livestock and the stockperson.
- c) Animals must be treated and handled in accordance with Animal Welfare Guidelines, i.e. without excessive physical force, in a manner that avoids injury and minimises stress.
- d) Where the destruction of an animal is deemed necessary on humane grounds, it must be carried out under direct veterinary supervision or by a licensed slaughter service (who may be a knackery employee). The death must be recorded on the AIM database by the knackery and in the herd register or equivalent by the Producer.
- e) Producers must ensure that the health and welfare of the animals is provided for in the event of unplanned absences of a stockperson.
- f) The herd must be under the routine care of a veterinary surgeon.
- g) All bovine animals must be presented for testing in accordance with the DAFM disease eradication and control requirements.
- h) Each Producer must follow a documented Animal Health Plan that is based on the needs of the farm and that is drawn up by the Producer (ideally in conjunction with his/her veterinary surgeon or agricultural advisor) and that is equivalent to the Animal Health Plan in Appendix 7.
- i) Boundaries and fences must be maintained in a stock-proof condition to minimise contact with animals of other herds and must be maintained to minimise risk of injury to animals.
- j) Sick animals must be treated promptly and segregated where required.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

- k) Producers must be aware that certain diseases can be transmitted from animals to humans and familiarise themselves with possible preventative measures (see Appendix 8 Zoonoses and Notifiable Diseases).
- l) All purchased stock must be monitored for signs of disease for a period after purchase.
- m) Lactating cows must normally be milked daily.
- n) A record of significant animal health events (e.g. abortions, disease incidences including respiratory, leucosis, salmonellosis, leptospirosis, paratuberculosis / Johne's, blackleg , etc) must be maintained.

Note: Guidelines on this are published by Animal Health Ireland (see Appendix 1 Reference Information).

- o) The authorities must be informed in the event of incidences of notifiable diseases (see Appendix 8 Zoonoses and Notifiable Diseases).

- R9. Participate in animal health control programmes and adhere to the established best practice guidelines such as Teagasc, or "Cell Check Farm Guidelines for Mastitis Control" published by Animal Health Ireland (AHI).
- R10. Examine all cows regularly in relation to body condition score and implement a feeding regime to remediate any problems.
- R11. Implement measures to minimise lameness and hock swellings and other illnesses and treat promptly.
- R12. Monitor the incidence of animal mortality (e.g. stillborn calves, cow deaths), involuntary culling (for health reasons such as lameness, infertility and mastitis) and implement corrective actions.
- R13. Implement an observation period for purchased stock, purchase animals of known health status, take all possible measures to prevent purchasing animals that are health risks prior to them arriving on the farm (e.g. certification of freedom from Bovine Viral Diarrhoea (BVD), Leptospirosis, vaccination status, letter of assurance from vendors vet etc.).
- R14. Monitor dairy animals for expressions of desirable social behaviour such as licking and grooming.
- R15. Ensure that there is good human - animal contact as evidenced by lack of fear of contact with known personnel.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

3.9 Biosecurity and Pest Control

Background Information

Producers will be conscious of the need to minimise the risk of diseases being brought onto the farm. Providing suitable disinfecting facilities at the farm gate, controlling access to the farm and advising visitors of their responsibilities are good practices in this regard. Particular attention should be paid to higher risk vehicles transporting slurry and other animal wastes or vehicles that are likely to have been in contact with the dairy animals.

Producers will also be aware of the need to control vermin and rodents, birds and other pests in the farmyard to prevent disease spread particularly by contamination of feedstuffs (including forage) and feeding surfaces (e.g. troughs). (See Appendix: Biosecurity Guidelines).

- a) Personnel entry and traffic movement must be kept to a minimum and visitors to the farm must be made aware of their responsibilities regarding biosecurity e.g. through a prominently displayed notice (see also 3.13.c Farm Safety Risk Assessment availability).
- b) The Producer must provide facilities for visitors to disinfect footwear on arrival at the farm using suitable disinfectants.
- c) Each Producer must operate and maintain an effective pest control programme in the farmyard.
- d) Where baiting is used, the following requirements apply:
 - i. A farmyard sketch identifying the locations of the bait points must be available;
 - ii. Baits must be placed in a manner that prevents access of non-target species and minimises the risk of cross-contamination of feed or water;
 - iii. There must be a programme for the inspection and replenishment of the bait points.
- e) Only officially approved pest control products (i.e. that carry a Pesticide Control⁵ Service (PCS) or official approval number) may be used on the farm.

R16. Create a biosecurity plan setting out management practices for issues such as incoming stock, isolation, cleansing and disinfection, sharing of vehicles with other farms, regular visitors, etc.

R17. Site manure heaps / slurry tanks so as to prevent access by stock.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

⁵ See the PCS website www.pcs.agriculture.gov.ie

3.10 Housing

Background Information

The quality of the housing provided has a significant impact on animal health and performance and so particular attention is required with regard to the space allowances in lying areas, access routes and roadways, feeding and watering areas and to the overall ventilation requirement.

Producers will be aware that poor ventilation can lead to serious health problems where the build-up of toxic gases is allowed. Properly designed ventilation permits free circulation of air above animal height while avoiding draughts at livestock level.

Producers will also be aware that artificial lighting is required to facilitate monitoring and inspection of housed animals after dark. Specific expert advice on the layout of buildings suitable for dairy animals is available from Teagasc.

- a) Housing must be constructed, managed and maintained to permit effective cleaning and disinfection and minimise risk of injury.
- b) Sheds and other facilities must be managed and maintained so as to facilitate hygienic milk production.
- c) Where bedding is provided, the bedding must be maintained in a manner that provides for a comfortable clean environment suitable for milking animals.
- d) Electrical fittings and wirings must be maintained in a manner that is safe and inaccessible to livestock.
- e) Animals must be housed in a manner that permits natural daylight to be available.
- f) Appropriate lighting must be provided to permit full inspection of the animals after dark, particularly for calving animals.
- g) Ventilation must be sufficient to provide fresh air and to minimise draughts and condensation.
- h) Housing and facilities must facilitate emergency exit in the case of fire, flooding or other serious situations.
- i) Producers must consider the DAFM and Teagasc space allowances for dairy animals as outlined in Appendix 10 Dairy Animal Housing, Space & Transportation.
- j) Feed barriers must be designed and positioned so as to allow normal feeding behaviour and to minimise injury to the animal.
- k) Isolation unit(s) (ideally one for every 40 cows +10% margin to cover on-going changes in herd size) must be available to isolate animals infected or suspected of being infected with diseases communicable to humans through milk (see also the DAFM specification in Appendix 10 Dairy Animal Housing, Space & Transportation on the design of the isolation box).
- l) Areas where cows for milking are handled (collecting yards, passages and holding areas) must be kept free from accumulated dung and soiled water.

R18. Locate the power unit of electric fences away from the dairy / milking area and ensure that the parlour is correctly bonded.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

3.11 Transport

Background Information

Animal transport needs to be managed in a way that ensures the animals arrive at their destination safely and without undue stress. Commercial livestock hauliers, as the persons in charge of the animals during transit, are obliged to ensure that the welfare of the animals is safeguarded during transport, loading and un-loading. Producers (when moving / transporting their own stock) have similar responsibilities while the animals are in transit and will be aware of the importance to ensure that animal safety is taken into account at all times.

- a) Producers must ensure that the animals are fit to travel⁶ and that the means of transportation is suitable and appropriate.
- b) Where the Producer procures hauliers for transportation of animals for journeys >65 km, the Producer must use approved / registered hauliers.

Note: This list is available from the DAFM website: <http://www.agriculture.gov.ie/animaltransport/>

- c) The key requirements for the Producer’s own transport are:
 - i. Vehicles must be designed for ease of cleaning and a routine must be in place for maintaining the vehicle in a clean state between uses;
 - ii. Vehicles must be such as to avoid risk of injuries from sharp projections, and loading ramps must be designed and operated in a manner that prevents animals slipping or falling from the ramp, and must be equipped with battens, bridges gangways and side protection gates that are operational (See Appendix 10 Section 5 Transportation);
 - iii. Lighting (including portable lighting) must be available for loading/ unloading in the dark;
 - iv. Ventilation must be available in transit at all times;
 - v. A visual assessment of the animals must be possible at any time during a journey;
 - vi. Where vehicles are decked, they must be designed to minimise seepage onto lower deck animals.
- d) Producers must inform themselves regarding the maximum and minimum loading densities⁷ for cattle as set out in Appendix 10 Section 5 Transportation.

6 - Unfit / injured animals can only be transported under the direction of a veterinary surgeon. Animals becoming unfit during transport must be delivered as soon as possible to a suitable place for unloading or slaughter

7 - Producers could refer to the DAFM leaflet entitled “Guidelines for Animal Welfare During Transport Within Ireland” and the FAWAC document “Best Practice for the Welfare of Animals During Transport”.

3.12 Environment

Background Information

In Ireland, milk is typically produced from grass. This contributes significantly to the reputation and market position enjoyed by milk products from Ireland. Accordingly Producers will be aware of the need to manage their enterprises in an environmentally friendly manner and also to improve biodiversity. Producers who already participate in the Rural Environmental Protection Scheme (REPS) or the Agri – Environment Options Scheme (AEOS) demonstrate their commitment to good environmental management practices. Producers will be familiar with these codes of practice and also with the Statutory Management Requirements (SMR), commonly referred to as cross-compliance requirements relevant to maintaining land in Good Agricultural and Environmental Condition (GAEC) (see Appendix 1 Reference Information).

 <p>Blue Text: For information only. Score not affected.</p>	 <p>Black Frame & Text: Required for certification. Assessed for score.</p>	 <p>Green Text: Information is collected only. Score not affected.</p>	 <p>Orange Text: Recommendations only. Score not affected.</p>
--	---	--	--

Irish farming performs well compared with other countries through the widespread participation in various biodiversity enhancement programmes (including REPS, AEOS, etc.). With the advice available from organisations such as Teagasc, Producers will be able to maintain or enhance the biodiversity of the farm.

Many leading customers are seeking ways to reduce the water consumption throughout their supply chain since water is seen as the critical issue that will influence the security of supply over the medium to long term. Ireland is particularly fortunate to have in excess of 99% of the water used in livestock production coming from natural rainfall and this combined with the fact that Ireland has less than 0.1% of the country under water stress establishes a unique point of difference for customers.

- a) Adequate facilities for collecting and storing of all manures and effluents (including farmyard manure, slurries and effluents arising from silage storage and dirty water / yard run-off) must be in place in order to prevent pollution and disease.
- b) Producers must be aware of the legal restrictions that apply to manure and fertiliser spreading on the farm (permitted spreading times, spreading restrictions).
- c) Fuel oil storage facilities must be managed in a manner that minimises risk of spillage and/or contamination during fuelling.
- d) Waste oils and lubricants must be collected and controlled pending disposal through an approved facility (e.g. Local Authority approved).
- e) Farmyards must be maintained in a tidy, ordered fashion especially adjacent to the parlour and dairy.
- f) All waste plastic sheeting and bags must be collected and controlled pending safe disposal (i.e. recycled).
- g) Farm machinery must be stored and operated in a manner that minimises both the biosecurity risk and the risk of injury to animals and personnel.
- h) Farm manures and soiled water applications must be applied in a manner that minimises the risk of pollution, contamination and the spread of disease (see Appendix 14 Guidelines for Organic Materials Application).

Note: the burning of plastics, etc., on farms is prohibited.

Consider implementing measures to address the following as appropriate to your enterprise:

- S16. Participate in existing environmental development / protection scheme(s).
- S17. Assess and undertake actions to ensure areas of existing habitats i.e. areas that are undisturbed by daily farming practices (e.g. woodland, glens, scrub areas, hedges, field margins, ponds, water courses, ditches, etc.) are responsibly maintained and enhanced.

Note: a licence is required to fell mature trees.

- S18. Exclude animals from access to drains / watercourses except at controlled access points on all lands in the herd-owners control.
- S19. Develop procedures to minimise water use.
- S20. Identify and monitor of potential sources of water loss and monitor these (water supply pipes; leaks from taps, drinkers, troughs and nozzles; etc.).
- S21. Collect rainwater for use in yard washing.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

3.13 Farm Personnel: Health, Safety and Social Sustainability

Background Information

Producers with less than 3 employees will be aware of their legal responsibility to have a completed Farm Safety Risk Assessment (FSRA) on the farm. Where there are three or more employees, a Farm Safety Statement (FSS) is required. Producers will be aware that the FSRA or FSS assessment needs to be reviewed on an on-going basis and communicated to employees and visitors. Producers understand the need to ensure that all avoidable hazards (for both livestock and humans) are eliminated: these include open/unfenced lagoons, open wells, excessively low or insecure electric wiring, poorly fenced land bordering roads and railways, inadequately protected machinery, access to / gridding of agitation points etc.

Farmers will be aware of the need to seek professional advice in the completion of the FSRA / FSS and many agencies provide such a service. In addition, publications on this are available from various sources (Health and Safety Authority of Ireland (HSA), Teagasc, Farming Organisations, Insurance providers etc.) See also Appendix 11 Farm Safety Risk Assessment / Safety Statement Guidelines. Dairy Producers will be aware that safe agricultural employment plays an important role in the economic development of local populations and communities and of the positive impact on local economies through local sourcing of materials, labour and services. While many farms are family owned and operated, Producers will also be aware of the need to ensure that employed farm staff members are treated fairly in terms of hours worked, work environment, annual leave entitlements, benefits, etc

- 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.
- b) The FSRA / FSS must be available to all people who visit and work on the farm such as Farm Workers, Farm Relief Personnel, Contractors, etc.
- c) If the FSRA / FSS is not immediately available to hand, a notice must be displayed visible to all visitors (see also 3.9.a above), advising of the availability of the FSRA on request.
- d) Producers must have basic first aid supplies, including eyewash, disinfectant, etc., that is accessible at all times.

Note: *The first aid supplies may be kept in the dairy, another farm building or in the dwelling house provided these buildings are adjacent to the farmyard buildings.*

Consider implementing measures to address the following as appropriate to your enterprise:

- S22. Where there are full-time workers employed on the farm, follow an employee welfare policy that includes respect and fair treatment in the workplace and worker wellbeing and development (see sample Welfare in the Workplace Policy in Appendix 16).
- S23. Contribution of farm to local community.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

3.14 Dairy – General

Background Information

Producers will understand that milking activities and animal welfare and husbandry practices have a significant bearing on milk quality and will therefore be aware of the need to adhere to best practices in these areas. Several publications are available for further information – see Appendix 1 Reference Information.

- a) Producers must be registered by the regulatory authority for milk production and a signed copy (Producer and Veterinarian) of the Dairy Health cert (DAFM declaration - Information Note 2012 - Animal Health Requirements for Milk Yielding Animals) must be available.

Note: *New entrants must register with DAFM prior to commencing milk production.*

- b) All the milk supplied must be produced on the farm.
- c) Milk must not come from cloned animals.
- d) Producers must implement measures to ensure that cow udders, teats and adjacent areas are clean prior to milking.
- e) Potable water must be readily available for hand washing and washing milk contact surfaces.
- f) Where a private water supply is used for dairy washing (i.e. milking contact surfaces) the water must be tested for microbiological contamination (Enterococci and E. coli must be absent in 100ml).
- g) Where the water supply is derived from well(s), the well-head(s) must be sealed and the area around the well-head(s) maintained to prevent water contamination.
- h) Tanks for storage of potable water must be covered / protected to prevent contamination.
- i) Producers must monitor the results of bulk milk analyses and take appropriate corrective action to ensure that the milk meets legal requirements.
- j) Producers must engage with the Milk Purchaser to conduct a review of the data from milk monitoring / sampling and to identify potential actions to improve milk quality where necessary.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

3.15 Dairy

Background Information

Producers will be aware of the need to produce milk that meets safety and quality requirements and will therefore implement measures to prevent any form of contamination of milk and to ensure that the milking parlour, milk storage area and related equipment are maintained in a hygienic condition.

Direct (on-farm) energy use includes electricity, fuel, etc. Energy use contributes significantly to emissions and therefore reducing energy consumption on the farm will reduce emissions and also reduce direct costs. The Teagasc Dairy Manual on Energy Use (see Appendix 13 Teagasc Dairy Manual on Energy Use) provides practical guidelines on energy saving strategies since these savings can result in a significant saving in the cost per litre produced.

- a) The Producer must have a clearly established and effective routine for washing, cleaning and tidying the dairy on a daily basis when in use.
- b) Products other than those in routine use (detergents, de-scalers, filters, etc.) are not permitted to be stored in the dairy.
- c) The surfaces (floors, walls, ceilings, doors) of the dairy must be washable and maintained in a clean condition.
- d) The ceilings and roof linings must be weatherproof and together with roof beams / trusses must be maintained in a clean state.
- e) Drains and floors must be provided that prevent pooling and are maintained in a clean and functional state.
- f) Measures must be in place to prevent foul odours from the drainage system backing up into the dairy and to minimise risk of rodent access.
- g) Doors must be installed so as to be tight fitting and maintained closed.
- h) Where the dairy is fitted with windows, they must either be equipped with fly-screens or maintained permanently shut; they must be washable and kept clean, and any broken glass replaced promptly.
- i) The Dairy must be adequately lit with lights that have clean protective coverings or shatterproof bulbs to minimise the risk of contamination.
- j) The Producer must have measures in place to minimise risk of contamination by birds, insects, vermin, cats, dogs or other farm animals.
- k) The dairy must not share air space with any other building and must be separated from the milking parlour by a door that is closed when not in use.
- l) The dairy must be adequately ventilated to maintain air quality and to minimise condensation and vents / openings fly-screened.
- m) Effective measures must be in place to minimise the possibility of accidental water addition to the milk placed in the bulk tank.
- n) Milk placed in the bulk tank must pass through an effective milk filter⁸ that is maintained in a hygienic manner.

Consider implementing measures to address the following as appropriate to your enterprise:

S24. Calibrate and service the bulk tank.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

⁸ Milk filtration equipment must not change the composition of the milk and must not interfere with the verification of compliance with the quality criteria as set out in the regulations especially those relating to SCC.

3.16 Milking Parlour

Background Information

Producers will be aware of the need to ensure that the milk produced meets the highest practicable standards in the key areas, which include total bacteria count, somatic cell count, thermophilic bacteria, temperature, lactose, sediment and is free from adulteration of any kind. Producers will also be aware that while pasteurisation will address microbiological issues, other hazards (e.g. antibiotic residues) which may be present in the raw milk will not be removed prior to consumption. Producers will also implement effective procedures in place to prepare the cows, to reject any unfit milk, and to clean equipment after every use.

- a) The parlour must have floors, walls, doors and fixtures and fittings that are completed with a washable finish.
- b) Parlour equipment (milk tubes, pipes, jars, clusters, feeding systems, hoses) must be maintained in good physical condition and be kept clean internally and externally.
- c) There must be an established and effective washing routine that ensures that the milking equipment is clean and free of deposits.
- d) Measures must be in place for the effective cleaning of the parlour as required (floors, stanchions, other equipment) during and after milking with clean water.
- e) The parlour roof structures must be maintained to minimise the accumulation of dirt, dust, rust or flaking paint and to minimise the risk of contamination from vermin.
- f) The parlour lights must be fitted with protective coverings.
- g) Measures must be in place to minimise the risk of contamination of the parlour by cats, dogs and other animals.
- h) Where baiting is used, no bait points are permitted in the parlour or in any area accessed by the dairy cows.
- i) Drains must be provided that prevent pooling and must be maintained in a clean and functional state.
- j) Products not required during milking must not be stored in the parlour.
- k) Electrical installations in the parlour must be inaccessible to cattle, waterproof and maintained in a safe condition.
- l) The parlour must be ventilated to maintain air quality and to minimise condensation.
- m) Cows' milk must be individually inspected / monitored for abnormalities or infection at the start of milking.
- n) Where the milk from an individual cow is deemed unfit for human consumption (due to treatment with antibiotics or other remedies, to disease, wounds, or infections affecting milk quality etc., or due to other abnormalities of the milk itself) the milk must be segregated and prevented from entry to the bulk milk tank.
- o) In the event of positive / inconclusive Tuberculosis or Brucellosis reactors being identified in dairy animals on the farm, the milk must be segregated immediately and the Milk Purchaser notified.
- p) Teat disinfection (pre and post milking), where practiced, must be carried out in a manner that minimises the risks for chemical contamination of milk and only registered products may be used (i.e. products that bear a PCS number or equivalent).

Note: Products approved for post-milking only must not be used for pre-milking.

- q) Measures must be in place to minimise the risk to milk quality or hygiene associated with dust during milking.
- r) The use of a common udder cloth, for washing all cows, is not permitted.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

Consider implementing measures to address the following as appropriate to your enterprise:

- S25. Use variable speed drive (VSD) pumps.
- S26. Use efficient water heating systems.
- S27. Use a plate cooler.

- R19. Avoid over or under-milking cows
- R20. Where a new parlour and dairy are intended to be constructed, they should be designed, sited, constructed, maintained and managed so as to minimise the risk of contamination of milk (see also DAFM / Teagasc guidelines – See Appendix 1 Reference Information)
- R21. Ensure that milking equipment is installed to minimise the presence of difficult to clean pipework, equipment, etc.

3.17 Milk Storage & Collection

Background Information


Producers will understand that since milk is perishable, the manner in which it is stored has an important bearing on final milk quality particularly relating to the microbiological content of the milk. Producers will therefore be aware of the need to ensure that milk storage equipment is maintained to ensure its general condition and efficient operation.

- a) Access to bulk milk tanks must be confined to authorised personnel only and a clear sign restricting access must be in place in a prominent location (see Appendix 15 Restricted Access Signage Guidelines).
- b) Where there is an external bulk milk tank(s) / silos the following apply:
 - i. The area around external bulk milk tanks must be maintained in a clean and hygienic state;
 - ii. External bulk milk tanks must be designed for outdoor use, fitted with agitation equipment and be designed to facilitate inspection and sampling.
- c) Accessible hand-washing and drying facilities must be provided for all farm and milk collection personnel.
- d) Where bulk tanks (including external silos) are fitted with inspection points, these must be closed when not in use.
- e) The cooling system must be capable of cooling the milk to below 6°C within 2 hours of the end of milking and maintaining a storage temperature of 2 - 4°C.
- f) Milk storage equipment must be of sufficient capacity to store all milk produced under hygienic & temperature controlled conditions.
- g) The bulk tank and any internal and external ancillary equipment and fittings must be maintained / serviced so as to be in good physical / operational condition and in a clean and hygienic state.
- h) The bulk tank must be washed, sanitised and inspected after emptying to ensure that it is clean.
- i) The milk collection area must be maintained in a clean and hygienic state.
- j) Milk tanks must be dedicated to storage of milk for human consumption.

Consider implementing measures to address the following as appropriate to your enterprise:

- S28. Recover heat from the cooling process for use in other applications (e.g. washing) where economically viable and conduct an evaluation of the energy consumption of equipment and installations.

- R22. Ensure adequate lighting is provided to facilitate safe milk collection during the hours of darkness.

 <p>Blue Text: For information only. Score not affected.</p>	 <p>Black Frame & Text: Required for certification. Assessed for score.</p>	 <p>Green Text: Information is collected only. Score not affected.</p>	 <p>Orange Text: Recommendations only. Score not affected.</p>
--	---	--	--

3.18 Milking Equipment

Background Information

Producers will be aware that the cleanliness of the milk contact surfaces directly affects milk safety and quality. Milking equipment designed to ensure that the parts that come into contact with the milk and colostrum are smooth, washable and made from non-toxic materials and easy to clean / disinfect, but require routine maintenance to maintain them in optimum condition.

- a) Milking equipment (tanks, pumps, pipes, tubes, etc.) must be constructed / fitted and maintained so that all surfaces in contact with the raw milk can be cleaned using normal dairy detergents and sanitisers.
- b) The milking machine must be tested by an IMQCS⁹ registered milk technician at a frequency to be determined by the Producer based on milk quality data and performance of the equipment.
- c) Records of these tests and the corrective actions taken must be maintained.
- d) The Producer must have a routine for checking and replacing / servicing all equipment that could affect milk quality or animal health (including teat-cup liners for damage; pipework for leaks; milking pumps and pulsation system for effective operation; etc.).
- e) All mechanical, electrical and automatic equipment must be monitored daily to ensure effective operation and to prevent injury to personnel or the cows.

Consider implementing measures to address the following as appropriate to your enterprise:

S29. Develop other energy efficient measures.

R23. Implement measures to ensure that milking can take place in the event of a power failure.

R24. Change liners every 2000 milkings or as per the manufacturers' recommendations.

R25. The recommendation from IMQCS is for annual service of the milking machine (see Appendix 1 Reference Information).

R26. Only engage electricians that are formally registered (RECI or equivalent) to carry out work on electrical installations.

3.19 General Hygiene

Background Information

Producers will be aware that farm staff are required to be trained to understand their possible interaction with milk in terms of its quality and microbiological safety and that clean hygienic milking practices will be implemented at all times.

- a) Milking personnel must ensure that their hands and arms are maintained as clean as possible when milking and washing facilities must be readily accessible at all times.

Note: *It is recommended that clean intact gloves would always be worn during milking (Animal Health Ireland publication "Tools - Farm Guidelines for Mastitis Control", see Appendix 1 Reference Information).*

- b) Smoking must not be allowed in the dairy or parlour.
- c) Milking personnel must cover cuts and wounds with a dressing.
- d) The Producer must make employees aware that, if they are suffering from infectious diseases (with symptoms including vomiting, diarrhoea), they should not engage in milking activities.
- e) **The Producer must ensure that only milk suitable for human consumption is placed in the bulk tank (Critical).**

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

3.20 Chemicals, Pesticides and Herbicides

Background Information

All biocide chemicals (including detergents, sanitisers, disinfectants, herbicides, pesticides) used on farms in Ireland are subject to approval by the relevant competent authority (including DAFM, Pesticide Control Service (PCS), etc.). Producers will be aware of the need to comply with the regulations relating to the correct use of chemicals and of the need for safe handling and storage of these chemicals in accordance with the manufacturer’s recommendations. Training in chemical handling and the use of appropriate personal protective equipment (PPE) according to manufacturers’ recommendations enhances safety on the farm (see Appendix 12 Guidelines on Chemical Handling and Storage). See also Teagasc’s Milk Quality Handbook published on www.MilkQuality.ie for further information.

Producers will also be aware of the need to protect crops against pest, diseases and weeds with as little as possible reliance biocides/pesticides on environmental and cost grounds and will have considered other controls and protection methods such as cultural and physical controls (e.g. mechanical weeding), and biological controls (e.g. beneficial insects as part of an Integrated Pest Management (IPM) strategy).

- a) Only officially approved / registered disinfectants and sanitisers (i.e. with a PCS / VPA or equivalent) may be used and these must be used in accordance with the manufacturers’ recommendations including thorough rinsing where this is specified.

Note: *It is important to source products from reputable suppliers only. It is also important to ensure that thorough rinsing occurs after use of detergents and sanitisers to prevent undesirable chemicals including trichloromethane (TCM) developing in the milk.*

- b) The Producer must retain the product safety information (e.g. sheets / label / material safety data sheets) that is provided with the product by the supplier for each cleaning chemical while in use.
- c) Producers must be aware that the use or storage of strong smelling chemical products in or near the dairy or parlour or the feed store, or where the cows are housed could cause taint in the milk.
- d) When not in use, chemicals must be stored securely in a clean and dry place.
- e) Empty chemical containers must be stored and handled so as not to compromise safety of the milk.
- f) Manufacturers’ instructions on protection of the environment must be followed when using or handling chemicals including herbicide and pest control products.

Consider implementing measures to address the following as appropriate to your enterprise:

- S30. Use pesticide and herbicide application methods that ensure that field margins, hedgerows, watercourses, wildlife corridors and farm tracks are not inadvertently treated during application to crops.

Blue Text:
For information only.
Score not affected.

Black Frame & Text:
Required for certification.
Assessed for score.

Green Text:
Information is collected only.
Score not affected.

Orange Text:
Recommendations only.
Score not affected.

4. Appendices



4. Appendix 1

Reference Information

Note: This is a list of the key Irish and EU legislation relating to dairy farming. It is not intended as a definitive list of all relevant legislation and does not replace any applicable statutory requirement. It is the duty of producers to keep fully up to date with all legislation and legislation changes relevant to their farming activity

Hygiene

- Regulation (EC) No 178/2002 Of The European Parliament And Of The Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.
- Regulation (EC) of the European Parliament and of the Council of 29 April 2004 853/2004 laying down specific hygiene rules for food of animal origin.
- Regulation (EC) No 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs.
- S.I. 432/2009 European Communities (Food and Feed Hygiene) Regulations 2009.

Identification and Traceability

- Regulation (EC) 1760/2000 Establishing a system for the identification and registration of bovine animals and regarding the labelling of beef and beef products (and implementing Regulations).
- Regulation (EC) 21/2004 Establishing a system for the identification and registration of ovine and caprine animals.
- S.I. 276/1999 European Communities (Identification and Registration of Bovine Animals) Regulations, 1999.
- S.I. 258/1999 European Communities (Supply of Information on the Origin, Identification and Destination of Bovine Animals) Regulations 1999 and other acts.
- S.I. 77/2009 European Communities (Identification of Bovines) Regulations 2009.
- National Beef Assurance Scheme Act 2000.

Animal Remedies

- Directive (EC) 23/96 on measures to monitor certain substances and residues thereof in live animals and animal products.
- Regulation (EC) 2377/90 laying down a Community procedure for the establishment of maximum residue limits of veterinary medicinal products in foodstuffs of animal origin.
- Regulation (EC) 1831/2003 Of The European Parliament and of the Council of 22 September 2003 On Additives for use in Animal Nutrition.
- S.I. 786/2007 European Communities (Animal Remedies) (No.2) Regulations 2007.
- S.I. 183/2009 European Communities (Control of animal Residues and their residues) Regulations 2009.
- Diseases of Animals Act, 1966.
- The Animal Remedies Act, 1993.

Animal Welfare

- Protection of Animals Acts 1911 and 1965.
- Protection of Animals Kept for Farming Purpose Act, 1984.
- S.I. 14 of 2008 European Communities (Welfare of Farmed Animals) Regulations 2008.

Other

- DAFM Information Note 2012 - Animal Health Requirements for Milk Yielding Animals.
- Data Protection Act, No 25 of 1988 and the Data Protection (Amendment) Act, No 6 of 2003.
- Labour Court; Joint Labour Committee notice AGRI 2010 No 3 <http://www.labourcourt.ie>
- EC Joint Research Centre: Evaluation of the livestock sector's contribution to the EU greenhouse gas emissions (GGELS) - Final report - Administrative Arrangements AGRI-2008-0245 and AGRI-2009-0296. See <http://ec.europa.eu/dgs/jrc/index.cfm>

Feedstuffs

- S.I. 432/2009 European Communities (Food and Feed Hygiene) Regulations 2009.
- S.I. 88 of 1999 European Communities (Approval and Registration of Establishments and Intermediaries operating in the Animal Feed Sector) Regulations, 1999.
- S.I. 335 of 1999, European Communities (Approval and Registration of Establishments and Intermediaries Operating in The Animal Feed Sector) (Amendment).
- S.I. 283 of 1998, European Communities (Feedingstuffs) (Tolerances of Undesirable Substances and Products) Regulations, 1998.
- S.I. 390 of 1999, European Communities (Putting Into Circulation Of Feed Materials) Regulations, 1999 (information regarding feeding meat and bonemeal or fishmeal).
- Regulation EC No 1831:2003 of the European Parliament and of the Council of 22 September 2003 on additives for use in animal nutrition.

Farm Safety

- Safety, Health and Welfare at Work Act, 2005.
- Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007).

Sewage and Sludge Application

- S.I. 148/1998 Waste Management (Use of Sewage Sludge in Agriculture) Regulations 1998.
- FSAI Food Safety Implications of Land-spreading Agricultural, Municipal and Industrial Organic Materials on Agricultural Land used for Food Production in Ireland (2008).

Environment

- Local Government (Water Pollution) Act, 1977 and 1990.
- Waste Management Act, 1996 and 2002.
- Environmental Protection Agency Act, 1992.

Cross compliance

The list of cross-compliance measures includes the following Statutory Management Requirements (SMR):

- SMR1 - Conservation of Wild Birds
 - SMR2 - Protection of Groundwater
 - SMR3 - Sludge
 - SMR4 - Nitrates
 - SMR5 - Conservation of Natural Habitats and of Wild Flora and Fauna
 - SMR6, 7, 8 & 8a - Identification and Registration of Animals (Bovine, Ovine, Porcine)
 - SMR9 - Plant Protection Products (Pesticides)
 - SMR10 - Hormones
 - SMR11 - Food Hygiene
 - SMR12 - BSE & Feed
 - SMR13 - Foot and Mouth
 - SMR14 - Swine Vesicular Disease
 - SMR15 - Bluetongue
 - SMR16 - Animal Welfare (Calves)
-

- SMR17 - Animal Welfare (Pigs)
- SMR18 - Animal Welfare (General)
- GAEC - Good Agricultural and Environmental Condition

There are various inspection forms used for the above and all are available on the DAFM website:

- <http://www.agriculture.gov.ie/farmerschemespayments/crosscompliance/inspectionforms/>

Useful Publications:

- FAWAC: (www.agriculture.gov.ie/fawac)
 - o Best Practice for the Welfare of Animals During Transport
 - o Guidelines for Animal Welfare During Transport Within Ireland
 - o Animal Welfare Guidelines for Dairy Farmers 2003
 - o Animal Welfare Guidelines for Managing Acutely Injured Livestock on Farm
- Joint publication by the Departments of Agriculture, Fisheries and Food and Environment Heritage and Local Government: Good Agricultural Practice for Protection of Waters Regulations 2008.
- Fertiliser Association of Ireland: Code of Good Practice for the Environment and Quality Food Production, 2nd Ed. 1999.
- Animal Health Ireland: (<http://www.animalhealthireland.ie>) – various publications and leaflets.
- Teagasc: Managing Phosphorous in Farming, Nov. 1997.
- Teagasc: Prevent Silage Pollution, Jan 1994.
- EPA: Waste Catalogue and Hazardous Waste List (see the EPA Website).
- DAFM Publication: Code of Good Farming Practice for farm mixing of ingredients.
- HSA Guidelines on Farm Safety Statements and Farm Safety Assessment documentation.

Useful websites:

- Department of Agriculture, Food and the Marine: www.agriculture.ie
- Food Safety Authority of Ireland: www.fsai.ie
- Teagasc: www.teagasc.ie
- Irish Cattle Breeding Federation www.icbf.ie
- Animal Health Ireland: <http://www.animalhealthireland.ie>
- Environmental Protection Agency: www.epa.ie
- Health and Safety Authority: www.hsa.ie
- The Fertiliser Association of Ireland: www.fertilizer-assoc.ie
- Poisonous wild plants: <http://www.wildflowersofireland.net/>

Appendix 2

Dairy Producer Declaration Form

Note: At the beginning of the Bord Bia audit you will be requested indicate acceptance of the declaration form below in the presence of the Auditor.

Herd Owner Name: _____

(Person in whose name the Herd No. is registered with DAFM)

Herd Number: _____

Address: _____

Address for Correspondence: _____

(if different to above)

Tel/Fax/Mob/Email: _____ / _____ / _____

Declaration:

I have received a copy of this SDAS Standard and will abide at all times by the conditions applicable to producers as laid down in the Standard. I will provide full and accurate details of my farming practices relating to the Bord Bia Scheme. At all reasonable times I will allow Bord Bia farm inspectors access to records, and to record other relevant information about the farm enterprise.

I understand that my participation in the Scheme is a demonstration of my commitment to achieving the highest standards in dairy production and my responsibilities in the food chain and agree to permit my name and SDAS Membership Status to be included on the Bord Bia Register / Database and to accept contact in relation to SDAS related events.

I would like to assure Bord Bia that I comply with the relevant statutory requirements with regard to the operation of my farm. I will ensure that ruminants will not be cross contaminated by or fed non-ruminant feeds (including pigs and poultry feeds).

I agree to allow the audit findings to be communicated to the milk purchaser.

Signature: _____ **(Person Responsible for Managing the Farm)**

Position: _____ **(Herd Owner, Manager, Herd Owner's Nominee)**

Date: _____

SAMPLE DOCUMENT

Appendix 3

Supply and Sale of Animal Remedies

Marketing Authorisation

Animal remedies may not be placed on the market prior to the granting of the marketing authorisation number. The types of authorisation acceptable are as follows:

1. VPA (Veterinary Product Authorisation or equivalent) number. The VPA number is given to the product by the Irish Medicines Board (or equivalent) when the product is approved for sale and supply in Ireland.
2. TSA (Therapeutic Substances Act) number. The TSA number was given to the vaccine product by the Department of Agriculture when they were originally approved. This number will be replaced by the VPA as the products come up for review in the future.
3. EMEA (European Medicines Evaluation Agency). The EMEA assigns a number to the product when the product is approved for sale and supply in Europe. However, a VPA (or equivalent) number should also be available for the product when sold in Ireland.

Buying Animal Remedies Generally

Note: (Reproduced from DAFM website, March 2013)

Where can I buy animal remedies?

This depends on the sales category (route of supply) given to the product when it was licensed:

- If it is a 'Licensed Merchant' (LM) product, you can buy it from any Licensed Merchant outlet, from a pharmacy (which stocks animal remedies) or from the vet who looks after your animals - you do not need a prescription for such products.
- If it is a 'Pharmacy Only' (PS) or 'Prescription Only Exempt' (POM(E)) product, you can buy it from a pharmacy or from the vet who looks after your animals - you do not need a prescription for such products.
- If it is a 'Prescription Only' (POM) product, you first have to have a written prescription for the product from the vet who looks after your animals and you are then free to purchase the medicine from that vet, from a pharmacy or, for certain 'POM' products (A list is available from DAFM), from a Licensed Merchant's outlet.

How will I know the sales category of an animal remedy?

Licence holders are required to show the route of supply (in the above format) on the labelling and associated packaging. Product without this information on the label is likely to be not licensed for the Irish market; if you are supplied with such incorrectly labelled product, you should contact your local District Veterinary Office as possession of such a product may be an offence.

Can I buy animal remedies from salespersons calling to my farm?

Salespersons are not allowed to call to farms selling and supplying animal remedies. However, certain suppliers have licences under which their salespersons are allowed to call to farms to take orders for 'non-POM' animal remedies which are supplied subsequently through a separate delivery service. These salespersons are required to carry a copy of their 'solicit order' licence and farmers should ask to see a copy of the licence.

Can I buy animal remedies from a mail order catalogue?

Yes, but only if the seller is authorised to do so. A limited number of suppliers are licensed to sell 'non-POM' animal remedies by mail order. Before buying from any such supplier, you should look for confirmation that the seller has a mail order licence, or if in any doubt, you should contact the DAFM.

Can I buy animal remedies on the internet?

In general, farmers should be very careful about buying medicines on the internet, because of the risk of buying unauthorised products. The Department licenses suitable Irish-based internet sites to sell 'non - POM' animal remedies. Such sites are required to display a DAFM authorisation reference. If in any doubt about a particular site, you should contact DAFM.

Appendix 4c

Tube register

Tubes Normally Used						
Name	Short Name	Withdrawal Period		No Milkings	VPA Number (optional)	Comments
		(Meat - D)	(Milk - Hr)			

Tube Usage Record						
Date	Time	Tube	Cow No.	Qtr. Treated	Milk OK from	Administered By

Appendix 5b

Own Farm Feeds Record

	2014			2015			2016			2017			2018			2019			
	Dairy	Beef	Sheep	Dairy	Beef	Sheep	Dairy	Beef	Sheep	Dairy	Beef	Sheep	Dairy	Beef	Sheep	Dairy	Beef	Sheep	
(Tick all relevant boxes)																			
Fresh Grass																			
Grass Silage																			
Maize Silage																			
Arable Silage																			
Wholecrop Cereal Silage																			
Hay																			
Straw																			
Fodder Beet																			
Beet Tops																			
Sugar Beet																			
Turnips/Swedes																			
Potatoes																			
Carrots/Parsnips or Byproducts																			
Field Beans																			
Peas																			
Barley																			
Oats																			
Wheat																			
Triticale																			
Linseed																			
Rapeseed																			
Other (Specify)																			
1																			
2																			
3																			
4																			
5																			
6																			

SAMPLE DOCUMENT


Appendix 6

Biosecurity Guidelines

Policies should be developed to prevent unforeseen adverse situations. Policies / areas for attention could include the following:

- Dealing with incoming stock (sourcing from Bord Bia approved farms, evaluation of the animal(s) on arrival by competent stockperson or veterinarian, maintaining the animal(s) separate from the main group for a period (e.g. 28 days) during which the health status of the animal(s) is monitored.
- Cleaning and disinfection equipment, chemicals and procedures and frequency of cleaning.
- Cleaning and disinfecting of buildings and facilities (including calving boxes, hospital pens, cubicles, lying areas, structural components of buildings in contact with animals (e.g. stanchions, troughs, crush, etc.).
- Management of equipment that is shared with / borrowed from other farms.
- Visitors including regular visitors (e.g. visitor log, foot sanitising, control of access of vehicles).
- Siting of manure heaps / slurry tanks so as to prevent access by stock and to prevent odours which could give rise to milk taint.
- Prevention of access to the farmyard without authorisation.

Note: Guidelines are provided by other organisations including Teagasc, AHI, etc.



Appendix 8

Zoonoses and Notifiable Diseases

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 or inhaled 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 good personal hygiene should all form part of the prevention programme on all participating farms in the SDAS. 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.

The most common zoonoses can be seen summarised in the Table on the next page.

Notifiable Diseases

The Diseases of Animals Act, 1966, provides the basic legislation for the control and eradication of animal diseases. A number of diseases, if suspected or confirmed, must be notified to the Department of Agriculture, Food and the Marine in accordance with the Act or the Bovine TB and Brucellosis orders. These diseases are listed on the DAFM website:

<http://www.agriculture.gov.ie/animalhealthwelfare/diseasecontrol/listofnotifiablediseases/>

Contact your vet in the event that a potentially notifiable disease is suspected and ensure that DAFM is notified.



The most common zoonoses

Disease	Causative Organism	Principal Animals Involved	Probable Means of Spread to Man
Brucellosis	<i>Brucella abortus</i>	Cattle	Occupational and recreational exposure
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/fomite	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
Louping ill	Flavivirus	Sheep, goats, grouse, small rodents	Tick (<i>Ixodes ricinus</i>) bites
Q fever	<i>Coxiella burnetii</i>	Sheep, cattle, goats, cats, dogs, rodents, birds, ticks	Mainly airborne; exposure to placenta, birth tissues, animal excreta; occasionally ticks and milk
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 (e.g. clothing, towels, soap, furniture)
Cryptosporidiosis	<i>Cryptosporidium parvum</i>	Cattle, other animals	Occupational contact and ingestion; waterborne

Appendix 9

Medicine Storage Guidelines

Note: This is a recommendation for the safe storage of animal remedies as set out in section 3.4.g. It is not intended as a definitive guide to the safe handling and storage of animal remedies and does not replace any applicable statutory requirement.

- The medicine store should be of a sufficient size and strength to hold all animal remedies - whether unopened or partially used - that may be in stock at any one time.
- Only animal remedies recommended to be stored at room temperature should be kept in the medicine store.
- The medicine store should be located indoors and should be out of reach of children.
- The medicine store should be kept locked at all times. The key should be kept in a safe location. This location should be informed to all relief farm workers.
- The medicine store should contain a clear warning label.
- The medicine store should not be located in direct sunlight or adjacent to any source of heat or cold.
- The medicine store should not be located in a building that contains animal feedstuffs.
- All spillages should be removed immediately from the medicine store and disposed of in accordance with manufacturers recommendations.

Appendix 10

Dairy Animal Housing, Space & Transportation

1 Housing System: Guidelines

A dairy cow housing system should provide:

- A comfortable, well drained lying area.
- Shelter from adverse weather.
- Space to allow the animal to move, lie down and rise freely without undue risk of injury.
- Access to adequate food and water to maintain health and vigour.

2 Space Allowances: Guidelines

Sufficient housing capacity must be available for all housed dairy cows. This can be in the form of cubicles or loose housing or a combination of the two.

3 Isolation Facilities: DAFM Requirements

Isolation Facility: Specification

Each isolation box must be for one animal only; have no common air space with any other buildings or yards to which animals have access; have no door communicating with any other animal housing, animal yards or main animal passage ways; have its own separate entrance; be of adequate size to allow free movement of the animal (recommended size for a cow: 3.5m x 4m); walls must be plastered or have a smooth surface, up to a height of not less than 2m; have concreted or suitable surfaced floor; and have adequate ventilation.

Effluent from isolation box(es) must be effectively controlled by applying one of the following:

- **Dry bedding:** Effluent must be contained by using sufficient straw or other suitable absorbent material.
- **Separate holding tank:** Effluent piped directly to a separate holding tank.
- **Existing slurry tank:** Effluent piped directly to an existing slurry tank but when the box is required for the isolation of an animal, the drainage system must be:
 - o completely shut off and the effluent effectively controlled by dry bedding, as in (a),
 - OR
 - o effluent diverted to a separate holding tank, as in (b), by means of a diversion system (diversion manhole).

4 Space Allowances for Young Calves: Guidelines

Dairy Calves	Dairy Calves	Housed Suckler Calves
*Individual Calf Pen	*Group Pens	Calf Creeps **
Pen Length: At least equal to 1.1 times actual calf length (i.e. nose to tail length) Pen Width: At least equal to calf height (to withers)	For calves < 150 kg provide a minimum 1.5m ² per head For calves: 151 to 219 kg, provide a minimum 1.7 m ²	Newborn suckler calves should have access to a designated, comfortable, solid floor, draught free calf creep. This requirement is particularly important for cows and calves housed in slatted houses and cubicle houses. For Spring born calves, provide 0.9 to 1.1m ² creep area. For Autumn born calves: provide a minimum 1.5 m ² creep area (depending on calf size / turnout date)

*EU Welfare of Calves Regulations 1995 and 1998 (m2 per head)

** Teagasc Guidelines

Note: Calves must not be confined to individual pens after 8 weeks of age (unless for disease control treatment purposes) (see also 3.7.b&c)

5 Transportation: Ramp and Space Requirements

Ramp Specification

While the legislation (EC) /1/ 2005 defines the angles of loading/unloading ramps, the main concern in the SDAS is that the ramps are designed and operated in a manner that ensures that the animals can climb up or go down without risk or difficulty and animals are transported in a manner that ensures their safety and welfare at all times.

The ramp specification in (EC) /1/ 2005 is defined as follows:

Ramps shall not be steeper than an angle of 20 degrees, that is 36.4% to the horizontal for pigs, calves and horses and an angle of 26 degrees 34 minutes, that is 50 % to the horizontal for sheep and cattle other than calves. Where the slope is steeper than 10 degrees, that is 17.6% to the horizontal, ramps shall be fitted with a system, such as provided by foot battens, which ensure that the animals climb or go down without risks or difficulties.

Space Requirements

While the legislation (EC) /1/ 2005 establishes the space requirements as set out below, the main concern in the SDAS is that animals are transported in a manner that ensures their safety and welfare at all times. This calls on the experience of the farmer as a stockperson to ensure that this concern is addressed at all times.

Bovines: The space requirements for bovines in transport are as follows:

	Small Calves	Medium Sized Calves	Heavy Calves	Medium Sized Cattle	Heavy Cattle / Cows
Weight (average)	50 kg Average	110 kg Average	200 kg Average	325 kg Average	550 kg Average
Min – Max density	0.3 - 0.4 m ² / head	0.4.- 0.7 m ² / head	0.7 - 0.9 m ² / head	0.9 – 1.3 m ² / head	1.3 – 1.6 m ² / head

Appendix 11

Farm Safety Risk Assessment / Safety Statement Guidelines

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

At the core of this legislation is the risk assessment approach, and the legal duty on employers (with more than three staff) to prepare a written health and safety document referred to as a 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.

Recently an online Farm Safety Risk Assessment with the title of the "Farm Safety Code of Practice" was launched where farmers can complete and store their risk assessment on line – see www.farmsafely.com (at time of printing).

A Farm Safety Risk Assessment/Farm Safety Statement 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. However, it is strongly recommended that a Farm Safety expert is consulted in the preparing of the document.

The Farm Safety Risk Assessment/ 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 (see website).

Some common issues of concern that could be addressed in the Farm Safety Risk Assessment/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.
- Safety rails should be erected on top of side walls of open silage pits.
- 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 as per Appendix 8) relevant to the farming enterprise.
- The risk associated with hazardous chemicals usage (see Appendix 12).

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

Appendix 12

Chemical Handling and Storage Guidelines

Note: This is a recommendation for the safe handling and storage of chemicals. It is not intended as a definitive guide to the safe handling and storage of chemicals and does not replace any applicable statutory requirement. These measures are important under cross-compliance requirements.

Safe Handling of Chemicals: Guideline

1. Purchase only approved chemicals.
2. Store in designated storage facilities, which are labelled and locked, and situated 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 not to harm personnel, animals or the environment.

At all times, treat chemicals as dangerous substances and identify the hazards associated with their use in the Farm Safety Statement / Farm Safety Risk Assessment.

Safe Storage of Chemicals: Guideline

1. Purchase only approved chemicals.
2. Store in external designated storage facilities, which are labelled and locked, and situated well away from food. Alternatively, chemicals may be stored in a washable cabinet or shelf but may also be placed on a clean concrete platform or non-corrosive frame at least 300mm from the floor.
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 not to harm the environment.

Appendix 13

Teagasc Dairy Manual on Energy Use

On Irish dairy farms there is a wide variation in both the energy consumed per litre of milk produced and in the cost per litre. In a detailed examination of 21 Farms (1) Teagasc researchers found that electricity consumption ranged from 53 to 108 Watts per litre produced and the cost per litre ranged from 0.23 to 0.76 cent per litre produced.

Improving sustainability on your farm could focus on:

- The Amount of energy used
- The Cost of energy
- Capacity for inclusion of renewable sources of energy

Average Component Breakdown

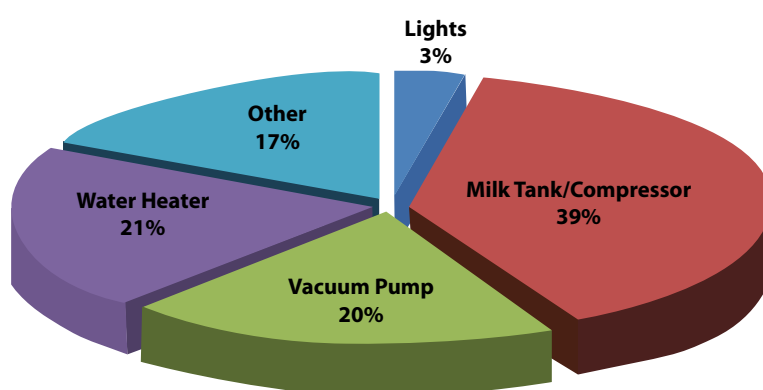


Figure 1 – Average component consumption on 21 commercial dairy farms

Variable Speed Drive (VSD) Vacuum Pumps

Have you installed a Variable Speed Drive (VSD) Vacuum Pump?

Modern milking machines require a large vacuum reserve for washing due to large milk-line bores. However during milking the plant consumption is a fraction of the vacuum pump capacity resulting in large amounts of air being drawn in through the regulator. Addition of a variable speed drive (VSD) to the vacuum pumps of these large modern milking machines can result in savings of over 60% on vacuum pump running costs which would be a saving of €410 per year for the average 100 cow farm.

The VSD is able to adjust the rate of air removal from the milking system by changing the speed of the vacuum pump motor to equal the rate air is admitted to the system at a given vacuum level. All of the energy used to move air through the conventional vacuum regulator is saved.

Minimising the Energy Requirement and Cost of Milk Cooling

Have you an effectively working plate cooler?

The goal of pre-cooling is to bring the milk temperature as close as possible to that of the well water. Effective pre-cooling in a Plate Heat Exchanger (PHE) can reduce milk cooling costs by 50%. Achieving a balance between the flow of milk and flow of water is essential. An effective plate cooler will bring milk temperature to between 15.9 – 16.8 degrees C where a milk:water flow ratio of 1:2 is achieved. (Temperature achieved is dependant on the size of the PHE).

To achieve this:

- Variable speed milk pumps smooth the flow of milk through the plate cooler
- Achieve a milk:water flow ratio of at least 1:2.
- Unrestricted water flow from the well or mains supply through the plate cooler through large diameter pipes is needed to achieve this goal.
- Control the water flow through the plate cooler so that water is not being pumped unnecessarily when milk is not flowing through the plates.



The Plate Heat Exchanger (PHE) should be sized correctly to ensure the correct milk to water flow rates. A PHE can half the costs of cooling milk. Reuse the heated water elsewhere to make even more savings.

Water heating – Minimising Cost and GHG emissions

How do you heat your water?

An adequate and reliable supply of hot water is an essential element in the production of high quality milk on any dairy farm. Water used for cleaning milking systems and bulk milk storage tanks must be available in adequate quantities and at required temperatures for each cleaning process.

A trial in Moorepark (2) in 2011 showed the relative cost and Carbon emissions from alternative water heating systems:

Heating Method	Cost per 100 l (c)	CO2 per 100 l (Kg)
Electricity – Day Rate	180	6.23
Electricity – Night Rate	88	6.23
Kerosene	85	3.05

Heat Recovery to reduce energy consumption

Heat recovery systems transfer energy from the cooling systems refrigerant to water in a storage tank thus raising the temperature of the water. Supplementary heating is always required to achieve the desired temperature of 80 OC. The economics of installing a system must be carefully considered. Installing HR is a specialised job and should only be done by a registered refrigeration technician with experience of heat recovery.

Lighting

Have you energy efficient lighting (e.g. fluorescent tubes) installed?

Moisture resistant double fluorescents or high bay metal halide lamps are the most common types of lighting used on Irish dairy farms. Using metal halide lights can require over three times more electricity than fluorescent type lights.

Key Recommendations:

- Switch start or magnetic ballast fluorescent tubes (double five foot T8 58W switch start) are still commercially available and where automatic identification systems are installed these lights are the best option.
- Where automatic cow identification is not installed T5 high efficiency fluorescent tubes (double five foot 58w T5) are the best option.
- Low pressure sodium (LPS) lights are the most efficient solution for lighting external areas where colour perception is not a priority.

Renewable Energy Sources

Renewable energy refers to energy that occurs naturally and repeatedly in the environment. Therefore, it does not release any net greenhouse gases into the atmosphere. Using renewable energy sources can offer a range of benefits:

- lower energy bills
- energy price stability
- security of energy
- 'green' credentials
- possibility of selling electricity back to the grid

There are a number of farm level renewal energy projects that can be implemented. Careful consideration must be given to the economic and environmental benefits that will accrue:

- Wind power
- Solar electricity (photovoltaic)
- Small-scale hydro-electric power
- Solar water heating
- Air-source heat pumps

Alternatively farmers can opt to purchase their supply from a supplier of renewable electricity.

Sources

(1) Dairyman Project

(2) Teagasc 2011 "Energy use in Agriculture"

Appendix 14

Guidelines for Organic Material Application

Organic materials (i.e. manures, soiled water, sludges and composts) are a valuable source of essential soil nutrients and conditioning and when used in an environmentally responsible manner can minimise the need for chemical fertiliser. However, these materials are also potential sources of pathogens (of both human and animal health significance) and chemical contaminants. Farmers must ensure that materials used for land spreading are both safe/suitable for use and are then managed in a way that minimises the risk to both animal health and/or food safety. In particular, when applying organic materials to grazing land, farmers must allow for sufficient time between application and grazing.

Further detailed information on this topic is contained in a recent Food Safety Authority Scientific Committee report titled "Food Safety Implications of Land-spreading Agricultural, Municipal and Industrial Organic Materials on Agricultural Land used for Food Production in Ireland". (http://www.fsai.ie/resources_publications.html Use keyword "land-spreading")

Treated or untreated sewage sludge is prohibited on Bord Bia Quality Assured farms (see Requirement 3.6.a) and this applies to all the land in the management of the herd owner.

Sludges are permitted where these are from industrial waste treatment (e.g. food processing) and where a current EPA licence is available that permits land spreading on food producing land.

Organic Materials Treatment Guidelines

To ensure the safety for food production of the product to be applied, it is recommended that all organic materials applied to crops would have been treated in one of the following ways:

Composting of solid organic materials is a particularly effective method of controlling microbial pathogens, but for best results the process needs to be actively managed. The material should be treated as a batch and turned regularly (at least twice within the first 7 days) either with a front-end loader or preferably with a purpose-built compost turner. This should generate high temperatures over a period of time (e.g. above 55 degrees C for 3 days) which are effective in killing pathogens and this temperature should be monitored. Allow the compost to mature as part of the treatment process. The whole process should last at least 3 months.

Lime treatment of liquid organic material (addition of quick lime or slaked lime to raise the pH to 12 for at least 2 hours) is an effective method of inactivating bacterial pathogens. Allow the liquid organic material to mature as part of the batch treatment process for at least 3 months prior to land spreading.

Batch storing solid, liquid and slurry organic materials should be stored for at least 6 months (i.e. no additions of fresh manure are to be made to the store during this period) in order to be effective in killing pathogens.

Other: Guidelines on safe use of organic materials are available from DAFM and Teagasc.

Appendix 15

Restricted Access Signage Guideline

It is the responsibility of the farmers involved (supplier and purchaser) to ensure that visitors to the farmyard are controlled and managed so that these personnel are aware of their responsibilities regarding health and safety and biosecurity when visiting the farm. Closed gates at the entrance to the farmyard supplemented with suitable signage can help achieve this.

It is not intended that these guidelines would apply to personnel who visit the farmyard on a regular basis with the permission of the farmer, for example milk collection personnel, AI personnel, contractors, etc.

The following text could be used in the signage affixed either to the entrance gate or placed in a prominent position in the farmyard so as to be seen immediately on entry to the farmyard by visitors:

Ideally the sign would contain the following statements:

- No access beyond this point without permission OR No unauthorised access beyond this point.
- A health and safety statement is available – please ask.
- This is a food producing farm – please observe the biosecurity measures OR Access to the dairy facilities (bulk tank and milking parlour) is prohibited unless accompanied by the farmer.

Note: Please consult local providers for suitable signage.

Appendix 16

Welfare in the Workplace Policy

Employers must provide adequate and appropriate welfare facilities for employees while they are at work. The minimum statutory conditions applicable in Ireland are set out by the Labour Court in the Joint Labour Committee notice AGRI 2010 No 3 (see Appendix 1 reference Information).

Acceptable working conditions take into account payment for work undertaken and the ability of the worker to balance their commitments to work, family and community. Key areas on the farm that need to be considered are, working hours, employee health and safety, and the potential of employees to fulfil the needs of others within their environments. The text in the page below contains a sample policy as a guideline to farmers who wish to implement a welfare in the workplace policy on the farm.

Note: This document is based on the Sustainable Agriculture Initiative (SAI) principles published by the Sustainable Agriculture Initiative (SAI) Platform Working Group on Dairy which has adopted the Guide to Good Dairy Farming Practice - a joint publication of the International Dairy Federation (IDF) and the Food and Agriculture Organization of the United Nations (FAO), published in January 2004.

Welfare in the Workplace Policy

The policies relating to employees and workers on this farm are as follows:

1. Employees / workers' working hours and conditions will comply with the legislation.
2. Wages and benefits received by employees / workers comply as a minimum with local and national legislation.
3. Working conditions will comply with applicable laws as well as International Conventions and recommendations related to occupational health and safety.
4. Employees and workers are encouraged to become involved in general educational activities.
5. Employees and workers are encouraged and supported to undertake training on all aspects of sustainable agricultural practices.
6. In so far as it is possible, the farm will contribute to the economic and social benefit of the local community.