Manual 1

Bega Cheese Limited on Farm Quality Assurance Hazard Analysis & Standards

Approved Date:	18 May 2022	**Supersedes:**	March 2019

Contents

This manual

Manual 1: Hazard Analysis and Standards

Other manuals

Manual 2: On-farm Quality Assurance Plan

Manual 3: On-Farm Quality Assurance Monitor Book

Manual 4: Farmer Self-audit

General Disclaimer

While the Bega Cheese group of companies has made every effort to ensure the accuracy, completeness and reliability of the information set out in this publication, it does not warrant such accuracy, completeness or reliability and disclaims all liability for error, loss or other consequence that may arise from the use of, or reliance upon, any information in this publication. At all times, a supplier to BCL must satisfy itself as to the legal obligations it must meet and rights it may have in supplying milk to BCL and managing a dairy farm.

Definitions and Abbreviations

Term	Definition
Bega Cheese Limited (BCL)	Bega Cheese business includes - Bega Cheese, Tatura Milk and Bega Dairy and Drinks
FSANZ	Food Standards Australia and New Zealand
HACCP	Hazard Analysis and Critical Control Points
BJD	Bovine Johnes Disease
EBL	Enzootic Bovine Leukosis
TB	Tuberculosis
MRL	Maximum Residue Limit
NLIS	National Livestock Identification Service
Untreated Cooking oils	Fats or oils of vegetable or animal origin that have been used to cook food for human consumption
QACs	Quaternary Ammonium Compounds
NPEs	Nonyl-phenol Ethoxylates
Organochlorines	Are known for their high persistence and toxicity characteristics.
Oestradiol 17	Veterinary medicine used in oestrus synchronisation programs and historically for the treatment of non-cycling cow
MSA	Milk Supply Agreement
AS	Australian Standard
APVMA	Australian Pesticide and Veterinary Medicine Authority

Introduction

The Bega Cheese Limited (BCL) on Farm Quality Assurance Program is a management system that provides tools, training, and procedures for BCL raw milk suppliers. This program helps suppliers ensure that the quality of their milk and slaughter animals meet health, regulatory and market requirements specified by BCL, government authorities, and BCL customers.

This quality profile obtained by implementation of the Bega on Farm Quality Assurance program is often referred to as 'quality from paddock to plate'. BCL can demonstrate this profile to customers, and this enables BCL to secure many market opportunities.

Accreditation and relevant Acts

All dairy farms must hold a current dairy farm licence. The milk must be harvested and held in an approved dairy premise. It is a regulatory requirement and a condition of supply to BCL that the farm has an accredited farm quality assurance (QA) plan. Accreditation is issued by Australia's state food authorities, and they require that a farm's QA plan includes the minimum essential elements for food safety and quality. The essential elements for BCL suppliers are contained in the state acts applicable to the farm location and the Australian New Zealand (FSANZ) Food Standards Code Standard 3.2.1, Standard 4.2.4 Part 1 Primary Production and Processing Standard for Dairy products – this is available at www.foodstandards.gov.au. A supplier must review on a regular basis its obligations, to ensure it continues to meet relevant regulatory, industry and quality requirements.

BCL on-farm quality assurance system is based around four manuals:

1. *The 'Hazard Analysis and Standards' (this booklet - THE RULES)* — which sets out the rules for safe food production for BCL dairy farm suppliers by listing the hazards, standards and the records and monitoring required.
2. *The 'On-farm Quality Assurance Plan' (THE FOOD SAFETY PLAN)* — which is used by farmers and farm advisers to set up an on-farm quality assurance program.
3. *The 'On-Farm Quality Assurance Monitor Book' (THE RECORDS)* —Tool used to assist supplier for most quality assurance records, hygiene and maintenance checks. (If suppliers have alternative programs in place, they can be used please discuss with FSO)
4. *The 'Farmer Self-audit' (THE CHECK LIST)* — which is used to ensure the farm assesses its system and considers all aspects of the system at least once per year.

What are the key features of Bega Cheese Limited On-farm Quality Assurance?

The BCL On-farm Quality Assurance Program is a process of continual improvement—it evolves with the needs of customers and farmers. BCL on Farm Quality Assurance Program is based on the Hazard Analysis Critical Control Points (HACCP) approach which takes a preventative approach to safe milk production.

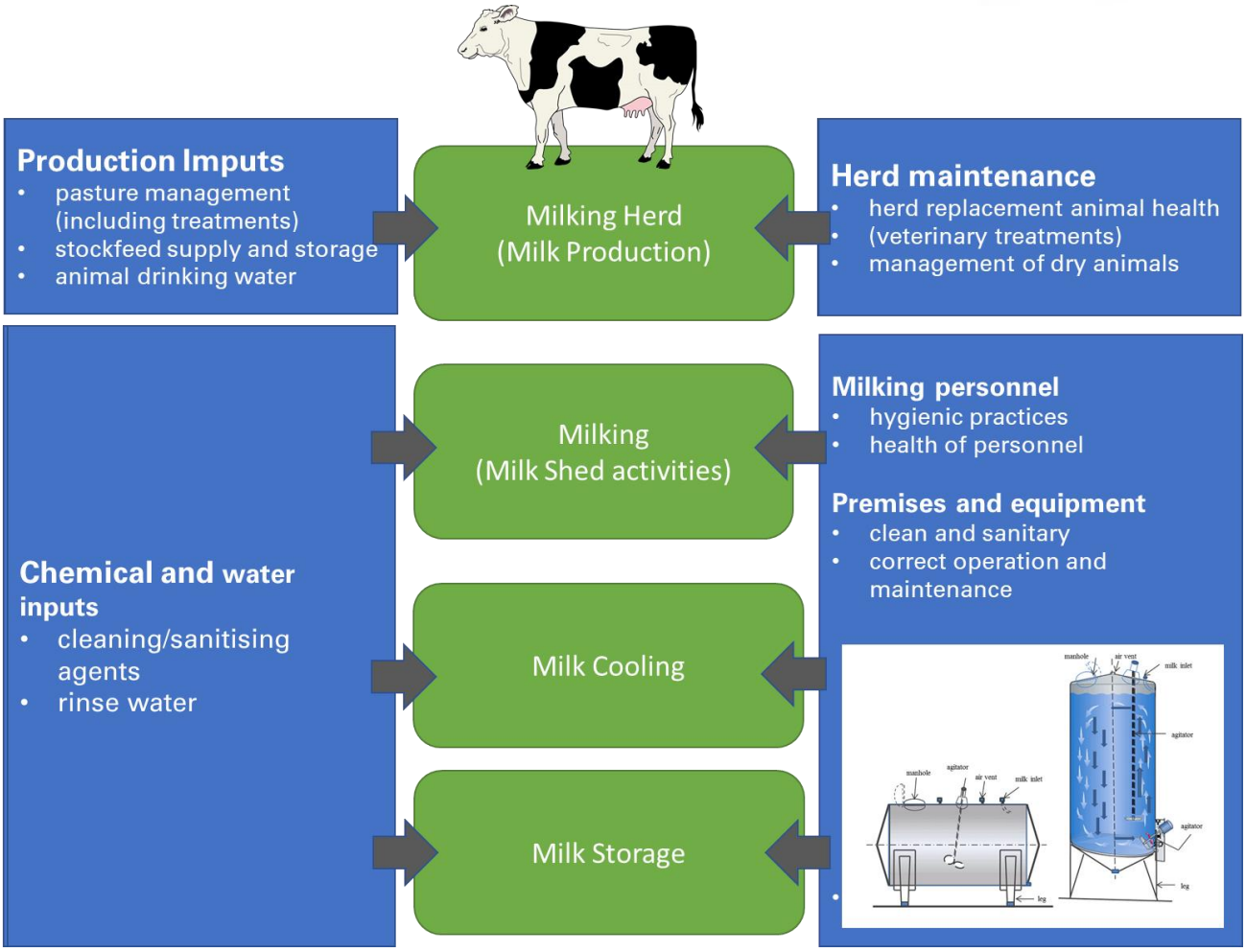
The principles of continuous improvement are also used in other aspects of BCL milk supply activities. The continuous improvement model is as follows:

Figure 1: The Bega Cheese Limited On-farm Quality Assurance Program

Process flow

The **process steps** of milk production are animal feeding and treatments, milking, milk cooling and storage and the cleaning and sanitation programs. These have critical control points to produce safe quality milk.

Figure 2: Key steps involved in milk production



Hazard Analysis Critical Control Points (HACCP)

The HACCP approach is a method used in the food industry worldwide to manage quality assurance systems for food production. It is a requirement by all food authorities in Australia that dairy farms have a milk food safety plan based on HACCP principles.

The steps of HACCP are:

- *Conducting a hazard analysis to identify the hazards to food safety and quality*
- *Identifying critical control points along the production chain to eliminate or control the hazard*
- *Establishing critical limits in the process*
- *Establishing monitoring procedures*
- *Establishing corrective action to be taken when monitoring indicates that a particular control point is not under control*
- *Establishing a record keeping system*
- *Establishing verification procedures to confirm that the HACCP system is working effectively*

The HACCP system involves identifying the potential risks, introducing control measures, monitoring the results, and taking corrective action where necessary. A summary of the hazards associated with the milk production model and the control measures is shown in Table 1: Dairy farm hazard control. The control measures form the basis of the food safety control procedures documented in this farm Quality Assurance Program to meet regulatory requirements.

Table 1: Dairy farm hazard control

Key Steps	Inputs/ Activities	Hazards	Control Measures
Milking Herd (Milk Production)	Feed & Water	Contamination of feed & water by agricultural chemicals or effluent	• Livestock health, mastitis and welfare • Livestock feeding • Dairy cleaning and Milking practices • Managing quality assurance (training, records, audits, corrective actions) • Property and herd status and livestock trading • Livestock identification • Antibiotic drugs, agricultural and veterinary chemical use, and storage
	Herd Maintenance	Contamination of milking animals with veterinary medicines	• Antibiotic drugs, agricultural and veterinary chemical use, and storage • Managing quality assurance (training, records, audits, corrective actions) • Property and herd status and livestock trading • Livestock identification
		Contamination of milk by unhealthy animals	• Livestock health, mastitis, and welfare
Milking activities	Chemical & water inputs	Contamination of milking plant with cleaning chemicals	• Dairy cleaning and milking practices
		Contamination of milking plant and milk by effluent	• Livestock feeding • Maintenance of dairy, refrigeration, equipment, and environment
	Milking personnel	Unhygienic practices by staff resulting in contamination of milk	• Managing quality assurance (training, records, audits and corrective actions)
	Premises & Equipment	Ineffective cleaning and sanitisation of plant and equipment	• Dairy cleaning and milking practices
		Poorly operating/ maintained equipment	• Maintenance of dairy, refrigeration, equipment, and environment
		Contamination of milk by pests	• Livestock Feeding • Maintenance of dairy, refrigeration, equipment, and environment
Milk Cooling	Cooling Capacity	Inability to chill milk effectively	• Maintenance of dairy, refrigeration, equipment, and environment
Milk Storage	Storage temperature	Inability to store milk adequately	• Maintenance of dairy, refrigeration, equipment, and environment • Managing quality assurance (training, records, audits and corrective actions)

What do farmers need to do?

Step 1: Read and file the 'Hazard Analysis and Standards' (THE RULES) booklet.

Step 2: Work though the 'On-farm Quality Assurance Plan' (THE FOOD SAFETY PLAN) booklet. Place a initial against each task in the boxes when you are comfortable that the task is completed for your farm. When all the tasks have been completed, sign and date the first page to signify that the farm has implemented a quality assurance plan.

Step 3: Complete the records in the 'On-Farm Quality Assurance Monitor Book' (THE RECORDS) as required. Each year, the farm will start a new Monitor Book. This book provides the evidence that the food safety plan is being managed. Monitoring Books will be available through BCL FSOs or electronically on the BCL Website. Suppliers are permitted to use alternative records please discuss this with you FSO to ensure all areas are captured for compliance.

Step 4: Every year, complete the Farmer Self Audit (CHECK LIST), which is in Manual 4. This must be done before the external audit or before a non-compliance audit.

Step 5: Keep the manual updated with any changes The Bega On Farm Quality Assurance Manual. Any changes to the program must be initialled and dated by the responsible person.

Auditing

The Farm Quality Assurance Program and its associated records must be audited by independent third-party auditors accredited by the relevant food safety Authority or the State Regulatory Authority at a frequency set by the relevant Authority.

Audit outcomes on farm are considered by the relevant State Food Authorities at the time of renewing accreditation certificates and licences.

The purpose of periodically reviewing and auditing the on-farm program is to check record keeping and ensure that the procedures, as set out in the Quality Assurance plan, are being followed.

Please see Appendix 1 for specific NSW Food Authority Requirements

Non-conformances and suspension of supply

Non-conformances refer to the items that are found not to comply with the procedures set out in the manuals. A non-conformance can also be issued by BCL Milk Supply group quality management system as part of not meeting the Milk Supply Agreement. Action must be taken as needed to deal with any non-conformance.

Accreditation may be suspended if:

- Any critical non-conformances are found during an audit, critical non-conformances require the auditor to notify State food authorities of the breach in safety within 24 hours, and the non-conformance must be cleared by an authorised officer, or

- The sum of major or minor non-conformances is sufficient to accumulate enough demerit points such that the audit fails. In this case the supplier has a month to rectify the issues, or the non-conformance escalates to a critical (as above).

The suspension will remain in place until the non-conformance has been rectified and checked by the regulator or BCL auditor (or both). BCL and the relevant authority can suspend supply if critical non-conformances are not addressed, or the farm poses an unacceptable and ongoing food safety or quality risk. Audit guidelines can be obtained from the relevant food authority. BCL requirements for supply are outlined in the MSA).

Milk Quality Targets

It is the aim of the farm to achieve the Milk Quality Targets. These targets are the outcome of best practice for the operation of a dairy farm and are established to aid in driving continuous improvement. Please refer to individual MSA for the specific milk quality targets.

These targets do not replace minimum standards set by regulators for the purpose of food safety auditing.

BCL uses the Early Milk Collection Index (EMCI) or milk cooling curve when milk has not had the required time to cool to below 5 ^{o}C prior to milk collection. Suppliers are to provide BCL team with their Cups off times so these can be used.

1. Property and herd status and livestock trading

Standard

- Residues of agricultural chemicals can be transferred from contaminated soil to the milk and meat of slaughter animals.
- Food safety is at risk if milk and meat animals are sold for human consumption that are contaminated with unacceptable levels of residues or pathogenic organisms.
- Inaccurate traceability of stock may lead to a critical failure to determine the residue and disease status.
- Purchased livestock can introduce diseases (e.g. BJD) to your property, and they can have chemical residues.
- Some livestock diseases are similar in nature to human diseases and infected herds pose a perceived (BJD), if not potential (TB), consumer risk.

Hazard

- No contamination of milk and meat with chemical residues from contaminated sites or from introduced stock.
- Maximum residue limits (MRLs) for a range of chemical residues in milk, meat and offal are specified in the Australian Food Standards Code.
- All farms to develop livestock purchase and sales procedures for dairy herd replacements, cull cows, bobby calves, bulls and beef stock that meet the national herd health standards by following BJD and other protocols (issued from time to time) for all livestock purchases and sales.
- Maintain National Vendor Declarations for all purchased and sold animals, and those on agistment. Keep appropriate stock movement procedures and records for traceability of all cattle to ensure milk and meat are produced from healthy animals only.
- All stock must be permanently identified by NLIS tags, as well as a usual management tag.
- All stock moved on and off the property must have NLIS tags and these movements must be recorded on the farm and updated on the NLIS database.
- All introduced stock must have a health status and treatment record.
- A vendor declaration must be obtained at purchase/delivery of stock.
- All herds that supply BCL to be assessed under the Dairy BJD Assurance Score

Monitoring and records

- Farmers to maintain records of:
    - The official herd disease status of the property (such as BJD).
    - The property's status and history for organochlorines and other chemical residue (if required).
- If supplied, retain and file results of processor chemical residue tests—including abattoir notifications from trace back for all types of chemical residues from tests of milk and meat
- Chemical residue test results on soil samples on file (if required).
- Dairy BJD Assurance Score.
- BJD and National Livestock Vendor Declarations when purchasing or selling cattle.
- An up to date 'Farm MAP'.
- Stock treatment records (for reference and trace-back).
- Document Property Identification Code (PIC) in manual 2.

2. Livestock identification

Standard

- Positive identification and accurate traceability of stock (as individuals or groups of individuals) is critical, and a system failure will affect the farm's ability to:
    - Determine the residue and disease status of stock.
    - Manage veterinary chemical and drug treatments.
    - Undertake sound livestock husbandry.
- Livestock (including bobby calves) sold for slaughter or milk delivered to a processor prior to the expiration of a withholding period (WHP) or export slaughter interval (ESI) are likely to be contaminated with chemical residues above the minimum residue limit (MRL).

Hazard

- All livestock must be positively and individually identified, and procedures implemented, and records maintained to enable livestock traceability and to support livestock treatment and management records.
- All stock for sale identified with the National Livestock Identification Scheme (NLIS).

Monitoring and Records

- A stock register must be kept. It is recommended to keep a calving register for ease of cow and calf management (record of Dam, Sire, DOB)
- Annual physical inspection of stock IDs (i.e., checking ear tags).
- National Livestock Vendor Declaration.
- Stock treatment records.

3. Antibiotic drugs, agricultural and veterinary chemical use, and storage

Standard

- Agricultural chemical application and veterinary medicines administration must be managed to prevent any contamination of milk and meat.
- Agricultural chemicals and veterinary medicines must be used in accordance with relevant State Legislation (for example, the Victorian Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007 for farms operating in Victoria).
- All veterinary medicines must be suitable for use on dairy farms and registered by the Australian Pesticide and Veterinary Medicines Authority (APVMA) or National Registration Authority (NRA).
- Milk containing suspected or detectable residual veterinary chemicals must not be sold for human consumption and must not be sent for processing.
- Antibiotic residues in milk pose significant risks to human health and significant costs to BCL's business.
- Veterinary medicines may cause residues in milk and meat if used incorrectly. This will result in loss of market confidence and endangering the health of consumers. They may also interfere with the processing of dairy products.
- Veterinary medicines generally have different withhold periods for milk and meat.
- Chemical residues in milk and meat could come from:
    - Antibiotics—oral, injectable, intramammary and intrauterine. (Some consumers are allergic to certain antibiotics).
    - Parasite treatments—drenches, injectable, pour-ons and dips.
    - Hormones—reproductive treatments and growth promotants.
    - Analgesics and anti-inflammatory drugs.
    - Mineral treatments—such as copper, cobalt, zinc, selenium.
    - Teat dips, sprays, and ointments.
- Property risk assessment record for persistent chemicals (completed at least once for all grazing properties). Any known hazards on farm e.g. Sheep dips, sheds containing sprays (Dieldrin) Known areas are to be marked on the farm map noted in section 1.

- Quaternary Ammonium Compounds (QACs) - QACs are a group of chemicals widely used as biocides and disinfectants in the home, industry and in food manufacture. Products containing QACs are used to clean and sanitise the milking machine and/or vat on some dairy farms. Benzalkonium Chloride (BAC) is the specific type of QAC of most concern and is present in several products registered for use on dairy farms. In some cases, residues have been found in dairy products.

  BCL will conduct routine testing for the presence of QACs – there should be no presence of QACs on farm.

- Nonyl-phenol Ethoxylates (NPEs) - NPEs are surfactants used in many industrial chemicals, pesticides, and herbicides. However, from the Dairy Industry's perspective it is their use in most iodine-based teat sprays that is of greatest concern. NPEs are used in the spray formulations to solubilise iodine. Over the past few years concerns have emerged globally about the effects of NPEs in the environment and toxicity in aquatic environments. But more importantly, residue testing in Australia has identified that teat sprays containing NPEs can cause positive residue test results.

  Pre-milking teat spray and teat dip are of the most concern to BCL and the Dairy Industry. As such, BCL will conduct testing for the presence of NPEs.

Hazard

- All agricultural chemicals (herbicides, pesticides, fungicides) must be suitable for use on dairy farms and registered by the Australian Pesticide and Veterinary Medicines Authority (APVMA) or National Registration Authority (NRA).
- Compliance with the MRL in milk and meat for human consumption as specified in the Food Standards Code, through the safe and responsible administration of veterinary chemicals to stock to prevent residues of antibiotics and other veterinary chemicals. Observe both Milk and Meat withhold periods.
- Agricultural chemicals must be used in accordance with manufacturer's instructions. At all times follow label directions and recommendations for treatment by a veterinarian.
- Chemicals must be labelled and stored in a secure manner in accordance with label or veterinary written instructions.
- Out of date (expired) veterinary medicines must not be used and disposed of in a secure manner.
- A permanent veterinary medicine register, and agricultural chemical register must be maintained for all chemicals purchased by the farm. Annual stock takes must be completed. Agriculture and Veterinary Chemical register template in Manual 3.

- Identify and record animals or groups of animals treated, pastures, crops or feed that has been treated at the time of treatment. If the record is completed on a whiteboard, it is to be transferred to a permanent record within 24hrs of the completion.
- The farm must have a system of 'Temporary Marks' for treated milking and dry cows.
- The use of Oestradiol 17 and its esters is restricted for international trade reasons:
    - Oestradiol cannot be used in lactating dairy cows.
- The use of the hormone recombinant Bovine Somatotrophin (rBST) is not permitted
- The use of QACs and NPEs is not permitted
- MLA Livestock Production Assurance (LPA1 and LPA2) requires that animals bred only for beef production should have injections administered into the neck region, unless the injections are site-specific, and then no more than 10 ml of intramuscular injection is to be administered into any one site.
- Only drugs and chemicals registered by the APVMA are to be used on farm and users must adhere to the Agricultural and Veterinary (Control of Use) Regulations 2007.
- Record all adverse reactions to veterinary chemicals or any unexpected treatment failures. Identify, record, and notify the purchaser of any animal carrying the remains of a broken needle.

Monitoring and records Antibiotic, Veterinary chemicals

- Antibiotic and inhibitory substance screening tests in all milk tankers at factory receival and random screening on meat.
- Trace-back for all types of chemical residues from tests on dairy products and meat.
- Records of drug/chemical usage are to include:
    - Name of Drug used
    - Reason for treatment
    - Use-by date and batch number of chemical
    - Supplier of drug or treatment
    - Application rate and method
    - Calving date (Dry off date)
    - Date of use.
    - Who applied the preparation? (Name, signature)
    - Animal ID or group and location/Quarter treated
    - Withholding period required (Milk and Meat).

- All persons administering drugs must be competent to do so.

- Mastitis Treatment Record (all treatments every time including treatments with nil withhold periods) located in Manual 3.
- Stock Treatment Record (all treatments every time including treatments with nil withhold periods) Located in Manual 3.
- Drug and Agricultural Chemical Purchase invoices.

Monitoring and records Agricultural chemicals

- Chemicals must be labelled and stored in a secure manner.
- Risk Assessment for Persistent chemicals to be completed for the Property. Template Manual 3.
- A permanent agricultural chemical register must be maintained for all chemicals purchased by the farm. Agriculture and Veterinary Chemical register template in Manual 3.
- An annual chemical stocktake must be undertaken.
- All agricultural chemical applications must be recorded. Paddock, stored grain, and pest treatment record is available in Manual 3.
- Treatment records must be made within 24 hours of use and include:
    - Date of application
    - Description of where treatment occurred, e.g., Paddock identification. A farm paddock map is recommended.
    - Extent of the treatment
    - Reason for treatment, e.g., type of vegetation / insect pests.
    - Trade name of chemical used. (Batch number is recommended as well)
    - Method of application
    - Rate of application
    - Wind speed
    - Wind direction
    - Who applied the chemical (Name, signature)
    - Withholding period
    - Clearance date
    - Personal Protective Equipment (PPE) used/provided.
- Material Safety Data Sheet (MSDS) for each chemical must be kept on site and be available.

Pesticide chemicals

The farmer needs to ensure that pest treatments and pesticides used in the dairy premises are managed to prevent the contamination of milk, feed, people, and livestock.

- All pesticides are used in accordance with manufacturer's instructions and suitable for use in a food environment.
- Pesticides are labelled and securely stored so they do not pose a contamination risk to milk.
- A permanent chemical register must be maintained for all pest control chemicals purchased by the farm.
- Bait stations, if used, are identified on a location map, and managed by a competent person.
- If pesticides are used records must be kept and include:
    - Date of use
    - Who applied the pesticide (name, signature and contact details)
    - Pesticide used
    - Rate of application
    - What area was treated
    - What species was treated.
- Conduct pest inspection quarterly and record findings. Paddock, stored grain, and pest treatment record is available in Manual 3.

4. Livestock health, mastitis, and welfare

Standard

- Breaches of welfare requirements of farm animals may affect markets due to customer concerns.
- Veterinary medicines may cause residues in milk and meat if used incorrectly. This will result in loss of market confidence and endanger the health of consumers. They may also interfere with the processing of dairy products.
- Water supplied to livestock can contain toxins, taints and odours and pathogenic and spoilage micro-organisms which could affect animal health or milk safety and quality.
- Some livestock diseases (zoonosis) and livestock treatments can affect the health of farm staff, other livestock, and the farm ecosystem.
- Mastitis causes high levels of Bulk Milk Cell Counts (BMCC) in milk, and this can:
    - Cause downgrading of milk and manufactured product.
    - Be associated with the incidence of pathogens and toxins in milk products.
    - Can lead to udder damage and a reduction in milk yield and composition.
    - Reduce shelf-life of packaged milk and result in spoilage of milk.
    - Directly impact on poor manufacturing properties and reduced product yields.
    - Impact on export market eligibility.

Hazard

- Milk shall only be harvested from healthy cows. Milk must be isolated from cows where there is a potential for infectious disease to transfer to humans.
- Mastitis is to be controlled such that Bulk Milk Cell Count (BMCC) is below the acceptance standard as described in the Bega Cheese Limited MSA, in this regard BCL has a policy of continuous improvement.
- **CRITICAL.** No antibiotic failures from mastitis treatments.
  Note: A positive antibiotic detection by BCL will result in a suspension of BCL on Farm Quality Accreditation. State Food Authorities will be notified of the positive result and an audit will be undertaken.
- All people responsible for the care and management of livestock to be trained in their responsibilities. QA Training and responsibilities record Manual 3
- The Food Standards Code (which describes the standards for milk) specifies that milk must be harvested from healthy cows. To ensure this:

- No evidence of preventable disease in stock and disease incidences to be controlled as soon as identified.
- Stock water to be of the best available quality and free of undesirable taints, odours, chemicals, algal toxins or pathogenic micro-organisms that might jeopardise the chemical residue status, safety or quality of milk and meat or the health of livestock.

- BCL and its customers expect that milk is humanely harvested from healthy cows, using good husbandry practices that improve the welfare of cattle on supplying dairy farms. The Australian Code of Practice for the Welfare of Animals – 'Cattle' stipulates minimum animal welfare standards for cattle production. The Farm Manager must have read a current copy and comply with these standards.
- Bobby calves must be managed with care. Sound animal husbandry practices and management systems are the key to delivering bobby calves' welfare and ensuring they are fit for sale. Suppliers to BCL must comply with all animal health and welfare standards. Bobby calves are not to be supplied milk from treated cows. Feeders should be cleaned of any potential scour ban residue before being used for Bobby calves
- Animals showing signs of infectious diseases transferable to humans through milk must be identified, segregated and their milk withheld from supply and must be assessed by a veterinarian or animal health officer.
- Where the cause of a Sudden Death of livestock is suspected from Anthrax or any other significant disease suppliers are to notify the DPI and the BCL FSOs immediately. Do not move the animal.
- No Zoonotic infections (e.g. Leptospirosis). If animals are detected or show evidence of a zoonotic disease such as leptospirosis or Salmonella, they are to be separated immediately and BCL FSOs notified

Monitoring and records

- Bulk Milk Cell Counts (BMCC) for BCL suppliers are carried out for every pick-up. Suppliers are notified of the results. Farm managers are responsible for monitoring these results. In addition, suppliers with BMCC results out of specification are notified when these results are identified.
- File BMCC results.
- All milk tankers at factory receival are screened for antibiotic and inhibitory substances.
- Notifications may be issued to farmers following trace-back for all types of chemical residues from tests on dairy products and meat.
- Maintain stock treatment records.

- Maintain mastitis treatment records.
- Water test results if required.

Bovine Johne's Disease (BJD)

Bovine Johne's Disease (BJD) is the most common disease-causing Chronic diarrhoea in adult cattle. The disease Is now widespread across Australia and New Zealand. Dairy Australia (DA) is continuing to work with other cattle industries and the government to develop a national approach to managing BJD. The National BJD Strategic Plan aims to minimise contamination, protect the status of non-effected herds, and minimise BJD's social, economic and trade impact.

Infection with the bacteria occurs in young animals exposed to manure of infected adult animals.

The highest risk of infection is when calves are less than a month old. Calves then develop an age-related immunity and are relatively resistant to infection once they are a year old.

For further information on managing BJD within your herd please refer to the DA website. https://www.dairyaustralia.com.au/animal-management-and-milk-quality/animal-health/bovine-johnes-disease#.Yk9qf9tByUk

Specific regional information for Victoria, NSW, Tas, QLD and SA can be found at the above website

The 3-step calf rearing plan forms part of this program and has been endorsed by industry. BCL recommends that suppliers follow this program as part of their management system.

Following the three-step calf plan is a key step for the control and prevention of BJD in dairy herds. This includes:

- Removing calves within 12 hours of birth
- Ensuring adult animals and effluent cannot contaminate the calf rearing area
- Young stock (up to 12 months old) should not be reared on pastures that have had adult animals on them for 12 months

Additional information is also available in Milk Supply Service Guidelines. BJD Management program is to be confirmed in Manual 2 - 1 Property and Herd status and livestock trading.

Appendix 6 in Manual 2 includes an example of BJD Score declaration and Johne's Disease Dairy Score factsheet can be found at the Dairy Australia Website.

Enzootic Bovine Leukosis (EBL)

BCL supports the program to eradicate Enzootic Bovine Leukosis (EBL) from the national dairy herd and encourages all dairy farmers to participate in the program. The Australian dairy herd was proclaimed provisionally free of EBL in December 2012. The industry is in a rolling 3-year monitoring phase to maintain this status. The goal of EBL free status will be achieved once all dairy herds receive

a negative bulk milk test in each of the next 3 years. Providing all results during this period are negative, formal EBL freedom will be internationally recognised.

Milk processors are responsible for collecting bulk milk samples if EBL testing is required.

EBL is detectable in low levels across the national beef herd. As a result, it is important that dairy farmers purchasing beef animals ensure they are coming from tested EBL-free herds. If for any reason the EBL status of the stock is unknown, then any introduced beef animals should be isolated until tested free of EBL.

5. Livestock feeding

Standards

- Residues of agricultural chemicals and other undesirable substances can be transferred to milk and the meat of slaughter animals through contaminated stockfeed, stockfeed additives and forage feed.
- Some crops, pastures, weeds, and forages can taint milk or are toxic to livestock.
- Forage can contain plant and fungal toxins and pathogenic microbial contamination.
- Restricted Animal Material are not permitted for use in the feeding of cattle due to the risks to the export markets (European Union) and risks to livestock of contracting a cattle disease such as Bovine spongiform encephalopathy (BSE) more commonly known as Mad Cow Disease.
- For farm-mixed feed, the Australian Code of Good Manufacturing Practice for home-mixed feeds, Feed-Milling Industry and Stockfeed Premixes provides guidelines.

Hazard

- Avoid the contamination of milk and meat animals with chemical residues, Restricted Animal material, toxins, feed derived milk taints and other undesirable substances derived from stock feeds and additives.
- Treated stockfeed must not be fed until it is outside the chemical withhold period.
- A system must be in place to ensure that the use of effluent on paddocks does not pose a food safety risk. Sludge sprayed directly on paddocks must be withheld from grazing for 21 days, whilst effluent applied via irrigation requires a 14 day withhold from grazing.
- All feed to comply with regulatory standards for stock feeds. Records must be available for each delivery to demonstrate regulatory compliance.
- All feed and forage to be free from or have controlled levels of suspect mould, toxic levels of toxic plant material and tainting plants.
- Should farmers suspect that their cattle have been fed material that does not meet the above criteria they must hold their milk and advise their BCL FSOs immediately to allow a risk assessment to be conducted.

Restricted Animal material

- No meat, offal or rendered tissue (such as meat meal, meat and bone meal, bone flour, blood meal or fish meal) is to be fed to cattle.
- Untreated cooking oil (Obtained from local restaurants, manufacturers) is determined on the Ruminant Feed Ban and therefore Is not permitted to be used with stockfeed.

- Ensure all Restricted animal material stored for application to paddocks is secure from stock access. BCL recommend a 21-day withholding period before allowing stock to graze on treated pasture.

Genetically modified organisms

- Take all reasonable steps to avoid the use of GMO feeds and feed products.
- When non GMO feed is unavailable or is prohibitively expensive the feed supplier must provide detail of the GMO content of the feed and use of GMO feed must be recorded.

Monitoring and records

- Supplier Grain and Fodder Declaration Forms specifying the chemical treatments and withhold periods of the stockfeed are to be supplied with each batch of stockfeed purchased. Where feed is supplied from the one stockfeed vendor, a 12-monthly declaration is adequate provided the supplier is FeedSafe® or Fodder Care® accredited. Each new supplier of stockfeed is required to provide a vendor declaration.
- Farmers to maintain a paper trail for trace-back via delivery dockets and invoices and bag batch labels and feed specifications.
- All stockfeed purchases must be recorded and include a declaration containing the following:
    - Date of purchase
    - Supplier
    - Description of feed
    - Date (or period) of supply
    - Chemical residue status
    - GMO status
    - Quantity
    - Storage area
    - Any applicable withholding dates
    - Vendor declaration status
    - Vendor declarations must be obtained and kept for purchased feeds.
- To access suitable declarations to be used when purchasing stock feeds from vendors that do not operate under the FeedSafe accreditation program, use the following web link www.wobb.com.au/industry/commodity/index.asp.

- If Stockfeed is suspected to be contaminated it must be tested prior to use to ensure it does not pose a risk of contaminating milk. Any testing records are to be kept.
- Always maintain paddock and stored grain treatment records for all treatments. Paddock, stored grain, and pest treatment records Manual 3
- Maintain application records of effluent to paddocks.
- Sprayed paddocks to be clearly marked and a farm map made available to all staff.
- Mixing instructions for home mixed feeds with additives to be displayed.
- Samples of feed to be taken and tested in cases where residue status of the feed is in doubt.
- Sample(s) taken (or retained) as required and tested for toxins or other undesirable agents, if considered necessary.

6. Dairy cleaning and milking practices

Standard

- Poor cleaning will result in bacterial growth within the plant and milk stone/fat build up which can be a source of bacterial contamination of raw milk. This cause's milk spoilage, product downgrades and shortened shelf life of manufactured products.
- Factors affecting cleaning efficacy include:
    - Washing water volumes.
    - Detergent dose rate and operating temperature.
    - Hot water temperature (dairy/plant exit temperature of hot water not lower than 65°C).
    - Mechanical water agitation and duration (contact time).
    - Washing water quality and hardness.
    - Milking practices and cleanliness.
    - Dairy maintenance.
- Poor milking practice is a critical factor affecting the incidence of mastitis.
- Inefficient milking management increases animal stress and decreases milk yields and is a major factor contributing to bacterial and physical contamination of milk.
- Physical contamination of milk with sediment and foreign matter increases the risk of bacterial contamination of milk and indicates poor milking practices, increases the cost of processing and results in product being downgraded.
- Failure to follow milking procedures is a major factor in milk contamination, accidental contamination of milk by antibiotics or other inhibitory or veterinary substances and milk down-grades. Documented milking procedures help ensure this does not occur.
- The inclusion of colostrum in milk causes:
    - Downgrading of milk and effects milk colour, smell, and taste.
    - Poor flavour, texture and keeping quality of cheese, butter, and short shelf-life products.
    - Impaired solubility of milk powders.
    - Cleaning problems in processing equipment.

Hazard

- To produce milk that records the lowest possible bacteriological contamination related to dairy hygiene and cleanliness. This is as measured by bacteriological testing limits as set by BCL and its customers. Food safety authorities also set maximum levels.
- To achieve this supplier are to:
    - Implement a cleaning program for both milk vat and milking plant and display a documented 'Cleaning schedule' and directions for use of detergents and sanitisers in the dairy. Dairy Hygiene & Maintenance checklist, Vat cleaning and Dairy Cleaning procedure Manual 3
    - Use only registered products that are suitable for purpose (as per label).
    - Always have a clean milking area and clean external equipment surfaces.
    - Cleaning and sanitation agents are to be appropriately labelled and stored (see Sec 2.3).
    - Ensure dairy water is of a potable standard.
- Only APVMA approved chemicals can be used. All chemicals must be suitable for their intended purpose and used in accordance with manufacturer's instructions. All chemicals must be labelled with an appropriate APVMA or NRA approval number and handled, stored, and disposed of securely.
- Suppliers are to have NO RESIDUE VIOLATIONS in milk and to minimise contamination of milk with sediment and other foreign matter. To achieve this, suppliers are to have milking practices that ensure:
    - Treated cows are withheld so NO ANTIBIOTIC or chemical residue violations occur.
    - Colostrum milk is excluded from supply for 8 milking (or 10 milking for cows that have been induced). Maximum allowable level is less than 0.3% of immunoglobulin.
    - There are no adverse sediment results.
    - Milk is free of abnormalities (blood or clinical mastitis).
    - Teat sealant products.
    - Udders and teats are free of detectable health problems.
    - Cows are not agitated or stressed during milking.
- These milking practices are documented and DISPLAYED at the dairy including vat wash instructions for tanker drivers.

- The frequency of monitoring for the Hygiene and Maintenance Checks is twice per annum and additionally as required under a major bacteriologic quality failure.
- 'As required' means, that for every major bacteriologic quality failure the farm must complete and record a hygiene and maintenance check.
- Water used for dairy plant and animal cleaning purposes must not jeopardise food safety or milk quality.
- Ensure hot water system provides adequate capacity and temperature for effective cleaning and sanitising.
- Conduct hot water system review 6 monthly (including temperature verification).
- Ensure 6 monthly calibration of automatic cleaning systems.
- Water tests are to be conducted if an issue has been raised on the farm, e.g. high TPC. Contact your Farm Services Officer to assist with water testing.
- Water treatments if used must be recorded: including date, treatment, and rates.
- Where reclaimed water or re-use water (grey water) is used it must be in accordance with EPA guidelines and must have a documented water management plan.
- Water used for teat or udder washing must be applied in a manner that ensures milk is not contaminated. Refer to Countdown 2020 website (https://www.dairyaustralia.com.au/resource-repository/2020/07/09/countdown-farm-guidelines-for-mastitis-control#.Yk6BH9tBxPY) for best practice.
- Stock must be prevented from accessing contaminated water sources.

Monitoring and records

  - All suppliers are regularly tested and notified of bacteriological counts and bulk milk cell counts.
  - Dairy Hygiene and maintenance checklist Manual 3 must be completed as required Notification of milk quality is by text message as per the MSA

7. Maintenance of dairy, refrigeration, equipment and environment

Refrigeration Standard

- The refrigeration must be capable of achieving milk must be cooling to below 5º Celsius within 3.5 hours of the commencement of milking as per FSANZ requirements to ensure bacterial growth is minimised by cooling milk quickly and stored at temperatures at or below 5°C.
- Poor milk vat temperature control and out of calibration temperature monitoring equipment can result in rapid and uncontrolled bacterial growth, increased bacteriological counts and milk spoilage.
- Refrigeration must not allow milk to be frozen at any time as milk quality can be affected when milk is frozen.
- Integrity of barriers between milk and cooling mediums in milk heat exchangers must be always maintained to prevent cross contamination from cooling fluids into milk.

Milking plant Standard

- Poor milking plant performance results in:
    - Increased mastitis and teat damage and higher Bulk Milk Cell Counts.
    - Increased milking times can lead to stress on staff and cows and reduced milk production.
    - Poorly maintained dairy equipment can result in bacterial contamination of milk and activation of milk lipase, which causes milk fat breakdown.
- Equipment and structure must not cause contamination of milk and are compliant with AS 1528.1:2019
- Milk contact surfaces are capable of being easily cleaned, rust free and acid/alkali wash resistant.
- Milk filters stored in a clean dry location.

Shed and surrounds Standard

- Milking premises must be adequately designed, constructed, and maintained to prevent contamination during milk production activities.
- Milking sheds must not be used for any purpose that may compromise food safety.
- Clean, tidy and rubbish free dairy and surrounds reduces opportunity for external contamination of milk.
- Milk can be tainted by odours from the shed environment.

- The farmer needs to ensure that milk is protected from contamination resulting from poor cleaning, sanitising practices, and animal hygiene practices.
- Yards, stock tracks and stock drinking points should be maintained in a condition that minimises animal and udder contamination.
- Poor maintenance can affect the safety of the workplace for harvesting and collection of milk. The farm operator needs to ensure that milk is protected from contamination from poorly maintained milking equipment and sheds.
- Rubbish harbours rodents and vermin, which are a source of human and animal pathogens. The approach and surrounds of the dairy must be maintained in a clean and tidy manner to minimise contamination and exclude pests and non-milking animals.
- BCL customers can see and potentially visit supplying dairies and their attitudes are important to the security of the marketplace and milk income.
- The farm operator must provide and maintain a 24-hour all-weather road access for milk tankers.
- Provide milk tankers, feed trucks and other vehicles safe and unrestricted access to the dairy.
- Non milking animals are to be segregated from the dairy and surrounds to reduce the potential for milk contamination.

Hazard

- It is a requirement to have a minimum of a 'B-rating' dairy building (NSW Farms).
- Milk plant performance must meet The Primary Production and processing standard for Dairy (Standard 4.2.4)
- Food Standards Australia New Zealand guidelines for raw milk cooling must be complied with.
- Harvested Milk cooled to 5^{o}C within 3½ hours from the start of milking or not exceeding 5^{o}C by two hours, 21 minutes from the completion of milking.
- Thermometer must read within ± 1^{o}C of temperature by standards thermometer.
- Thermostat cut-in at 4^{o}C and cut-out before freezing.
- For farms with pre-cooling, exit milk temperature within 2–3^{o}C of the pre-cooling water.
- To ensure dairy effluent is contained on the property and the system complies with industry standards. See Dairy Waste Management Industry Guidelines.
- Use only food grade and corrosion resistant materials in milking plant.
- Guidelines for water cooling towers must be complied with.
- Vats with top opening lid or inspection hatch are to be covered with a roof.

- Breathers on vats must be screened to exclude pests.
- Swing lid vats must be in an enclosed pest proof room or have the ability for the lid to be secured.
- It is recommended that milkers check the temperature of the Milk vat at the beginning and end of milking.
- Milk pickup temperature checks are automatically made, recorded and a notification left at the dairy by the bulk milk tanker operator at pick-up. Pickup notice is to be checked by the milker for each pick-up.

Monitoring and records

Refrigeration.

- Vats must be able to store and keep milk chilled at 5º Celsius or less.
- Handheld farm thermometers are calibrated at least annually.
- The following checks carried out at least twice per year or as requested by BCL:
    - Vat cooling time.
    - Temperature of thermostat cut in.
    - Temperature of thermostat at cut-out.
- Milk chilling capacity must be checked at least at Peak Milk Flow period and during the Peak Heat Period of the year by measuring the time between milking commencement and when the milk is below 5º Celsius. This is to be recorded on the Dairy Hygiene and Maintenance check list.
- Required annual refrigeration system maintenance by a Licenced refrigeration technician and report supplied.
- Have minor service requirements met as per manufacturers' recommendations which can be performed by a competent owner/operator. Record of service must be kept
- Recommend a six-monthly check for system leaks, faults, and general condition of system.

Dairy surrounds and milking plant

- It is required that a qualified technician undertake milking plant performance test at least once annually and supply a detailed report.
- Milk vats and vat rooms must not be used to store any substances that may or will contaminate milk.

- Inspection of shed, dairy surrounds, vat room, plant and associated yards, raceways, stock troughs/feed pads and tanker access as per the Hygiene and Maintenance Checklist at least twice per year and as required. (Dairy Hygiene and maintenance checklist is available in Manual 3).
- Rubberwear replacement schedules have been met
- Teat cup inflations are checked and replaced as per industry requirements (i.e every 2500 milking)
- If a cooling tower is in place that requires registration, then a risk management plan needs to be in place that meets regulatory requirements.

Dairy effluent

- Poorly managed dairy effluent can pollute the environment and is a risk to milk quality and cow health.
- BCL requires suppling farms to manage dairy effluent responsibly and supports Industry endorsed programs. The farmer needs to ensure effluent from milking sheds and feed pads is contained within the farm boundaries and does not contaminate water sources or pasture.
- Each state has different requirements for effluent management on farms. Ensure your effluent management system complies with your state's legislation.
- Effluent must be contained on your property. It cannot leave the property boundary or enter surface waters.
- Stock must be prevented from accessing effluent areas, e.g. ponds.
- Dairy effluent disposal monitored and recorded daily and the effluent application area to be quarantined for a minimum of 21 days for direct sludge application and 14 days for irrigation application before grazing. Record on the Paddock, stored grain and pest treatment record.
- Daily monitoring of operation of effluent system.

Calibration

Vat thermometers must be checked for calibration monthly by comparing the vat temperature readout with the relevant tanker docket or a handheld thermometer. These checks are recorded on the "Dairy Hygiene & Maintenance Check list" Appendix 7 of Manual 2 determines the correct method for the calibration of the thermometer.

- Tolerance of +/- 1ºC is acceptable.
- Tanker dockets must be kept for the recorded date.

Note - Thermometers must be a food grade metal or plastic exterior thermometer and **MUST NOT** be a mercury in glass thermometer.

Cooling Towers (Victoria Only)

Certain states have requirements around the management and use of cooling towers.

In Victoria, dairy farm cooling tower systems that contain a fan and have recirculating water are required to be registered with the Department of Health, as per the Public Health and Wellbeing Act 2008.

The registration system ensures that all cooling tower systems in Victoria are identified to help track potential sources of Legionnaires' disease.

Other states may also have legislation regarding cooling towers. If you have a cooling tower, refer to your state authority to check if there are any requirements.

- The owner of the land on which a cooling tower system is located is required to register and renew the registration of that system on an annual basis.
- Part of the registration process is to develop a Risk Management Plan.
- The cooling tower system is cleaned every 6 months or after a shutdown of more than a month.
- Registration forms and a risk management plan template can be obtained from the Department of Health on 1800 248 898 or downloaded from www.health.vic.gov.au/environment/legionella/index.htm

8. Managing quality assurance (training, records, audits, corrective actions)

Standard

- Untrained and or incompetent staff and contractors pose a risk to product quality and safety.
- The integrity, consistency and relevance of the quality system will be compromised if there is a lack of quality records, no farmer self-audits and corrective actions, or the quality program is not independently audited and verified. This will lead to inferior continuous improvement and or inconsistent milk safety and quality.

Hazards

- Staff are adequately trained in all aspects of the quality program related to their work.
- Staff training can be provided by on the job training, formal training, online training, attending field days, farm walks and discussion groups. Document staff attendance.
- All staff must be inducted on the farms operating procedures with respect to personal hygiene with reference to food borne illnesses or disease, hand washing, requirements not to milk if suffering from a food borne illness and animal hygiene practices.
- All staff must understand and follow procedures for isolation of milk from treated animals.
- Staff should attend appropriate courses that may be available to further their skills base and comply with Work Cover requirements.
- The minimum training standard for users of farm chemicals is to have completed or be supervised by staff who have completed an approved 'Farm Chemical Users Course'.
- Farm manager to annually review the quality system, record and correct non-conformances, check records, complete a Farmer Self-audit (Manual 4), check corrective actions, and verify the system ensuring on-going compliance and continuous improvement.
- "People in Dairy", and "ESKi" (https://thepeopleindairy.org.au/eski/) are available through the Dairy Australia website. These may provide up to date relevant information on staff training and development.

Monitoring and records

- BCL requires all records as part of this on Farm Quality Assurance Program to be permanent in nature. White boards for temporary recording are ok, but these records must be transferred to a permanent record.

- It is recommended that records are retained for a period of 6 years to align with milk supply agreement obligations as determined by the Dairy Code. There Is a Archive Register in manual 3 that has some determined timelines for records as a guide. A minimum of two years records (back to the last audit must be easily accessible for audit purposes).
- A tick or initial is not acceptable for monitoring records where a measurement or observation is required
- Maintain an "incident" reporting sheet to record non compliances and action plans to rectify (see Manual 3 – incident report and diary note sheet).
- Formal audits as determined by performance against milk safety, quality, and quality program management.
- Training (recorded in the 'Manual 3') and work instructions recorded.
- Maintain and file farm chemical authorisations.
- Complete all questions and actions in the BCL Farmer Self-audit.
- Wall charts and Instruction sheets.
- Farm Chemical Users Certificate

Document all dairy start up and shut down, vat cleaning procedures, and have all staff sign off to acknowledge their understanding using Manual 3.

References

State Dairy Authority	Accreditation or License	Website	Contact Number
Safe Food Queensland	Accreditation	www.safefood.qld.gov.au	1800 300 815
NSW Food Authority	License	www.foodauthority.nsw.gov.au	1300 552 406
Dairy Food Safety Victoria	License	www.dairysafe.vic.gov.au	03 9810 5900
Tasmanian Dairy Industry Authority	License	www.tdia.tas.gov.au	03 6478 4100
Dairy Safe (Dairy Authority of South Australia	Accreditation	www.pir.sa.gov.au/biosecurity/food_safety/dairy	08 8223 2277
Western Australian Department of Health	Accreditation	www.health.wa.gov.au	08 9388 4598

Appendix 1 – NSW Food Authority

NSW Food Authority only For those farms based in NSW The authorised officer has a list of elements (e.g., process control, hygiene, sanitation) that must be checked. If an element is not of an acceptable standard the officer will allocate a certain number of points. The number of points allocated will depend on whether the officer rates the element to be 'critical', 'major' or 'minor'. The points allocated for each of the categories are:

critical – 64 points; major – 8 points; minor – 2 points

At the conclusion of the audit the allocated points are added to give a total rating for the business from 'A' to an 'E' (shown in Table 2).

It is a requirement of BCL for all NSW Farms to achieve at least a B Rating.

Table 2: NSW Rating a business

Rating	Total number of allocated points	Audit Result
A	0-15	Acceptable
B	16-31	Acceptable
C	32-47	Marginal
D	48-63	Unacceptable
E	64 and above	Unacceptable

To ensure that all new licensees can demonstrate long term compliance with NSW legislative requirements, they will be subject to an increased audit frequency (as outlined in Table 3) before moving to routine audits as part of the compliance audit model.

Rating	Priority 2 (e.g. Dairy Farm)
A	24 months
B	12 Months
C	6 months
D	1 Month or more frequently if required
E	1 Month or more frequently if required

Table 3: Audit frequency

Manual 2

Bega Cheese Ltd on Farm Quality Assurance

On Farm Quality Assurance Plan

Contents

This manual

Manual 2: On-farm Quality Assurance Plan

Other manuals

Manual 1: Hazard Analysis and Standards

Manual 3: On-Farm Quality Assurance Monitor Book

Manual 4: Farmer Self-audit

Introduction

This On-Farm Quality Assurance Manual is an essential tool for producing safe and high-quality milk and meat that meet the quality assurance specifications for Bega Cheese Ltd (BCL) and its customers.

BCL on-farm quality assurance system is based around four components:

1. *The 'Hazard Analysis and Standards' (THE RULES)* — which sets out the rules for safe food production for BCL dairy farm suppliers by listing the hazards, standards and the records and monitoring required.

2. *The 'On-farm Quality Assurance Plan'* (this manual - *THE FOOD SAFETY PLAN*) — which is used by farmers and farm advisers to set up an on-farm quality assurance programme.

3. *The 'On-Farm Quality Assurance Monitor Book'* (*THE RECORDS)* —which is used for most quality assurance records and hygiene and maintenance.

4. *The Farmer Self-audit (THE CHECK LIST)* — which is used to ensure the farm assesses its system and considers all aspects of the system at least once per year.

Note: Reference material and spare recording sheets are available on the BCL supplier portals on the web page.

This manual — the 'On-Farm Quality Assurance Plan' — is the primary tool for implementing the farm quality system and for auditors to accredit the farm quality system.

How to use this manual

1. Work through the task, activity, training, or plan that is required for each of the 'farm control' steps listed in this book.

2. Place an initial in the box down the right-hand side of the page when each is completed.

3. When all the control steps have initials against them, sign-off the manual at the bottom of the farm details page (next page). This shows you have implemented the on-farm quality assurance programme.

BCLs On-Farm Quality Assurance plans are to be completed at least once. They should then be checked at least annually and amended as required. If there are any significant changes on farm or in farming practices the on-farm quality assurance plan should also be reviewed. This manual should be filed for later reference.

Farm details and sign-off

Your signature on this form is your guarantee that you have implemented the on-farm quality assurance programme outlined in this manual. Sign this form only **AFTER** completing all the required tasks, activities, training, or plans identified in this manual to a standard adequate to tick each of the boxes.

Name of person responsible for the quality assurance system:	
Signature:	Date:
Dairy farm name and address / location:	
Dairy licence auditor	
Dairy Licence or Accreditation Number:	
Bega/Tatura/BDD Farm No:	PIC:
Owner's / Manager's name and address:	Owner's / Manager's name and address:
Phone Number:	Phone Number:
Lessee's / Share farmer's name(s) and address (if applicable):	
Phone Number:	Fax Number:
All personnel involved in the running of this dairy farm are committed to the implementation and maintenance of this quality assurance program. This will ensure food safety; high product quality and best practice farm management are adhered to by staff and contractors.	
Signed by: …… Name: …….. Date:…… (Name of person implementing the programme to verify that required tasks, activities, training, or plans identified in this manual have been completed and implemented to an adequate standard)	

1. Property and herd status and livestock trading

Farm MAP

- The farm MAP must identify all paddocks.
- The farm MAP should also have temporary notes for paddocks where chemicals have been applied and the withholding period, showing:
    - Calf rearing paddocks (see BJD below).
    - Dairy effluent disposal areas.
    - Details of contaminated sites.

► A Farm MAP should be kept up-to-date and displayed for all farm staff. Location of farm map:	**Farm MAP Completed** ☐

On-farm control of Bovine Johne's Disease (BJD)

- The farm will follow a recommended management practice to eliminate or control Bovine Johne's Disease (BJD): (e.g. The Three Point Calf Plan)

► BJD management or control plan in place and followed. The Suppliers Handbook contains detail of the Three Step Calf Plan. Notes:	**In place and followed** ☐

- The farm should have calculated its BJD Assurance Score (Dairy Score) and declare this on all vendor declarations for cattle being sold.

► Calculate the farm's Dairy BJD Assurance Score (Dairy Score) by completing the Dairy BJD Assurance Score Declaration Forms supplied in Appendix 6. Notes:	**Calculated & completed** ☐

On-farm control of livestock trading

For livestock purchases

- Obtain vendor declarations for all stock purchases before including the milk in bulk supply: (The Dairy BJD Assurance Score may be declared on the National Vendor Declaration Form (NVD) by writing in Section 9 "*Dairy Score is...*" {as appropriate}).
- If treatment status is unknown, discard milk from the factory supply until milk tests are negative for the presence of antibiotics.
- If the cow is dry and could have been treated with a dry-cow antibiotic, a longer withholding period will be necessary before testing the cow's milk for antibiotics.
- No genetically modified livestock (animals bred using DNA modification technology) can be purchased.

► Vendor declarations filed routinely Location of records:	**Completed** ☐

For livestock sales

- Prior to sale, check treatment records to ensure cull cows, bulls and bobby calves have exceeded their Withholding Periods (WHP) or Export Slaughter Intervals (ESI). If not, withdraw animals from sale. (Note: Check abattoir's requirements for cull cows.).
- Cattle may be sold for slaughter or sold to another producer or feedlot whilst still within an Export Slaughter Interval (ESI) or Withholding Period (WHP) provided the purchaser has notification of such on the National Vendor Declaration.
- Bobby calves are not to be fed milk from cows under veterinary treatment or during the Withholding Period (WHP) for that treatment.
- Bobby calves treated with anti-microbial medication are to be withheld from sale until the Export Slaughter Interval (ESI) is completed or the purchaser is notified.

► Livestock trading procedures in place: Keep records of animals sold and complete National Vendor Declaration (NVD). Copies must be filed Location of records:	**Procedures in place** ☐

Note: as the NVD form does not have space to record the identification of all animals sold in a lot or truck load, the back of the NVD can be used to note the identity (ID) of every animal sold. For bobby calves, record the ID of the mother on NVD.

Control of livestock movement on- and off-farm

- Paddocks must not be contaminated by persistent chemicals (suspect sites must be securely fenced).
- Paddocks must not be grazed or harvested within any chemical treatment Withholding Periods (WHP)
- Conduct a risk assessment on all new farmland and agistment grazing land for chemical residues, ensure BJD status is equivalent or better than the status– this requires consulting with the owner and relevant government departments.

► The farm must have a system for quarantining treated paddocks requiring a Withhold Period Describe the system:	**Procedures in place & completed** ☐

2. Livestock identification

Livestock identification system

- All livestock must be positively and individually identified to enable traceability and management of records to prevent contamination of milk or meat.
- Under the National Livestock Identification System (NLIS), all livestock require electronic identification when sold. For on-farm management purposes, this technology may require livestock to receive electronic identification as calves and this ID be used as the farm ID. Electronic ID readers will be required to implement this system.
- Calves reared for replacements on property are to be positively identified soon after birth. Acceptable methods of animal identification are:
    - Freeze brands with a sequential individual numbering system (preferred)
    - Ear tags with a sequential individual numbering system
    - Electronic individual ID system where the farm has ID readers easily available
    - Other forms can be used in conjunction with above—they include names, photos, and tattoos.
- Procedures are to be in place to ensure any purchased livestock are identified and animal details recorded in the Livestock Register.

► Livestock ID system and procedures in place Describe the system:	**Procedures in place** ☐

Livestock register

All farms are to have a Livestock Register inclusive of Dam, Sire and DOB. Acceptable methods may include the following:

○ Calf book; ○ Herd recording; ○ Cow book; ○ Computer system.

► Livestock Register established Describe the system:	**Completed** ☐

On-farm control of bobby calves

- Farms must have a method for identifying bobby calves that are not for herd replacement and are destined for the calf market, so they:
    - Are not fed antibiotic contaminated milk.
    - Do not suckle or have access to antibiotic treated cows or their discarded milk.
- Treated bobby calves are to be held from sale until residue levels are acceptable based on the withholding period and export slaughter intervals.
- Methods used to identify bobby calves include, separate pen, tail rump paint, all beef breed types, all bull calves.

► This farm has procedures for identifying and managing bobby calves Describe the system:	**Bobby calf procedures and ID completed** ☐

3. Antibiotic drugs, agricultural and veterinary chemical use, and storage

On-farm controls for veterinary treatment methods and training (ALL ASPECTS CRITICAL)

- All people administering veterinary medicines animal health preparations are to be trained and competent to undertake these duties.
- Training should ensure that they always follow directions on the container label, paying particular note to the expiry date, dose rate, method of administration, frequency of treatment and approval for class of stock.
- Use only those drugs that are APVMA or NRA registered, legally prescribed and approved for the class of stock.
- Use only veterinary medicines or animal health preparations from their original containers.
- Use of animal health treatments in an off-label manner must have written direction of a veterinarian for each instance.
- Prescription-only veterinary chemicals are to be obtained from a veterinarian and labelled with the following:
    - Name of product/drug
    - Active ingredients
    - Animals or class of animals to be treated
    - Direction for use
    - Withholding period (WHP)
    - Name of prescribing veterinarian and contact phone number
    - Expiry date
    - Storage instructions.
- Empty containers are not to be reused for any other purpose.
- Always use clean, calibrated veterinary equipment to administer treatments.
- Ensure cows have a satisfactory dry-off period before calving.
- No drugs to be held post their expiry date.
- All antibiotics, agricultural and veterinary chemical must be stored as per label instructions.
- Injections are administered in the neck region where practical and where livestock are designated “beef only production”.
- Train staff in how to advise BCL of any contaminated bulk milk, and immediately apply the “stop” sign to the vat outlet until the milk status has been determined.
- At least one farm operator must hold a current Chemical User Certificate.

► One farm operator holds a current Chemical Users Certificate. Notes:	**Person Identified & copy of certificate held.** ☐

► This farm has training and procedures in place Notes:	**Training & procedures in place** ☐

On-farm control of livestock treatment records (CRITICAL)

- All livestock treatments must be recorded and all livestock that have been treated must be identified. This is critical.
- To ensure comprehensive trace-back, ALL treatment records shall be permanent and be recorded at the time of treatment. If treatment is recorded on a whiteboard, they are to be transferred to a permanent record within 24 hrs and include the following:
    - Treatment date
    - Reason for treatment
    - Animal ID or group and location/Quarter treated
    - Name of drug or chemical used
    - Use-by date and batch number of chemical
    - Supplier of drug or treatment
    - Application rate and method
    - Withholding period for milk and meat
    - Calving date (Dry off date)
    - Export slaughter intervals
    - Who applied the drug/chemical.
- The farm must use:
    - the Stock Treatment Record, OR
    - the Mastitis Treatment Record supplied by BCL located in the Bega Cheese Ltd on farm Quality Assurance Monitoring Book, OR
    - equivalent records that contain all information required above including the rolling stocktake (see example in the Bega Cheese Ltd on Farm Quality Assurance Monitoring Book)

Acceptable methods for recording treatments include:

- Treatment book
- Computer program
- Daily diary

► The farm uses a Stock Treatment Record, or the Mastitis Treatment Record, or an alternative acceptable method for recording treatments. Describe recording system:	**Acceptable treatment records in place** ☐

On-farm control of chemicals and drug storages

- All veterinary medicines, animal health preparations and agricultural chemicals must be stored securely so they do not pose a risk to food safety from accidental milk or livestock contamination or accidents.
- Chemicals and drugs are not permitted to be stored in the milking area, with the exception of a lockable refrigerator or cabinet in the vat room.

► Agricultural and veterinary chemical 'Storages' checked and completed Location of storages:	**Checked and completed** ☐

On-farm control of chemical traceability

- Tax invoices for the purchase of agricultural and veterinary chemicals must be kept and filed for tax purposes. The same tax invoices can be re-used, without duplicating the information, for quality assurance purposes. The records must be easily accessed for trace-back and for auditor cross-referencing.

► Tax invoices filed to allow easy access Location of records:	**Filing Completed** ☐

Identification of treated livestock (CRITICAL)

- Cows and calves treated with drugs, medicines or chemicals requiring a withholding period (as per the label or veterinary instructions) must be positively identified and temporarily marked for easy identification.
- This enables cows to be readily identified at milking time to prevent the inclusion of contaminated milk in the bulk supply and to ensure that treated cull calves are not sold for slaughter. Temporary marks such as tags, paint, tape, leg bands, etc must last the duration of the withholding period for that treatment.

► Complete the Instruction sheet titled 'HOW TO IDENTIFY TREATED COWS' (supplied with the Bega Cheese Ltd on farm Quality Assurance Monitoring Book) and locate in the dairy clearly visible for all milkers Location of procedure:	**Completed** ☐

Instructions displayed for treated cows (CRITICAL)

- The method used for identifying treated stock (as described above) must be clearly displayed for all milkers, staff, and visitors to your dairy at the dairy **AND**
- Staff and milkers must have access to all treatment records to enable cross-referencing.

► Treatment records to be available to all staff Location of records:	**Completed** ☐

On farm controls for the separation of purchased cows and treated cows from bulk milk supply

- The ID (e.g. ear tag number) of treated cows to be withheld from supply must be displayed for milkers during milking. Method and systems to do this could include a notice board, whiteboard or blackboard, or a computer system.

► Method for displaying treated cow ID in place Describe system and identify display location:	**Method in place** ☐

- For treated DRY COWS, list the calving date, and ensure the calving date is outside WHP before including milk in the bulk supply.

► Methods and system in place. An example procedure for recording treated stock is in Appendix 2 of this Manual. Describe system and location of records:	**Completed** ☐

On-farm Control of Forage Feed and Stored Grain Treatments (CRITICAL)

- Ensure all chemical applications to pastures and crops are recorded for trace-back and that withholding periods for the grazing of cattle, harvesting of grain, or cutting of crops or pastures for fodder can be referenced and are observed.
- All treatment records shall include the following:
    - Treatment date and reason for treatment.

- Paddock identification and paddock area, OR grain storage identification and amount of grain.
- Name of chemical, trade name of product, use-by date and batch number when first used.
- Application rate and method.
- Total amount of concentrated chemical.
- Beaufort Scale Wind speed (for spraying).
- Wind Direction
- Withholding period (WHP) (days), and date for safe-to-graze/harvest/feed.
- Name of person and signature.

- The Paddock and Stored Grain Treatment Record supplied in the Monitor Book should be used. Otherwise:
    - Ensure that the treatment records contain all information required above including the rolling stock take (see example in the Monitor Book).

► Paddock and stored grain treatment records in place Location of records:	**Records in place** ☐

- Treated paddocks requiring a quarantine period prior to grazing shall be clearly identified and a method established (e.g. warning signs on all gateways) to ensure there is no grazing of livestock for the duration of the grazing withholding periods.

- Restrict access of cows to paddocks containing tainting plants and remove cows from paddocks containing risky levels of toxic plants. Eliminate and eradicate problem plants. Delay milking for four (4) hours after grazing such plants.

► Quarantine methods and grazing systems in place Describe the system:	**Completed** ☐

Property Risk Assessment record for Persistent chemicals

- Property risk assessment record for persistent chemicals (completed at least once for all grazing properties). Any known hazards on farm e.g., Sheep dips, sheds containing sprays (Dieldrin) Known areas are to be marked on the farm map noted in section 1.

► Property Risk Assessment record for Persistent Chemicals completed: Farm Map updated with any High-risk areas determined in the Risk Assessment. Notes:	**Completed** ☐

4. Livestock health, mastitis, and welfare

On-farm control of animal welfare

- Staff and management should be trained in and understand appropriate humane treatment of livestock. Guidelines for the management of farm animals can be found in the 'Code of Practice for the Welfare of Animals – 'Cattle'. Copies can be obtained from the Milk Supply Team.

► Training in animal welfare completed Notes:	**Training completed** ☐

Recommendations for the on-farm control of mastitis

- Dairy Australia's national programme for mastitis control is called Count Down. A copy of the Count Down farm guidelines is on the Dairy Australia website. It provides a farm with a mastitis control plan for use in addition to existing programmes. See also <www.mastitis.focus.com.au> to generate a Mastitis Focus Report.

► Mastitis control programme in place Notes:	**Completed** ☐

On-farm control of herd health

- Farms must implement a herd health programme that addresses all disease risks for a region and ensures the herd is healthy. The following management programmes are to be implemented (see reference material for forms and guidelines):
    - External parasite control programme
    - Internal parasites control programme
    - In northern Victoria, Anthrax control programme
    - Effective vaccination programme

- Footrot treatment and control procedures as listed in DPI Agfacts
- Laneways, yards, and pens of good design, well-maintained and clean
- Ensure calves receive the recommended volume of colostrum within the recommended time.
- Milk should only be harvested from healthy cows. Milk must be isolated from cows which may have the potential to transfer disease to humans. Milk to be disposed of safely. See Supplier Handbook.

► Herd Health programme established Notes:	**Programme established** ☐

On farm control of stock water

- The farm must have methods in place to ensure stock have safe drinking water by doing the following:
    - Assess the quality of the stock water supply for possible contamination—prevent cattle access if risks are identified
    - Prevent effluent entering the stock water supply
    - Treat contaminated water supply or seek alternative supply suitable for dairy stock
    - File records of water quality tests if required.

► Methods in place to ensure safety of stock drinking water Notes:	**Completed** ☐

5. Livestock feeding

On-farm controls for purchased stockfeed

- All purchased stock feed is to comply with state stockfeed requirements.
- Commodity Supplier Declaration Forms must be obtained for all purchased feed. If feed has been treated only as per label of a registered chemical, then the withhold periods supplied on these forms must be observed.
- Vendor declarations must include the name of the supplier, description of the feed, Qty date of supply, chemical residue status, any withholding periods and signature or whoever is making the declaration.
- Refuse delivery of any stockfeed of doubtful chemical residue status and take all reasonable steps to avoid the use of GMO feeds and feed products.

► Retain feed purchase invoices and batch details to facilitate trace-back in case of a chemical contamination of milk or meat Location of records:	**Filing completed** ☐

Stockfeed vendor declarations

- Where feed is supplied from the one stockfeed vendor, a 12-monthly declaration is adequate provided the supplier is FeedSafe® or Fodder Care® accredited. Each new supplier of stockfeed is required to provide a vendor declaration. Note the date the next 12-monthly Vendor Declaration will need to be obtained on the Quality Assurance Yearly Schedule.

► Vendor declarations from all stockfeed suppliers are provided initially and every 12 months Location of records:	**Completed** ☐

On-farm control of feed mixing

- For farm-mixed feed, the Australian Code of Good Manufacturing Practice for home-mixed feeds, Feed-Milling Industry and Stockfeed Premixes provides guidelines.
- Feed mixing operations should be designed in such a way that it prevents feed dust contamination of milk.
- Farm chemicals and pesticides must be stored in a secure location to prevent contamination of stockfeed.
- If feeds are mixed with additives such as vitamins and minerals, mixing instructions must be available for staff at the mixer. These instructions must follow label directions for dose rate, mixing method, and storage. Withholding periods must be followed. Records should be maintained on the Manual 3 – Paddock, stored grain and pest treatment record (at all times).
- Stockfeed containing any material derived from animals with the exception of tallow, gelatine and dairy products must not be fed to ruminants. Untreated cooking oil is not permitted to be used with stockfeed.

► Ensure staff are trained in the operation of the mixer Notes:	**Training and mixing instructions completed** ☐

On-farm control of GMO stockfeed

- All suppliers are required to sign a declaration regarding the use of genetically modified organisms (GMO).
- It is a farmers responsibility to take all reasonable steps to avoid the use of GMO feeds and feed products .
- When non GMO feed is unavailable or is prohibitively expensive the feed supplier must provide detail of the GMO content of the feed and use of GMO feed must be recorded.

► Notify all feed merchants of these GMO requirements Notes:	**Completed** ☐

6. Dairy cleaning and milking practices

On-farm control of dairy cleaning and hygiene

- Farms are required to undertake two (2) hygiene checks of the dairy plant per year and record this in the Bega Cheese Ltd on Farm Quality Assurance Monitoring Book.
- It is recommended that these checks are conducted in conjunction with the scheduled replacement of dairy liners.
- Use only APVMA **registered** dairy detergents and sanitisers that are suitable for their intended purpose for which all major chemical manufacturers provide cleaning advice—follow the recommendations for use.
- Monitor quality results daily and act on any results outside the standard or on any non-conformance issued by BCL
- Cleaners and sanitisers are to be appropriately labelled and stored (see section 3 of this manual for on farm control of chemical and drug storages).

► Dairy plant hygiene checks scheduled Notes:	**Schedule completed** ☐

On-farm control of milking practices

- Establish a method for checking treatment records and for the identification of treated cows (see Section 3 of this manual).
- Establish methods for identifying freshly calved cows and discarding milk until suitable for inclusion in bulk supply. If milk is stored for calves, ensure there can be no accidental inclusion in the bulk supply. Antibiotic milk should not be fed to calves.
- Establish a method for discarding and withholding milk from treated cows for the duration of the withholding period.
- Recommended milking practices include the following:
    - At each milking, check udders for inflammation and the presence of clinical mastitis.
    - Apply teat cups to clean dry teats only.
    - If required, wash and dry dirty teats.
    - Sanitise teats after milking with a recommended sanitiser and emollient at correct strength to label.
    - Maintain a clean milk harvesting area, milking platform and clean hands and aprons
    - Practice good hygiene, especially when handling or treating infected or sick cows.

► Instructions for plant and vat washing procedures completed and displayed. (Example procedure is located in Appendix 3 & 4 at the end of this Manual) Location of instructions:	**Completed** ☐

- The following instructions MUST be displayed at the dairy:
    - How to set the dairy up for milking.
    - How to identify cows to be withheld from supply.
    - How to identify cows treated with veterinary drugs or chemicals with a withhold period.
    - How to identify freshly calved cows.
    - How to identify treated dry cows.
    - How to identify mastitis cows to be withheld from supply.
    - How to clean the dairy plant (including temperatures, Chemical type & Qty)
    - How to clean the bulk milk vats.
    - How to operate the effluent system.
    - How to ensure that the milk refrigeration vats and milk cooling is operating correctly.
    - Water treatment instructions (if required).

► Instructions for start up and milking operation completed and displayed (Example procedure is located in Appendix 5 at the end of this Manual) Location of instructions:	**Completed and displayed** ☐

On-farm control of dairy water

- If the quality of the dairy water supply has been assessed and tested in the past for total hardness and bacteriological quality, then FILE THE RESULTS.
- Re-test ONLY when supply circumstances are altered or as required.
- Establish detergent–water mix requirements based on the test results.
- If dairy water is found to be inadequate for dairy cleaning, treat the water or change the water source. DISPLAY the treatment instructions at the dairy. RECORD treatment on the Dairy hygiene & maintenance check list

- Hot water washes require boiling water above 94°C and above 65°C on exit from the plant. Use a minimum of five litres per set of cups per wash cycle
- Water quality must not jeopardise food safety. If concerned test water to see if in standard
- Ensure new milking personnel are trained in methods described above.

► Water results must be filed, and the water treatment instructions must be displayed Location of records: Location of treatment instructions if required:	**Completed** ☐

On-farm control of milking personnel

- Ensure milking personnel follow good personal hygiene practices.
- Persons with contagious diseases, relevant to the dairy industry, or open infected wounds must not milk cows or enter the dairy and milk handling areas.
- Where appropriate staff and or stock should be vaccinated for zoonotic diseases.
- Relevant training of staff should be provided.

► Training and systems completed Notes:	**Completed** ☐

7. Maintenance of dairy, refrigeration, equipment, and environment

On-farm control of milk refrigeration

- It is recommended milkers monitor the milk vat temperature before the start of each milking, and at the end of each milking. The normal temperature range for each of these times should be clearly displayed for all milkers in the vat room.
- The temperature of milk at pick-up should also be monitored by the milker.

► Systems for monitoring temperatures in place Notes:	**Completed** ☐

- Farmers are required to make at least two (2) checks (in summer and winter, and at peak milk production and periods of peak heat) of the refrigeration system performance (e.g., 5° within 3.5 hours from the commencement of milking) and the washing hot water with a calibrated food-grade farm thermometer. These checks are listed on the Hygiene and Maintenance Checklist in the Bega Cheese Ltd on Farm Quality Assurance Monitoring Book.
- If the refrigeration system does not comply with 5° within 3.5 hours from the commencement of milking have the Farm Services team been notified has this been recorded on the Hygiene and Maintenance Checklist?

► Temperature checks scheduled for summer and winter on the yearly calendar Notes:	**Completed** ☐

► An annual refrigeration service is required Notes:	**Completed** ☐

- The hand-held farm thermometer shall be calibrated at least annually and recorded on the Dairy hygiene & maintenance check list. A tolerance of +/- 1ºC is acceptable. If the thermometer is outside this tolerance has a corrective action been recorded?

- Vat thermometers are to be checked monthly by comparing vat temperature to relevant tanker docket
- A CSIRO method for calibrating a hand-held thermometer is included in Appendix 7 at the end of this manual.
- Handheld thermometers must be made from food grade metal or plastic. Mercury in glass is NOT allowed.

► Farm Thermometer calibrations scheduled Notes:	**Completed** ☐

On-farm controls for dairy repairs and maintenance (R&M) and surrounds

- Controls include:
    - Monitoring of the condition of the premises and plant regularly.
    - Ensuring poisonous or odorous substances are not stored in a milk storage room or near the milk storage area.
    - Maintaining of vermin and fly control programmes for dairy premises and surroundings—use only approved pesticides and record any chemical applications and records of pest control maintained (see Pest control records Manual 3). Records to be kept include:
        - Date of use.
        - What area was treated.
        - Pesticide used.
        - Rate of application.
        - Who applied.
    - Baits must not be placed above stockfeed in the dairy.
    - Implementing a suitable waste management programme.
    - Ensuring tanker and driver access is free of manure and meets BCL.
    - Non milking animals are adequately segregated from the dairy and surrounds to reduce potential of milk contamination.

► R&M methods and systems scheduled Notes:	**Completed** ☐

On-farm controls for the repairs and maintenance (R&M) of milking machines and plant

- An annual milking machine service and a performance test are required.

Follow manufacturer's recommendations for the replacement of milk contacting rubberware, and teat cup liners. Liners need to be replaced every 6 months or after 2500 milking's, whichever comes first. Appendix 8 contains a table to help you determine replacement frequency for your herd.

- Use only approved food grade and corrosion resistant materials.
- Rubberwear replacement schedules have been met
- Teat cup inflations are checked and replaced as per industry requirements (i.e., every 2500 milking's)
- Cooling towers requiring registration are to have a risk management plan completed. Details for cooling tower requirements are contained in the reference material.

► R&M and rubber replacement scheduled on the yearly planner Notes:	**Completed** ☐

On-farm control of the dairy effluent system

- The farms' effluent system must comply with Industry guidelines, State guidelines or code of Practice.
- Withhold periods of pasture treated with effluent must be observed. 14 days for irrigation application method and 21 days for direct sludge application these must be recorded.
- There should be NO access of stock to effluent for drinking or wading.
- Environmental regulations are controlled by the EPA and local government. Direct disposal or point source disposal is a prosecutable offence and you can have an immediate prohibition order placed on your farm for breaches of the relevant Acts.
- The industry agreed four-point plan is:
    - Do you have an effluent system (pond or direct application)?
    - Is your effluent contained on site – does not leave the property boundary or enter surface waters (waterways, drains, etc)?
    - Does your pond ever overflow, become crusted or never need emptying?
    - Do you spread or rotate your effluent over at least 10% of farm to avoid nutrient overload?

► Check your system complies and train staff Notes:	**Completed** ☐

8. Managing quality assurance (training, records, audits, corrective actions)

On-farm controls for managing the quality system

- Provide training for staff in their areas of responsibility and maintain staff training records.
- It is recommended that responsibility lists for staff and instruction sheets for all critical farm operations are compiled.
- Staff or contractors involved in the application of farm chemicals should attend or be supervised by a person who has completed an approved Farm Chemical Users' course or equivalent before applying chemicals.

► Complete the 'duties and responsibilities' table at the front of the Bega Cheese Ltd On-farm Quality Assurance Monitoring Book Notes:	**Completed** ☐

Farmer self-audits

- Conduct Farmer Self-audits at least annually to review the system and record Corrective Actions when a fault or mistake is identified.
- Corrective Actions must also be recorded in response to any of the following:
    - Any significant failure in your food safety plan or similar
    - A QA failure occurs during routine on-farm activities.
    - Under instruction from an external auditor.
    - A complaint is received from a purchaser or processor of the cattle.
    - A non-conformance is identified by BCL or the Food Safety Authority.
    - An adverse reaction to a veterinary chemical or an unexpected treatment failure has occurred.
    - Cattle are identified as being of doubtful chemical residue, or BJD status.
    - Stockfeed is identified as being of doubtful chemical residue status.
- Farmer self-audits:
    - Enable a review of the quality system and ensure continuous improvement.
    - Ensure corrective actions are followed up.
    - Ensure that farm management controls are up to date.
    - Prepare the farmer for a formal audit.

- It is expected that a FARMER SELF AUDIT will occur once each year and just before the formal audit.

► Schedule the farmer self-audit one month before the normal formal audit timing on the yearly planner Notes:	**Completed** ☐
► At the completion of a FARMER SELF AUDIT record NON-CONFORMANCES in the 'QA Incident Reports and Diary Notes' table in the Bega Cheese Ltd on farm Quality Assurance Monitoring Book Notes:	**Completed** ☐

GO TO THE FARM DETAILS PAGE IN THE FRONT OF THIS BOOKLET

(PAGE 2)

SIGN-OFF COMPLETION

OF THE BEGA CHEESE LTD ON FARM QUALITY ASSURANCE SYSTEM FOR THIS FARM

Appendix 1:
Example Treated Stock Recording Procedure

Treated Stock Recording Procedure

This completed procedure must be placed in the dairy. The procedure explains a detailed step-by-step protocol for cows once treated with any antibiotic or veterinary medicine during lactation or at the beginning of the dry period.

Procedure:

1: Establish whether any treatment carries a milk or meat withholding period by thoroughly reading the label.

2: Who ever treats a cow is responsible for recording the treatment on the 'Stock Treatment' record sheet and clearly and correctly identifying the treated cow.

3: Each group of cows Dry Cow treated, must be recorded on the 'Stock Treatment or Mastitis Treatment' record sheet. Individual cows treated must also be recorded in Cow number order (on a wall chart or in a book) so when the cow calves, her withholding period information can be easily accessed.

4: Any cow **treated with a chemical or antibiotic** is to be identified.

5: Lactation treated cows must have marks for easy identification by the dairy shed operator.

6: Dry cow treated cows, as for lactation treated cows, must be identified but with different marks from the lactation treated cows.

7: **NO animal with a mark signifying she has been treated, is to be milked into the vat at any time. Milking personnel must re-apply the mark if it is becoming difficult to see.**

8: When animals exit the withholding period (lactation treated cows) as indicated on the 'Treatment Record' they are to be marked for easy identification so they can be milked into the vat at the next milking. Check the animal prior to the first milking to be sure she has recovered from her ailment and is clear to be milked into the vat.

9: **If in doubt about any cow, ASK** the farm manager or owner or milk the cow into the bucket to be safe.

Appendix 2:
Example Procedure for Introducing Purchased Cows or Freshly Calved Cows

Purchased Cows or Freshly Calved Cows Procedure

This completed procedure must be placed in the dairy and be understood by all staff. The procedure explains a detailed protocol for cows purchased or freshly calved and before they are milked with the main herd and into the vat.

Procedure:

A: Purchased Cows

1: Cows purchased must be entered on to the 'Livestock Register'.

2: Cows will be given a new herd identification number if required which will be recorded alongside its original number.

3: This will allow the Farm Manager to establish whether any cow(s) must be withheld from the vat due to a recent treatment.

4: If there is that necessity that cow(s) require to be withheld from the vat, the cow(s) should be identified, and the procedure followed as per the 'Treated Stock Recording Procedure'.

5: All cows in this category should also be entered into the 'Treatment Record' sheet using the new identification number.

B: Calving Cows

Once a cow has calved, there are some vital steps to be undertaken prior to allowing that cow's milk to enter the milk vat.

1: The cow's identification number must be correctly viewed and recorded.

2: The cow's drying off records must be checked (the wall chart or book where the details were listed in numerical order).

3: The date the cow was dried off, the treatment used and the date the milk was permitted for human consumption all must be identified.

4: If the cow has calved after that date go to item 7.

5: If the cow has calved early, you will have to keep the milk out of the vat until the withholding period has passed and check the milk status prior to including the milk in the vat.

6: If the cow is to be withheld, the cow must be identified. **No animal is to be milked into the vat at any time during the withhold period.**

7: Cows free of the withholding period must be 'stripped' in each quarter to determine any mastitis infection or blood in the milk. If present, they require withholding and item 6 above followed.

8: All cows require to be withheld from the vat for four (4) days or eight (8) milking's to avoid colostrum entering the vat.

9: If teat seal was used, then follow the instructions for withholding milk and stripping out the product prior to inclusion in the vat. Again, these cows must be marked. Procedures are contained in the Suppliers Handbook.

Appendix 3:
Example Procedure for Dairy Plant Cleaning

Cleaning Procedure

This procedure must be displayed in the dairy. It contains a detailed step by step procedure for dairy plant cleaning

Morning:

1: Rinse plant with cold/warm water (as close to 35°C as possible) using a minimum of 5 litres of water per set of cups (preferably 10 litres per set of cups).

2: Hot water with Acid detergent at the recommended rate (read the label and find a cup/scoop that will measure accurately). Using 5-7 litres of hot water (80-85°C) per set of cups.

3: Rinse using 5 litres of hot water (80-90°C) per set of cups.

Evening

1: Rinse plant with cold/warm water (as close to 35°C as possible) using a minimum of 5 litres of water per set of cups (preferably 10 litres per set of cups).

2: Hot water with alkaline detergent at the recommended rate (read the label and find a cup/scoop that will measure accurately). Using 5-7 litres of hot water (80-85°C) per set of cups.

3: Rinse using 5 litres of hot water (80-90°C) per set of cups.

Critical Comments & Safety

- No hot water temperature with detergent should fall below 65°C during washing
- Deviation from the above programme must be notified to the Milk Supply Manager if it presents the likelihood of a milk quality problem
- Label instructions must be carefully followed.
- A separate scoop/cup is to be used for each detergent to avoid any chemical reaction.

Appendix 4:
Example of Vat Cleaning Procedure

Step 1	Vat Control to “OFF”
Step 2	Check detergent jars
Step 3	Connect 2” hose
Step 4	Turn sight tube to Position “B”
Step 5	Open TCP sample valve & fit tube
Step 6	If “Cycle Complete” or “Fault Light” is **ON** PRESS “Reset Stop” then “Start”
Step 7	Turn Wash Control to “ON”
Step 8	Push Reset / Stop
Step 9	Push Start
Step 10	Manhole door to be ajar

Appendix 5:
Example Dairy Plant Start-up and Milk Operation Procedure

Dairy Plant Start-Up and Milk Operation Procedure

This procedure is to be displayed in the dairy. The procedure contains a detailed step-by-step protocol for the set up and start-up of the dairy plant.

Procedure:

1: Ensure the yards are set up for herd access and exit to required paddock.

2: Shut yard gate once the herd is assembled.

3: Check the Vat is clean. Outlet is closed, milk line is placed into the vat and refrigeration **turned ON**. (Follow any specific Vat procedures required).

4. If milk is already in vat, check milk temperature.

5: Replace any air and milk plugs in the milk line.

6: Insert filter sock and turn plate cooler on.

7: Be ***sure*** the milk line is in the vat.

8: Read 'Treatment Record Sheet' to be aware of all the cows to be withheld from the vat.

9: Start up plant (green switch in motor room).

10: Lift buttons on claw bowls in dairy pit.

11: Wait for vacuum to be functional and pulsators are operating correctly.

12: Begin placing cups on cows – **Any Identified Cows MUST Be Withheld** as per the 'Treated Stock Recording Procedure'. These cows are to be milked into a test bucket.

13: After the first row of cows are put on and are milking effectively, check the vat room to be sure that milk is entering the vat and the vat cooling is on.

14: **Throughout the entire milking be sure that ANY Identified** animal is withheld from the vat and milked into a test bucket.

15: **At the completion of milking, be sure milk is cooling.**

Appendix 6: BJD Score

Version 4 July 2012

Dairy BJD Assurance Score Declaration Form

PROPERTY DETAILS

Trading name:								
Address of property:								
Property Identification Code (PIC)								
Animal description No;breed;sex;type eg weaners								

Please provide a different form for cattle of different Dairy Scores

PART A – HERD BASE SCORE DETERMINATION

Applies to the lowest Score animal in the herd. Select ONE Score only

Australian Johne's Disease Market Assurance Program for Cattle (CattleMAP				
The herd is in the CattleMAP. The herd has a biosecurity program in place which is audited annually and has undertaken one or more whole herd tests with negative results. (select one score only and provide CattleMAP status expiry date and certificate number)	MN3	Expiry date:	Cert.No	10 ☐
	MN2	Expiry date:	Cert.No	9 ☐
	MN1	Expiry date:	Cert.No	8 ☐

Herd tested negative		
The herd is not known or suspected to be infected and has tested negative by being either: (Tick test type) ☐ Tested 4 year old or ☐ Tested to MAP Standard in the last 24 months. ~~or~~ or ☐ Check Tested in the last 12 months		7 ☐
Name of approved vet:	Date of Test	

Approved BJD Control Program		
BJD has been diagnosed in the herd in the past but an approved BJD control program has been implemented and the herd's current official status is: (select one score only)	Restricted 2	6 ☐
	Restricted 1	5 ☐
	Tested Low Prevalence	4 ☐
	Tested Moderate Prevalence	3 ☐
	Tested High Prevalence or untested but on an approved control program	2 ☐

Infected or Suspect herds	
Herd is known or suspected to be infected and has not been tested or had an approved BJD control program implemented	1 ☐

Non-Assessed herds		
The herd has not recently been tested but is not known to be Infected or Suspect and is located in: (select one score only)	Free Zone	10 ☐
	Protected Zone	7 ☐
	Beef Protected Area	0 ☐
	Management Area	0 ☐

Non Assessed Herds on long term approved calf rearing programs

Herd has not recently been tested but is not known to be Infected or Suspect and JDCAP or 3-Step Calf Plan has been implemented and audited for the past 4 years or more. Years audited: 4 ☐

Herd has not recently been tested but is not known to be infected or suspect and the JDCAP or an auditable 3-Step Calf Plan was implemented prior to July 1, 2008. 3 ☐

PART B – CALF CREDIT POINTS (IF APPLICABLE-SEE NOTES OVERLEAF)

Approved calf rearing programs	**Score**
These calves have been reared for the first 12 months of their lives, under an audited JDCAP. Certificate No.☐☐☐☐☐☐☐☐ Years of participation:	+3 ☐
These calves have been reared in accordance with the 3-Step Calf Plan	+1 ☐

PART C – TOTAL SCORE FOR CATTLE = Part A base score + Part B calf credits =

PART D – For Cattle purchased into your herd as adults and being resold:
I hold a Declaration Form relating to the purchase and the Dairy Score on this form is: ☐

DECLARATION

I	**of**	**Date**
am the person with day to day responsibility for managing the dairy cattle herd described above and I declare that the information on this form is correct and I attest that I have documentary evidence to substantiate this declaration		**Signature**

Please Note: Making a false or misleading declaration may make the signatory liable to prosecution and/or civil action under the Trade Practices Act 1974 and relevant State legislation. Beef herds purchasing cattle with Dairy BJD Assurance Score of 6 or below will not be eligible for the Financial and Non-Financial Assistance Package for BJD affected beef herds

Version 4 July 2012

Dairy BJD Assurance Score Declaration Form

Explanatory notes

PART A – HERD SCORE

Johne's disease Market Assurance Program (MAP)
MN1 to MN3 are Monitored Negative statuses in the Australian Johne's Disease Market Assurance Program for Cattle (CattleMAP).
The herd's approved veterinarian issues a herd status certificate that is valid for 12 months.

Herd Tested Negative
Check tested, Tested 4 Year Old and Tested to MAP Standard are statuses allocated to eligible herds that have had a negative test by an approved veterinarian. A Check Test can only be conducted on an established herd that is not infected or suspect for BJD. A herd that has introduced cattle with a Base Score (Part A) of 1-6 is ineligible for a check tested status. In eligible dairy herds a Check test can be conducted by sampling the faeces from the concrete yard/standing area prior to wash down or by sampling (blood or faeces) 50 adult cattle (2 years of age and older) in the herd that are most likely to be infected. A Check test status can be maintained by testing every 12 months. Tested 4 Year Old and Tested to MAP Standard are tests of all or up to 300 of the cattle over 4 years old and 2 years old respectively in the previous 24 months, and these statuses can be maintained by a Check Test every 24 months. The date of test is the date samples are collected .

Approved BJD control programs
An approved BJD control program is approved by the State or Territory animal health authority for an infected herd.
The authority allocates the herd status to reflect the stage of the herd's progress.

To attain and retain a status of High Prevalence, Moderate Prevalence or Low Prevalence, a herd would also have to implement a disease program comprising at least:

- Individual animal identification
- 3-step calf rearing plan
- immediate culling of clinical cases
- herd retest at a maximum interval of 2 years to maintain or progress status
- culling priority for reactors and other high risk animals at the end of lactation
- introductions of same or higher assurance score

High Prevalence herds have more than 4% (4 years and older) test positive by ELISA or have not been tested and Moderate Prevalence herds have equal to or less than 4% test positive by ELISA. A Low Prevalence herd has 2% or less ELISA positives among cattle that are 4 years and older (or 1.5% or less in cattle 2 years and older).
Restricted 1 and Restricted 2 are statuses for infected herds that have had one and two consecutive negative herd tests respectively in an official control program, as per the Standard Definitions Rules and Guidelines for BJD

Approved calf rearing programs
Young animals are most susceptible to becoming infected with BJD. The risk of calves becoming infected can be lowered by reducing their exposure to infected cattle and contaminated environments on the farm.
The JD Calf Accreditation Program (JDCAP) is a voluntary comprehensive audited program that has been implemented on some dairy farms in Victoria and is a compulsory part of participation in the Victorian Test and Control Program from 2003 onwards.
The Three Step Calf Plan is a voluntary calf rearing program that can be included in dairy factory audited on-farm QA programs.
The following three steps are management practices that minimise the risk of spread of BJD infection in cattle under 12 months:

- Calves should be taken off the cow within 12 hours of birth.
- Management of the calf rearing are should ensure that no effluent from animals of susceptible species comes into contact with the calf.
- Calves up to 12 months should not be reared on pastures that have had adult stock that are known to carry BJD on them during the last 12 months.

Infected and suspect herd
The herd is classified by the animal health authority as infected or suspect and has not been tested to achieve a status under sections above.

Non-assessed herds
Herds that re not known or suspected to be infected, and have not qualified for one of the above statuses by testing, are classified as Non-Assessed. The risk that they are infected may be determined by their location. If you are unsure of your Zone/Area, please contact your local state government animal health office.
Dairy herds in the Beef Protected Area or Management Area that have not been tested or implemented an auditable hygienic calf rearing program have a Herd Base Score of 0.

PART B – CALF CREDITS

Approved calf rearing programs
Only calves that have been reared under JDCAP or the Three Step Calf Plan are eligible for calf credits. Individual calves that are classified in an approved BJD control program as having a high risk of being infected are not eligible for calf credits.

PART C – TOTAL SCORE FOR CATTLE

Scores for individual animals are calculated by adding the Herd Base Score from Part A and any eligible calf credits from Part B. Calves reared under JDCAP can attain a maximum of Score 7 which is maintained for life eg. base Score 4+3 JDCAP credit points. The animals must have been reared under the JDCAP program for 12 months-although this may not necessarily have been continuous on the same property.

PART D – FOR CATTLE PURCHASED INTO YOUR HERD AS ADULTS AND BEING RESOLD

If you are selling cattle originally purchased into your herd as adults and you hold a Declaration Form relating to the purchase, these cattle retain their original Dairy Score unless they are from CattleMAP herds entering non-MAP herds, when their maximum Dairy Score is 7

Appendix 7:
Procedure for Calibrating Hand-Held Food Grade Farm Thermometers

Step 1: Clean and wash the hand-held thermometer and store in the refrigerator for several hours before checking.

Step 2: Prepare a mixture of finely crushed ice and water, mix well in an insulated flask (e.g., an insulated drink container or thermos). It should appear to be a clear slurry. There should be enough ice to cover the full length of the thermometer probe. Drain off any excess water.

Step 3: Fully immerse the thermometer probe in the ice and take a reading when the gauge comes to rest. The 'ice-point reading' should be 0°C. The accuracy of this method is to 0.001°C.

Step 4: Record the reading and remove the thermometer for 5 minutes to the fridge and repeat the test recording. Do this three times. An average of the three test results can be used to determine the variance of the thermometer from 'true' reading.

Step 5: An average variation greater than 1°C is not acceptable and the thermometer should be adjusted or replaced.

Example: 1st test recording	0.5°C	
2nd test recording	0.6°C	
3rd test recording	0.4°C	
Average variance	0.5°C	0.5 + 0.6 + 0.4 = 1.5
		1.5°C ÷ 3 = 0.5°C

Appendix 8:
Liner Replacement Charts

Liner Replacement – Small to Medium Herds

Liners need to be replaced every 6 months or after 2500 milking's, whichever comes first. The tables below show maximum liner service life (days) (based on 2500 cow milking's, milking twice a day.

		Number of Cows													
CLUSTERS		100	120	140	160	180	200	210	220	230	240	250	260	280	300
	16	180	166	142	125	111	100	95							
	18		180	160	140	125	112	107	102	97	93				
	20			178	156	138	125	119	113	108	104	100			
	22			180	171	152	137	130	125	119	114	110	105		
	24				180	166	150	142	136	130	125	120	115		
	26					180	162	154	147	141	135	130	125	116	
	28						175	166	159	152	145	140	134	125	
	30						180	178	170	163	156	150	144	133	125
	40												180	178	166

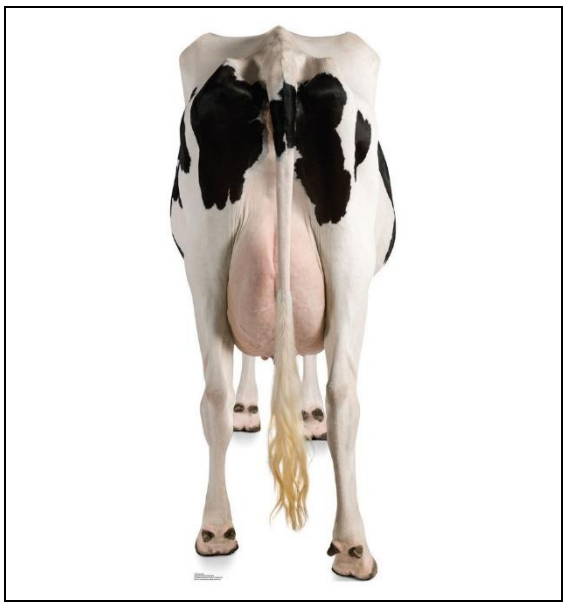
Liner Replacement – Large Herds

Liners need to be replaced every 6 months or after 2500 milking's, whichever comes first. The tables below show maximum liner service life (days) (based on 2500 cow milking's, milking twice a day.

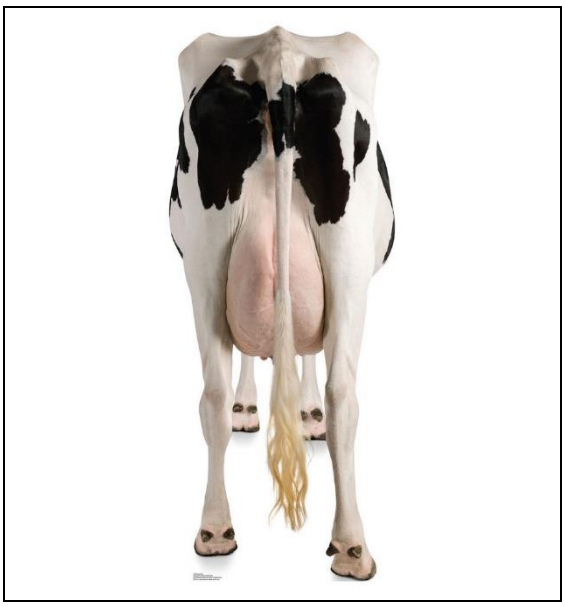
		Number of Cows													
CLUSTERS		300	320	340	360	380	400	450	500	550	600	700	800	900	1000
	24	100	93	88											
	26	108	101	95	90										
	28	116	109	102	97	92									
	30	125	117	110	104	98	93								
	40	166	156	147	138	131	125	111	100	90	83				
	50				180	164	156	138	125	113	104	89	78		
	60						180	166	150	136	125	107	93	83	
	70							180	175	159	145	125	109	97	87
	80									180	166	142	125	111	100

Appendix 9:
Cow Marking Template

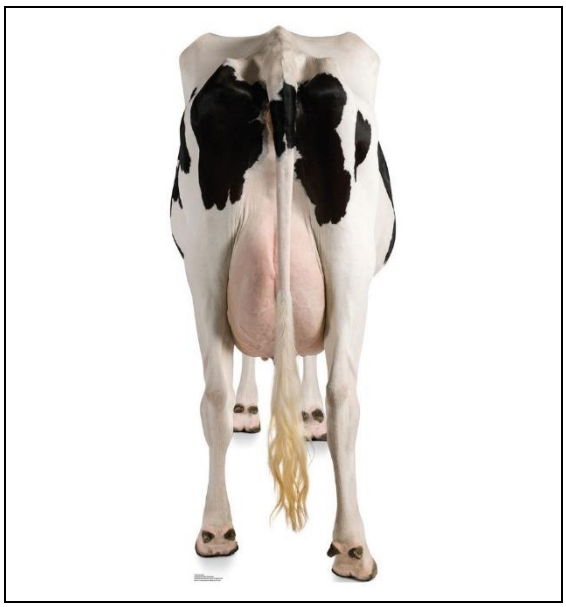
Cow treated with antibiotics



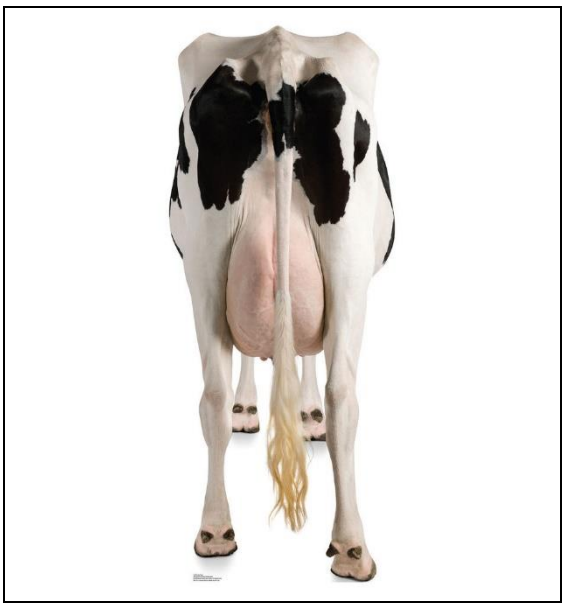
Freshly Calved Cow



Finished Treatment Out Of Withhold



Other:



Manual 3

Bega Cheese Ltd on Farm Quality Assurance

Monitor Book

Approved Date:	18 May 2022	**Supersedes:**	12 Jun 2019

Contents

This manual

Manual 3: Bega Cheese Ltd on Farm Quality Assurance Monitor Book

Other manuals

Manual 1: Hazard Analysis and Standards

Manual 2: Bega Cheese Ltd on farm Quality Assurance Plans

Manual 4: Farmer Self-audit

Introduction

This On-Farm Quality Assurance Manual is an essential tool for producing safe and high-quality milk and meat that meet the quality assurance specifications for Bega Cheese Ltd (BCL) and its customers.

BCL on-farm quality assurance system is based around four components:

1. *The 'Hazard Analysis and Standards' (THE RULES)* — which sets out the rules for safe food production for BCL dairy farm suppliers by listing the hazards, standards and the records and monitoring required.
2. *The 'On farm Quality Assurance Plan'* (this manual - *THE FOOD SAFETY PLAN*) — which is used by farmers and farm advisers to set up an on-farm quality assurance programme.
3. *The 'On Farm Quality Assurance Monitor Book'* (*THE RECORDS)* —which is used for most quality assurance records and hygiene and maintenance.
4. *The Farmer Self-audit (THE CHECK LIST)* — which is used to ensure the farm assesses its system and considers all aspects of the system at least once per year.

Note: Reference material and spare recording sheets are available on the BCL supplier portals on the web page.

This manual — the 'Bega Cheese Ltd on Farm Quality Assurance Monitor Book' — is used for most quality assurance records, Hygiene and Maintenance Checklists, and part of the Farmer Self Audit. This manual also serves as the primary tool for auditors to verify that the farm is in control of its quality system.

Bega Cheese Ltd On-Farm Quality Assurance Monitor Book are to be completed at least annually and there is a booklet allocated for each year. The farm starts a new book usually after the formal audit. Monitor books from previous years are stored for future reference. BCL will reproduce the checklists and records every year and, in the process, review the requirements of the QA system this ensures farmers, and the system remains relevant.

As stated above the records are the primary source of verification used by an auditor. Verification is one of the key principles of a Hazard Analysis Critical Control Points (HACCP) food safety programme. The others are identifying and monitoring critical control points in the food production system.

This monitor book has the primary records needed to monitor the farms QA system.

Yearly schedule

The following quality assurance calendar is used to control the timing of events, which influence quality on your farm.

YEARLY SCHEDULE – Year 20__													
Item to check	**Per Year**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Hygiene and Maintenance Check	2												
Farm handheld Thermometer calibrated	1												
Commodity Supplier Vendor Declarations (for farms with one feed supplier)	1												
VAT Refrigeration Check	1												
Milk vat temperature check	Summer Winter												
Machine test / service	1												
Refrigeration test / service	1												
Inflations / liners	To specs												
Rubber ware	To specs												
Annual Audit	1												
Farmer Self Audit	1												
Clean Dairy Surrounds & Tanker Access	2												
Auto Chemical Dosing System Check	2												

QA training and responsibilities

Complete the below template for each employee. If you are the Owner Manager a template will also be required to be completed by yourself. Listing your skills and qualifications

Notes:

1. Auditors may wish to identify and speak to those staff responsible or who carry out the work.
2. Complete the training column with a 'tick' (√) for those task that are completed by the employee
3. When the employee is deemed competent, they need to sign and date with the manager signing as witness. When skills are reviewed the review date is to be completed. (6 – 12 months)

Employee Name:	
Position:	
Owner/Manager Name:	

Duties and Responsibilities					
(√)	**Duties**	**Date**	**Signed Employee** (Acknowledge understanding)	**Signed Employer**	**Review Date**
	Collect cows from paddock				
	Milk Cows and udder hygiene				
	Mark and Treat cows under treatment				
	Understand treatments and withholds				
	Identify and treat animal health issues				
	Maintain milking area and surrounds				
	Maintain Milk storage area.				
	Clean Milk plant and Vat				
	Ensure milk cooling system is working correctly				
	Select Paddock rotation				
	Strip graze/move electric fencing				
	Feed out hay/silage/crop				
	Operate Tractor				
	Operate Quad bike Safely (must wear helmet)				
	Calf Feeding and Care				
	Manage/assist feeding program of young stock				
	Organise/assist joining program				

(v)	Duties	Date	Signed Employee	Signed Employer	Review Date
	Spray pesticides/herbicides to paddocks				
	Sowing/tillage of paddocks				
	Applying fertiliser to paddocks				
	Other Duties				
	Read and understood				
	Interpretation of BCL Quality Table				
	Bega Cheese Ltd on Farm Quality Assurance				
	Manual 1 Hazard Analysis & Standards				
	Vaccinations				
	Q Fever Vaccination.				
	Influenza (Flu Shot)				
	Covid-19 Vaccination.				

	Training Courses/Qualifications	Certification date/details
	Farm Chemical Users Course	
	Agricultural Chemical Users Permit (ACUP)	
	Cups On Cups Off (COCO)	
	Countdown Down Under	
	Feeding Pastures For Profit	
	Prohand Dairy Cows	
	Certificate II in Agriculture	
	Certificate III in Agriculture (Dairy Production)	
	Other Training:	

QA incident reports and diary notes

This page is used to make notes on quality assurance events, or corrective actions which the manager feels may need to be noted for future reference.

Date	Details of Incident Diary Notes and Comments	Staff	Action Taken to Prevent Reoccurrence and Person Responsible	Action Complete Date

Example of a treatment record

Cow Identification (ID)

For each treatment record the Identification of the animal or record the group of animals (all cows).

Stocktakes - Supplier, Quantity and Batch Number

When a chemical or drug is first used it is essential that the supplier of the drug, the quantity purchased, and the batch number is recorded.
Invoices of purchases to be filed for cross reference and trace back.

Dose Rate
The dose rate to be recorded.

Stock Treatment Record (Not Intramammary)

(EVERY TREATMENT AT ALL TIMES)

Cow ID	Problem Treated	Name of Drug / Chemical Used	When first used Supplier, Quantity, Batch No.	Expiry Date	Dosage Rate	WHP Milk (hours)	ESI Meat (days)	First Treatment Date	First Treatment am pm	Last Treatment Date	Last Treatment am pm	OK for Vat / Sale Vat Date	OK for Vat / Sale Vat am pm	OK for Vat / Sale Meat Date
107	Foot abscess	Penicillin	1/4/08 Bega Valley Vet Service, 250 mL, QA10P.6/09	6/2009	20 mL	36	5	1/7/08	am					
				6/2009	20 mL	72	5	2/7/08	am	2/7/08	am	5/7/08	pm	7/7/08

Vat, Slaughter Time, and Date
Using the withhold period and calculating from the date of last treatment determine and record the date milk can be included in the vat and livestock can be sold for slaughter and update the whiteboard / blackboard at the dairy.

Treatment Description and Drug Used

The problem treated and drug used to be recorded.

Expiry Date

The expiry date of any drug or chemical to be checked and recorded with every treatment.

Treatment Dates and Withhold Period

The withhold period for both milk and meat and the corresponding dates of first treatment and last treatment to be recorded.

Stock treatment record (not intramammary)

EVERY TREATMENT AT ALL TIMES

Cow ID	Problem Treated	Name of Drug / Chemical used	1. When first used, supplier, quantity, batch number. 2. Initials of person treating	Expiry Date	Dosage Rate	WHP	ESI	First Treatment		Last Treatment		OK for Vat / Sale		
						Milk (hours)	Meat (days)	Date	am pm	Date	am pm	Vat		Meat
												Date	am pm	Date

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Stock Treatment Record (Not Intramammary) (EVERY TREATMENT AT ALL TIMES) (continued)

Cow ID	Problem Treated	Name of Drug / Chemical used	3. When first used, supplier, quantity, batch number. 4. Initials of person treating	Expiry Date	Dosage Rate	WHP	ESI	First Treatment		Last Treatment		OK for Vat / Sale		
												Vat		Meat
						Milk (hours)	Meat (days)	Date	am pm	Date	am pm	Date	am pm	Date

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Stock Treatment Record (Not Intramammary) (EVERY TREATMENT AT ALL TIMES) (continued)

Cow ID	Problem Treated	Name of Drug / Chemical used	5. When first used, supplier, quantity, batch number. 6. Initials of person treating	Expiry Date	Dosage Rate	WHP	ESI	First Treatment		Last Treatment		OK for Vat / Sale		
												Vat		Meat
						Milk (hours)	Meat (days)	Date	am pm	Date	am pm	Date	am pm	Date

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Stock Treatment Record (Not Intramammary) (EVERY TREATMENT AT ALL TIMES) (continued)

Cow ID	Problem Treated	Name of Drug / Chemical used	7. When first used, supplier, quantity, batch number. 8. Initials of person treating	Expiry Date	Dosage Rate	WHP	ESI	First Treatment		Last Treatment		OK for Vat / Sale		
												Vat		Meat
						Milk (hours)	Meat (days)	Date	am pm	Date	am pm	Date	am pm	Date

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Stock Treatment Record (Not Intramammary) (EVERY TREATMENT AT ALL TIMES) (continued)

Cow ID	Problem Treated	Name of Drug / Chemical used	9. When first used, supplier, quantity, batch number. 10. Initials of person treating	Expiry Date	Dosage Rate	WHP	ESI	First Treatment		Last Treatment		OK for Vat / Sale		
												Vat		Meat
						Milk (hours)	Meat (days)	Date	am pm	Date	am pm	Date	am pm	Date

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Mastitis treatment record (every treatment at all times)

Cow ID	Name of Drug Used	When first used Supplier, Quantity, Batch No.	Expiry Date	First or Dry cow Intramammary Treatment						Second Intramammary Treatment						Third Intramammary Treatment						WHP		Date OK for Vat	Date OK for Meat
				Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Hours Milk	Days Meat		

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Mastitis Treatment Record (every treatment at all times) (continued)

Cow ID	Name of Drug Used	When first used Supplier, Quantity, Batch No.	Expiry Date	First or Dry cow Intramammary Treatment						Second Intramammary Treatment						Third Intramammary Treatment						WHP		Date OK for Vat	Date OK for Meat
				Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Hours Milk	Days Meat		

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Mastitis Treatment Record (every treatment at all times) (continued)

Cow ID	Name of Drug Used	When first used Supplier, Quantity, Batch No.	Expiry Date	First or Dry cow Intramammary Treatment						Second Intramammary Treatment						Third Intramammary Treatment						WHP		Date OK for Vat	Date OK for Meat
				Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Hours Milk	Days Meat		

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Mastitis Treatment Record (every treatment at all times) (continued)

Cow ID	Name of Drug Used	When first used Supplier, Quantity, Batch No.	Expiry Date	First or Dry cow Intramammary Treatment						Second Intramammary Treatment						Third Intramammary Treatment						WHP		Date OK for Vat	Date OK for Meat
				Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Hours Milk	Days Meat		

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Mastitis Treatment Record (every treatment at all times) (continued)

Cow ID	Name of Drug Used	When first used Supplier, Quantity, Batch No.	Expiry Date	First or Dry cow Intramammary Treatment						Second Intramammary Treatment						Third Intramammary Treatment						WHP		Date OK for Vat	Date OK for Meat
				Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Hours Milk	Days Meat		

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Mastitis Treatment Record (every treatment at all times) (continued)

Cow ID	Name of Drug Used	When first used Supplier, Quantity, Batch No.	Expiry Date	First or Dry cow Intramammary Treatment						Second Intramammary Treatment						Third Intramammary Treatment						WHP		Date OK for Vat	Date OK for Meat
				Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Hours Milk	Days Meat		

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Mastitis Treatment Record (every treatment at all times) (continued)

Cow ID	Name of Drug Used	When first used Supplier, Quantity, Batch No.	Expiry Date	First or Dry cow Intramammary Treatment						Second Intramammary Treatment						Third Intramammary Treatment						WHP		Date OK for Vat	Date OK for Meat
				Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Hours Milk	Days Meat		

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Mastitis Treatment Record (every treatment at all times) (continued)

Cow ID	Name of Drug Used	When first used Supplier, Quantity, Batch No.	Expiry Date	First or Dry cow Intramammary Treatment						Second Intramammary Treatment						Third Intramammary Treatment						WHP		Date OK for Vat	Date OK for Meat
				Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Hours Milk	Days Meat		

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Mastitis Treatment Record (every treatment at all times) (continued)

Cow ID	Name of Drug Used	When first used Supplier, Quantity, Batch No.	Expiry Date	First or Dry cow Intramammary Treatment						Second Intramammary Treatment						Third Intramammary Treatment						WHP		Date OK for Vat	Date OK for Meat
				Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Hours Milk	Days Meat		

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Mastitis Treatment Record (every treatment at all times) (continued)

Cow ID	Name of Drug Used	When first used Supplier, Quantity, Batch No.	Expiry Date	First or Dry cow Intramammary Treatment						Second Intramammary Treatment						Third Intramammary Treatment						WHP		Date OK for Vat	Date OK for Meat
				Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Date	am pm	R F	L F	R H	L H	Hours Milk	Days Meat		

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Paddock, stored grain and pest treatment record (at all times)

Date	Treated For	Paddock ID & Size / Grain Storage ID & Tonnage of Grain		When first used Supplier, Quantity, Batch No	Expiry Date	Chemical Used	Application Rate	Total Amount of Chemical Mixed	Application Method	Wind Strength	WHP Days	Date Safe to Graze / Harvest / Use	Person Who Treated Comment
		ID	Ha/t										

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Paddock, stored grain and pest treatment record (at all times) (continued)

Date	Treated For	Paddock ID & Size / Grain Storage ID & Tonnage of Grain		When first used Supplier, Quantity, Batch No	Expiry Date	Chemical Used	Application Rate	Total Amount of Chemical Mixed	Application Method	Wind Strength	WHP Days	Date Safe to Graze / Harvest / Use	Person Who Treated Comment
		ID	Ha/t										

Approved Date:	18 May 2022	Supersedes:	12 Jun 2019

Dairy hygiene & maintenance check list

Check completed by			Sign:		**Date Completed:**		
TEMPERATURE CHECKS (circle 1)			Peak Milk Flow OR Peak Heat Period				
VAT1 Thermometer check **+/ -**	˚C		Temperature at cut in	˚C	Temperature at cut out	˚C	
VAT2 Thermometer check **+/ -**	˚C		Temperature at cut in	˚C	Temperature at cut out	˚C	
VAT1 Cooling time	1st milking	hrs;	2nd milking	hrs;	3rd milking	hrs;	4th milking hrs
VAT2 Cooling time	1st milking	hrs;	2nd milking	hrs;	3rd milking	hrs;	4th milking hrs
Hot Water	Temp into dairy plant	˚C	Temp exiting dairy plant	˚C			
Farm Handheld thermometer calibrated		☐ Yes ☐ No	*Comments on temperature checks:*				

HYGIENE Inspection Area	**Satisfactory**	**Comments**	**Action Taken**	**Date Completed**
Liner Mouthpieces, Claws & Short Pulse Tubes clean and serviceable	☐ Yes ☐ No			
Long Milk Tube clean and serviceable	☐ Yes ☐ No			
Milk Line and Milk Line End Section clean and serviceable	☐ Yes ☐ No			
Receiver, Milk Pump and Releaser clean and serviceable	☐ Yes ☐ No			
Jumbo Rubber and Delivery Line clean and serviceable	☐ Yes ☐ No			
Moisture Trap / Vacuum Tank clean and serviceable	☐ Yes ☐ No			
Rubber ware replacement schedule up to date	☐ Yes ☐ No			
Pulsator Air Filters free from dust	☐ Yes ☐ No			
Dairy shed walls/ceilings - Clean	☐ Yes ☐ No			
- Surface sound	☐ Yes ☐ No			
Dairy shed floors - Clean	☐ Yes ☐ No			
- Surface sound	☐ Yes ☐ No			
Premises structurally sound	☐ Yes ☐ No			
Vat room – Clean and free of dangerous goods	☐ Yes ☐ No			
- Surfaces sound	☐ Yes ☐ No			
BULK MILK TANK / SILO Fittings, interior and exterior vat surfaces, agitator and outlet clean and serviceable	☐ Yes ☐ No			
Surrounds – free from rubbish/tidy	☐ Yes ☐ No			
Evidence of pests	☐ Yes ☐ No			
Cow laneways are not a milk quality risk	☐ Yes ☐ No			
Tanker access as required	☐ Yes ☐ No			
Water suitability and treatment	☐ Yes ☐ No	*Comment on suitability required:*		
Vat Operation Check: ☐ Yes ☐ No	Date:	AMMTA machine test: ☐ Yes ☐ No	Date: / /	

Approved Date:	18 May 2022	**Supersedes:**	12 Jun 2019

Dairy hygiene & maintenance check list

Check completed by			Sign:			**Date Completed:**	
TEMPERATURE CHECKS (circle 1)			Peak Milk Flow OR Peak Heat Period				
VAT1 Thermometer check **+/ -** ˚C			Temperature at cut in	˚C	Temperature at cut out	˚C	
VAT2 Thermometer check **+/ -** ˚C			Temperature at cut in	˚C	Temperature at cut out	˚C	
VAT1 Cooling time	1st milking hrs;	2nd milking hrs;	3rd milking hrs;	4th milking hrs			
VAT2 Cooling time	1st milking hrs;	2nd milking hrs;	3rd milking hrs;	4th milking hrs			
Hot Water	Temp into dairy plant	˚C	Temp exiting dairy plant	˚C			
Farm Handheld thermometer calibrated		☐ Yes ☐ No	*Comments on temperature checks:*				

HYGIENE Inspection Area	**Satisfactory**	**Comments**	**Action Taken**	**Date Completed**
Liner Mouthpieces, Claws & Short Pulse Tubes clean and serviceable	☐ Yes ☐ No			
Long Milk Tube clean and serviceable	☐ Yes ☐ No			
Milk Line and Milk Line End Section clean and serviceable	☐ Yes ☐ No			
Receiver, Milk Pump and Releaser clean and serviceable	☐ Yes ☐ No			
Jumbo Rubber and Delivery Line clean and serviceable	☐ Yes ☐ No			
Moisture Trap / Vacuum Tank clean and serviceable	☐ Yes ☐ No			
Rubber ware replacement schedule up to date	☐ Yes ☐ No			
Pulsator Air Filters free from dust	☐ Yes ☐ No			
Dairy shed walls/ceilings - Clean	☐ Yes ☐ No			
- Surface sound	☐ Yes ☐ No			
Dairy shed floors - Clean	☐ Yes ☐ No			
- Surface sound	☐ Yes ☐ No			
Premises structurally sound	☐ Yes ☐ No			
Vat room – Clean and free of dangerous goods	☐ Yes ☐ No			
- Surfaces sound	☐ Yes ☐ No			
BULK MILK TANK / SILO Fittings, interior and exterior vat surfaces, agitator and outlet clean and serviceable	☐ Yes ☐ No			
Surrounds – free from rubbish/tidy	☐ Yes ☐ No			
Evidence of pests	☐ Yes ☐ No			
Cow laneways are not a milk quality risk	☐ Yes ☐ No			
Tanker access as required	☐ Yes ☐ No			
Water suitability and treatment	☐ Yes ☐ No	*Comment on suitability required:*		
Vat Operation Check: ☐ Yes ☐ No	Date:	AMMTA machine test: ☐ Yes ☐ No	Date: / /	

Dairy hygiene & maintenance check list

Check completed by			Sign:			**Date Completed:**	
TEMPERATURE CHECKS (circle 1)			Peak Milk Flow OR Peak Heat Period				
VAT1 Thermometer check **+/ -**	˚C		Temperature at cut in	˚C	Temperature at cut out		˚C
VAT2 Thermometer check **+/ -**	˚C		Temperature at cut in	˚C	Temperature at cut out		˚C
VAT1 Cooling time	1st milking	hrs;	2nd milking	hrs;	3rd milking	hrs;	4th milking hrs
VAT2 Cooling time	1st milking	hrs;	2nd milking	hrs;	3rd milking	hrs;	4th milking hrs
Hot Water	Temp into dairy plant	˚C	Temp exiting dairy plant		˚C		
Farm Handheld thermometer calibrated		☐ Yes ☐ No	*Comments on temperature checks:*				

HYGIENE Inspection Area	**Satisfactory**	**Comments**	**Action Taken**	**Date Completed**
Liner Mouthpieces, Claws & Short Pulse Tubes clean and serviceable	☐ Yes ☐ No			
Long Milk Tube clean and serviceable	☐ Yes ☐ No			
Milk Line and Milk Line End Section clean and serviceable	☐ Yes ☐ No			
Receiver, Milk Pump and Releaser clean and serviceable	☐ Yes ☐ No			
Jumbo Rubber and Delivery Line clean and serviceable	☐ Yes ☐ No			
Moisture Trap / Vacuum Tank clean and serviceable	☐ Yes ☐ No			
Rubber ware replacement schedule up to date	☐ Yes ☐ No			
Pulsator Air Filters free from dust	☐ Yes ☐ No			
Dairy shed walls/ceilings - Clean	☐ Yes ☐ No			
- Surface sound	☐ Yes ☐ No			
Dairy shed floors - Clean	☐ Yes ☐ No			
- Surface sound	☐ Yes ☐ No			
Premises structurally sound	☐ Yes ☐ No			
Vat room – Clean and free of dangerous goods	☐ Yes ☐ No			
- Surfaces sound	☐ Yes ☐ No			
BULK MILK TANK / SILO Fittings, interior and exterior vat surfaces, agitator and outlet clean and serviceable	☐ Yes ☐ No			
Surrounds – free from rubbish/tidy	☐ Yes ☐ No			
Evidence of pests	☐ Yes ☐ No			
Cow laneways are not a milk quality risk	☐ Yes ☐ No			
Tanker access as required	☐ Yes ☐ No			
Water suitability and treatment	☐ Yes ☐ No	*Comment on suitability required:*		
Vat Operation Check: ☐ Yes ☐ No	Date:	AMMTA machine test: ☐ Yes ☐ No	Date: / /	

Dairy hygiene & maintenance check list

Check completed by			Sign:		**Date Completed:**		
TEMPERATURE CHECKS (circle 1)			Peak Milk Flow OR Peak Heat Period				
VAT1 Thermometer check **+/ -** ˚C			Temperature at cut in	˚C	Temperature at cut out	˚C	
VAT2 Thermometer check **+/ -** ˚C			Temperature at cut in	˚C	Temperature at cut out	˚C	
VAT1 Cooling time	1st milking hrs;		2nd milking hrs;		3rd milking hrs;	4th milking	hrs
VAT2 Cooling time	1st milking hrs;		2nd milking hrs;		3rd milking hrs;	4th milking	hrs
Hot Water	Temp into dairy plant	˚C	Temp exiting dairy plant	˚C			
Farm Handheld thermometer calibrated		☐ Yes ☐ No	*Comments on temperature checks:*				

HYGIENE Inspection Area	**Satisfactory**	**Comments**	**Action Taken**	**Date Completed**
Liner Mouthpieces, Claws & Short Pulse Tubes clean and serviceable	☐ Yes ☐ No			
Long Milk Tube clean and serviceable	☐ Yes ☐ No			
Milk Line and Milk Line End Section clean and serviceable	☐ Yes ☐ No			
Receiver, Milk Pump and Releaser clean and serviceable	☐ Yes ☐ No			
Jumbo Rubber and Delivery Line clean and serviceable	☐ Yes ☐ No			
Moisture Trap / Vacuum Tank clean and serviceable	☐ Yes ☐ No			
Rubber ware replacement schedule up to date	☐ Yes ☐ No			
Pulsator Air Filters free from dust	☐ Yes ☐ No			
Dairy shed walls/ceilings - Clean	☐ Yes ☐ No			
- Surface sound	☐ Yes ☐ No			
Dairy shed floors - Clean	☐ Yes ☐ No			
- Surface sound	☐ Yes ☐ No			
Premises structurally sound	☐ Yes ☐ No			
Vat room – Clean and free of dangerous goods	☐ Yes ☐ No			
- Surfaces sound	☐ Yes ☐ No			
BULK MILK TANK / SILO Fittings, interior and exterior vat surfaces, agitator and outlet clean and serviceable	☐ Yes ☐ No			
Surrounds – free from rubbish/tidy	☐ Yes ☐ No			
Evidence of pests	☐ Yes ☐ No			
Cow laneways are not a milk quality risk	☐ Yes ☐ No			
Tanker access as required	☐ Yes ☐ No			
Water suitability and treatment	☐ Yes ☐ No	*Comment on suitability required:*		

Vat Operation Check:	☐ Yes ☐ No	Date:	AMMTA machine test:	☐ Yes ☐ No	Date: / /

Agriculture and Veterinary Chemical Register

Date Received	Supplier Name	Product Name	Quantity Purchased	Batch Number	Expiry Date	Disposal Comments	Signed

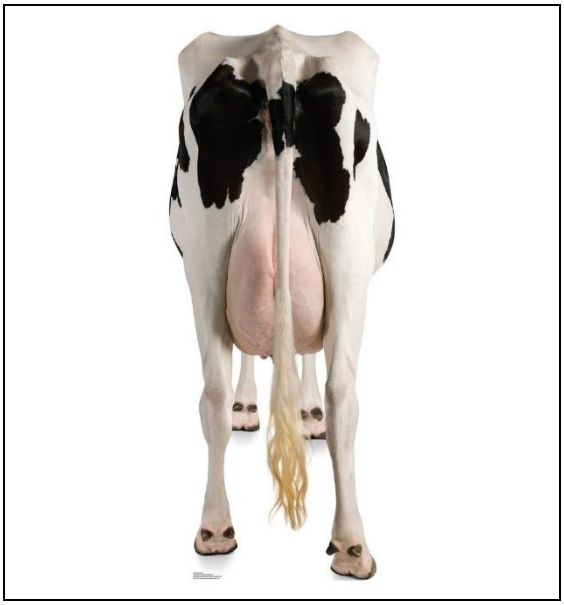
Archive register

The following is a list of important records. Complete the location where these are stored.

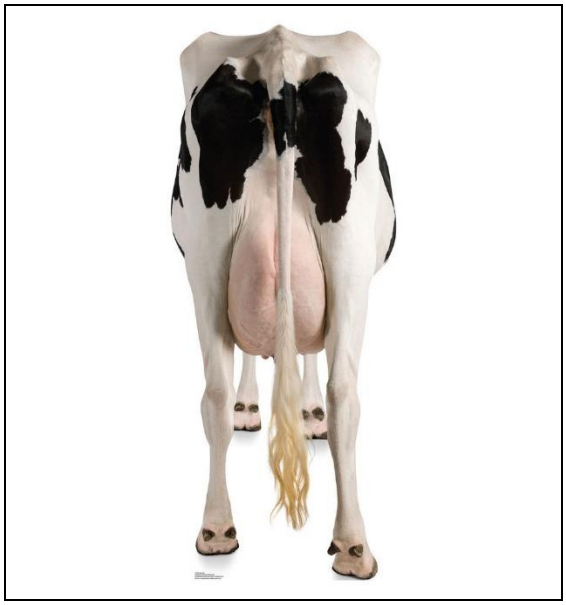
Archive Register		
Record Title	**Retention Period**	**Location stored**
Property risk assessment (if applicable)	Indefinitely	
Chemical soil test results (if applicable)	Indefinitely	
Cattle meat and fat test results (if applicable)	Indefinitely	
Livestock identification records	6 years	
Livestock vendor declarations	5 years	
EBL and BJD vendor declarations	5 years	
Abattoir feedback sheets	3 years	
Chemical user authorisation	5 years	
Farm chemical purchase invoices	5 years	
Veterinary chemicals and drugs extra-label use instructions	2 years	
Advice on livestock residues status	2 years	
Stock treatment records	5 years	
Paddock treatment records	10 years	
Stock food declarations	5 years	

Temporary marks to identify treated livestock

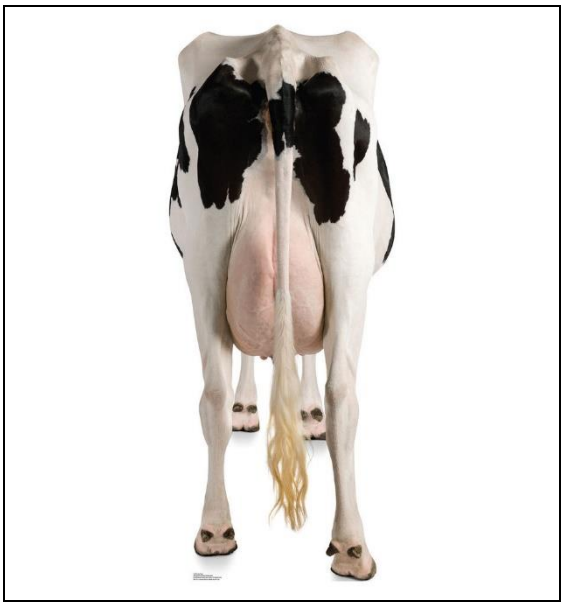
Cow Treated with antibiotics



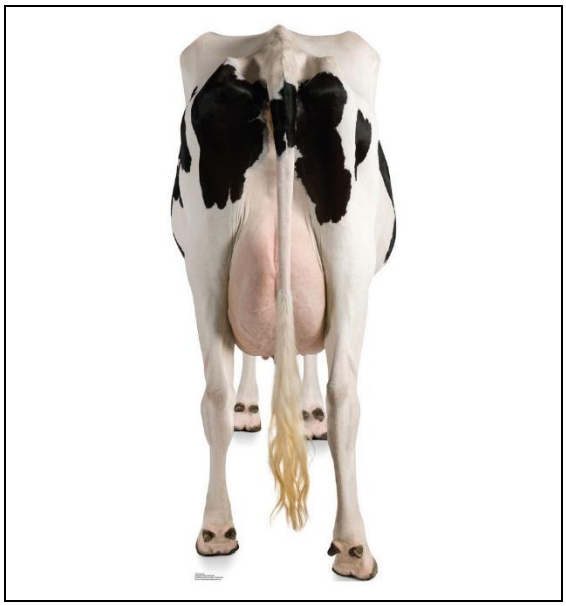
Freshly Calved Cows



Cow out of withhold period



Other:



Approved Date:	18 May 2022	**Supersedes:**	12 Jun 2019

Treated Stock Recording Procedure

Procedure:

1. All treated cows are recorded on the Whiteboard/Blackboard.

   Establish whether any treatment carries a milk or meat withholding period by ***thoroughly*** reading the label.

2: Mark all treated lactating cows with paint / leg bands / tape / recorded on computer. (Reapply mark if difficult to see).

3: Mark all dry cows with paint / leg bands / tape / recorded on computer. (Reapply mark if difficult to see)

NO animal with a mark signifying she has been treated, is to be milked into the vat at any time. Milking personnel must re-apply the mark if it is becoming difficult to see.

4. When animals exit the withholding period (lactation treated cows) as indicated on the 'Treatment Record' they are to be marked for easy identification with paint / tape, so they can be milked into the vat at the next milking. Check the animal prior to the first milking to be sure she has recovered from her ailment and is clear to be milked into the vat.

5. Freshly calved cows – ensure that the milk is withheld for 4 days (8 milking's) (10 for induced calvings). Dry cow treatment details are to be checked to ensure that the milk is suitable to go into the vat.

   Cows introduced to herd with uncertain treatment records are to be withheld from the vat until the milk is tested and cleared to go into the vat.

   Teatseal – cows treated with teatseal are to have each quarter stripped 10-12 times at calving

6. Record all treated cow details (lactating and dry) on recording sheets (herd or mastitis) / computer / herd recording.

7. All milkers to know treatment procedures, identification procedures and withholding procedures.

8. **IF in doubt about any cow, ASK** the farm manager or owner or milk the cow into the bucket to be safe.

Dairy Plant Start Up and Milk Procedures

Step 1:	
Step 2:	
Step 3:	
Step 4:	
Step 5:	
Step 6:	
Step 7:	
Step 8:	
Step 9:	
Step 10:	
Step 11:	
Step 12:	
Step 13:	
Step 14:	
Step 15:	
Step 16:	
Step 17:	
Step 18:	
Step 19:	
Step 20:	

Tanker Driver Instructions

Step 1:	
Step 2:	
Step 3:	
Step 4:	
Step 5:	
Step 6:	
Step 7:	
Step 8:	
Step 9:	
Step 10:	

Vat Cleaning Procedure

Step 1:	
Step 2:	
Step 3:	
Step 4:	
Step 5:	
Step 6:	
Step 7:	
Step 8:	
Step 9:	
Step 10:	

Dairy Cleaning Procedure

Morning

Step 1	
Step 2	
Step 3	
Step 4	
Step 5	

Afternoon

Step 1	
Step 2	
Step 3	
Step 4	
Step 5	

Dairy Cleaning Procedure (continued)

Critical Comments and Safety

Step 1	
Step 2	
Step 3	
Step 4	
Step 5	

Guidelines on completion of the Grain and Fodder Supplier Declaration Form

This form is to be completed by the grower and sighted by the purchaser before the purchaser accepts delivery of the commodity, as described on this form and accompanying documentation, for use as a stock food.

The purchaser may refuse to accept delivery of the commodity if this form is incomplete or if the information given on this form indicates that chemicals applied in the production of the commodity have not been used in accordance with the registered label on those chemicals or that the withholding periods specified for those chemicals have not been observed.

It is recommended that the grower of the commodity reads the following before completing this form:

1 . The purpose of this form is to encourage and ensure that chemicals used in the growing, pre-harvesting and storage of the commodity are used in accordance with the product label and Commonwealth and State laws.

2. The use of this form is not compulsory under law, but your commodity buyer may request your compliance and it is then your decision whether to comply. Non-compliance may however jeopardise your sale.

3. There are or will be various versions of this form used in the marketplace. However, this is the only form approved by the Grains Council of Australia. This approval does not mean other formats are not acceptable - the decision is yours.

4. You should also advise your insurance company of your use of the form that has to be sighted and the wording agreed to by your insurance company.

5. You should also ensure your crop production records will provide you with all the details necessary for you to complete this form.

Finally, as the grower of the commodity, whether it be grain, pulses, oilseeds, forage, or another agricultural commodity, you are responsible for:

- complying with recommended use (as shown on the label) of products used in the production and storage of the commodity.
- advising your insurance company of the use of this Declaration Form; and
- complying with Commonwealth and State laws.

<u>Procedure for use of the form:</u>

A. If there is insufficient space on this form, please provide the additional information on a separate sheet and attach it to this form.

B. Use one Declaration Form for each commodity contract to which you commit.

C. If the commodity is supplied from commingled stock, advise your buyer of this, and provide details of the commingling. This form should accompany or precede the first delivery against the contract. The buyer also needs to be advised of the number of loads and tonnages involved.

Grain and Fodder Supplier Declaration

(For use where stockfeed is purchased from a miller, agent, produce store or other trader)

It is declared that the consignment of stockfeed described as: ……

……

Supplied by ……

of ……

to ……

of ……

on …… or during the period from …….. to ……..

meets the following requirements:

1. Any chemical treatment applied to any component of this consignment during storage on our premises or otherwise in our possession was as per a product label approved by the APVMA 'Australian Pesticides and Veterinary Medicines Authority) and that the withhold period specified on that label have been observed.

2. In relation to the sourcing of raw materials:
   (a) the property on which the commodity was grown, or the storage facility in which the commodity has been stored carried accreditation under a recognised and independently audited QA programme, which includes chemical residue management provision: **OR**
   (b) has been purchased under a contract in which the supplier warrants that the commodity complies with all State and Federal laws and requirements relating to chemical and pesticide residues and specified government designated maximum residue levels; **OR**
   (c) in relation to direct farm purchases that the supplier of the commodity has attested to the effect that any pesticides / insecticides used on the grain have been applied in accordance with the registered labels of these chemicals, at rates not exceeding the maximum rate set out on the label of these chemicals and the appropriate withholding periods have been observed.

3. Is otherwise fit for the purpose of feeding to the species of livestock indicated in the product description above.

4. If free from RAM as required by state legislation

5. Contains ……% GMO material in the above described stockfeed.

Vendor's Signature: …….. Date ……

Note: This form is to be completed by an authorised representative of the stockfeed miller, produce store, agent or other stockfeed trader.

Grain and Fodder Supplier Declaration

(For use where stockfeed is purchased from a grower [see following guidelines] To be completed by the grower).

Vendor's Name:	Contract Number:
Address: State: Post Code:	
Phone:	Fax:
Property Identification:	Delivery Date:
Commodity:	Harvest Date:
Supply Paddock Area (Ha):	Other:
1. Has the crop been grown on a property with an anochlorine status classification, or on a property under quarantine because of anochlorine residues?	☐ Yes ☐ No ☐ Don't Know
If yes, give details:	
2. Does the property from which the commodity is grown carry accreditation under an independently audited quality assurance programme?	☐ Yes ☐ No
If yes, what is the name of the programme?	
3. Has this commodity been tested for residues of all chemicals used on this crop?	☐ Yes ☐ No
If yes, attach details of test results on the delivered product.	

4. Chemicals applied to commodity. Include all insecticides, herbicides, fungicides, crop conditioners, storage chemicals or other chemicals applied to the commodity from commencement of flowering.

Chemicals Applied	Rate per Hectare or Tonne	Application Date

5. Adjoining crops. List all insecticides, herbicides, fungicides, and crop conditioners applied to adjoining crops on your property from the commencement of flowering. (*'Adjoining crops'* means within 100 metres of the reference paddock.)

Crop Name	Chemical Applied	Rate per Hectare	Application Date

6. Neighbour's crops. List adjoining crops growing on neighbouring properties from the commencement of flowering of the delivered commodity. (*'Adjoining crops'* means within 100 metres.)

Crop Name	Approximate Harvest Month

I certify that:

(a) All chemicals applied by me; and

(b) To the best of my knowledge, all chemicals applied by others on my behalf in the production of this commodity have been applied in accordance with the registered label on those chemicals and that the withholding periods for those chemicals have been observed.

VENDOR'S SIGNATURE: _____ DATE _____ VENDOR'S NAME (please print) _____

Risk Assessment for Persistent Chemicals

- A persistent chemical property risk assessment aims to reduce or eliminate the chance of cattle introduced to a new property becoming contaminated with persistent chemicals through the ingestion of soil and plant material that contains persistent chemicals.
- Examples of persistent chemicals include some of the organochlorins (e.g. DDT, Dieldrin, Aldrin) and some 178 other chemicals.
- A property risk assessment also aims to ensure that the act of introducing cattle to a new property does not affect the existing herd health status. At this stage there are only two diseases of concern, BJD and EBL, but other diseases could be an issue in the future. A protocol and procedure can minimise the risk to your herd.
    - is to avoid cultivating this land or to place yards or holding pens on these sites. Information on how to manage these sites can be obtained from the DPI.
- This activity should be undertaken once for existing properties and for all new properties before cattle are introduced.
- Activity should be completed on any new Lease or property purchase even if it contained stock prior.
- Use the below table to complete the risk assessment.

Date of risk assessment		Risk assessment conducted by:		
Property address:		Type of property	Owned	Agisted

Answer the following questions to the best of your knowledge	Yes	No	Unsure	If YES, action required
1. Have Organochloride (OC) residues ever been found in stock from this property in the soil or other material samples from the property				Seek professional assistance from State Residue Contact Office. Residue Management Plan required.
2. Have any of the following OCs been used on the property, DDT, Dieldrin, Lindane				Seek professional assistance from State Residue Contact Office
3. Do stock have access to areas where bananas, cotton, corn, potatoes, lucerne, Orchard crops, sugar cane, tobacco, vegetables or other potentially OC treated crops were grown prior to 1998?				Seek professional assistance from State Residue Contact Office
4. Do stock have access to any timber buildings, sheds, yards, power poles, stockyards, or other structures, which may have been treated against termites before July 1995?				Stock should not be grazed or held in these areas unless it is confirmed that the area does not carry a residue risk.
5. Is there a dip or spray race (working or not) or dip/spray race on the property which was built or operated before 1990?				Ensure livestock are excluded from these areas unless soil tests confirm the areas only have insignificant contamination. Or stock are only exposed to the contaminated area in accordance with the provisions of an effective residue management plan/property management plan.
6. Do stock have access to a rubbish dump, farm machinery, sheds, painted feed bins or any painted surface?				Exclude livestock from these areas
7. Do stock have access to current or former chemical storage, mixing or washdown areas or fertiliser storage or loading areas?				These areas should always be securely fenced to exclude any stock that are ultimately intended for human consumption.
8. Do stock have access to leaking electrical transformers, capacitors, hydraulic equipment, batteries or coal mine wastes?				Stock should be permanently excluded from any areas, equipment or materials that are known or suspected to be affected by PCBs
9. Is feed stored in silos, hay sheds or other areas that may have been treated with OCs?				Seek professional assistance from State Residue Contact Office

Initial the following when completed:

- ☐ Identify AT RISK areas on a map of the farm or Agisted property
- ☐ Implement actions as listed above
- ☐ Test for soil residues if you are concerned an area is contaminated with persistent chemicals. Test animals that may have been exposed.
- ☐ Maintain records of soil residue tests, animal fat tests or property residue status from your State Residue Contact Office

Manual 4

Bega Cheese Ltd on Farm Quality Assurance

Farmer Self Audit

Contents

This manual

Manual 4: Farmer Self-audit

Other manuals

Manual 1: Hazard Analysis and Standards

Manual 2: Bega Cheese Ltd on farm Quality Assurance Plans

Manual 3: Bega Cheese Ltd on Farm Quality Assurance Monitor Book

Introduction

This Bega Cheese Ltd (BCL) On-Farm Quality Assurance Manual is an essential tool for producing safe and high-quality milk and meat that meet the quality assurance specifications for BCL and its customers.

BCLs on-farm quality assurance system is based around four components:

1. *The 'Hazard Analysis and Standards' (THE RULES)* — which sets out the rules for safe food production for BCL dairy farm suppliers by listing the hazards, standards and the records and monitoring required.
2. *The 'Bega Cheese Ltd On-farm Quality Assurance Plan' (THE FOOD SAFETY PLAN)* —which is used by farmers and farm advisers to set up an on-farm quality assurance programme.
3. *The 'Bega Cheese Ltd On-Farm Quality Assurance Monitor Book' (THE RECORDS)* —which is used for most quality assurance records and hygiene and maintenance.
4. *The 'Farmer Self-audit'* (this manual - THE CHECKLIST) — which is used to ensure the farm assesses its system and considers all aspects of the system at least once per year.

This manual — the 'Farmer Self Audit' — is in a question-and-answer approach. The expectation is that the farm will undertake a self-audit at least once per year, one of these usually scheduled for the month before the formal audit.

The purpose of the 'Farmer Self Audit' is to ensure that all farm guidelines and procedures as set out in the standards are current and correct and that:

- The staff instructions and operational procedures are current and understood.
- The method of identification of treated livestock is current.
- The cleaning and sanitation procedures are correct.
- The method of identification of treated paddocks and feed is current.
- The procedures to check milk cooling and milking practices are current and displayed in the dairy.
- The record keeping is up to date.
- The quality results are being monitored and acted upon.
- All preventative and corrective actions are being implemented.
- And to prepare the farmer for the Formal Audit from the food authority.

Farmer Self Audit

1. Property, herd status and livestock trading

Property

Yes ☐ No ☐

In the past 12 months or since this question was last addressed has this farm expanded to include any new properties either purchased, leased or Agisted?

If yes: Map amended ☐

- Amend your farm map to include the new land. Completed ☐
- If yes, obtain BJD status for any new properties purchased, leased or Agisted. These properties must have a status equivalent to or higher than your property.

Herd status

For BJD:

I. BJD control or eradication system in place and adhered to. Checked ☐

Livestock trading

Check the National Livestock Vender Declaration book is up to date Completed ☐

In the past 12 months, has this farm purchased any livestock? Yes ☐ No ☐

If yes, for each purchase are the following declarations obtained and filed

– Dairy BJD Assurance Score Declaration Form Filed ☐

– National Livestock Vendor Declarations Filed ☐

2. Livestock identification

In the past 12 months or since this question was last addressed, has this farm changed the method of identification of livestock?	Yes ☐ No ☐
If yes, ensure instructions at the dairy have been modified?	Completed ☐

3. Antibiotic drugs, agricultural and veterinary chemical use, and storage

In the past 12 months or since this question was last addressed has this farm changed the method of identification of treated livestock or the marking system for treated livestock	Yes ☐ No ☐
If yes, ensure instructions at the dairy have been modified.	Instructions modified ☐
Check treatment records are up to date.	Records up to date ☐

Antibiotic failures

In the past 12 months or since this question was last addressed has the farm had an antibiotic rejection or dumped milk for antibiotic inclusion in bulk supply?	Yes ☐ No ☐
If yes, you must complete an incident report as shown in the 'Monitor Book' and include any corrective actions undertaken.	Report completed ☐
Are all invoices for purchases of drugs and veterinary chemicals filed for later reference if required?	Filed ☐
Check chemical and drug storages for separation and quarantining of drugs and chemicals outside the used-by-dates or expiry dates and any chemical without a label.	Chemical and drug storages checked ☐

Agricultural Chemical use

Check paddock and stored grain treatment records are up to date.	Completed ☐
Has a property risk assessment record for Persistent Chemicals been completed	Completed ☐
Has the Farm Map been updated with any At Risk areas?	Completed ☐

4. Livestock health, mastitis, and welfare

Check mastitis treatment records are up to date	Checked ☐
In the past 12 months or since this question was last addressed, has the farm exceeded BCLs BMCC maximum standard?	Yes ☐ No ☐
If yes review your mastitis control plan, and reference the 'Count Down' guidelines	Mastitis control plan reviewed ☐

5. Livestock feeding

Order and file up-to-date Stock Feed Vendor Declarations.	Yes ☐ No ☐ Date __/__/__
In the past 12 months or since this question was last addressed, has this farm changed the additives in the home feed mix? If yes, check the mix instructions are up to date.	Yes ☐ No ☐ N/A ☐

6. Dairy cleaning and milking practices

The standard specifies that the frequency of monitoring for the hygiene and maintenance checks is twice per annum or 'as required'. It is recommended that a hygiene and maintenance check is conducted when rubber ware is changed.	Two hygiene checks completed ☐
'As required' means, that for major bacteriologic quality failures a farm receives, you must complete and record a hygiene and maintenance check on the checklist in the 'Monitor Book'.	
In the past 12 months, has the farm had a major bacteriologic quality failure?	Yes ☐ No ☐
If yes, a non-compliance hygiene & maintenance check must have been completed	Completed and recorded ☐
Check all instructions for daily, weekly, and monthly routines are displayed at the dairy and are up to date.	Completed ☐
Are all chemicals being used in the dairy have an APVMA approval number noted on the label?	Yes ☐ No ☐
Has the water source for the dairy changed? If yes has water quality been assessed and, if necessary, samples tested?	Yes ☐ No ☐
What is the current water source for the dairy?	
Is the water test result available for the auditor?	Filed ☐

7. Maintenance of dairy, refrigeration, equipment, and environment

If the following maintenance activities have been made in the past 12 months are the service reports available?

Milking machine check and performance test Filed ☐

Refrigeration system check Filed ☐

In the past 12 months, the standard requires two milk vat temperature checks— Peak Milk flow & Peak Heat flow. These are recorded on the hygiene and maintenance checklist in the 'Monitor Book'.

Vat temperature checks completed ☐

In the past 12 months or since this question was last addressed has the temperature at milk pick-up been above the standard set by BCL? Yes ☐ No ☐

Was your farm required to take corrective action? Yes ☐ No ☐

- Action Taken ……
- Date……

The handheld Farm Thermometer must be calibrated every 12 months. Calibration completed ☐
Date __/__/__

8. Managing quality assurance

'Manual 2: Bega Cheese Ltd On-farm Quality Assurance Plans' was completed when the new Bega Cheese Ltd On-farm Quality Assurance system was implemented on your farm.	
It should be filed for reference by the auditor—check this document is current.	Completed ☐
Are farm chemical user certificates up to date?	Yes ☐ No ☐
In the past 12 months or since this question was last addressed has the farm employed any staff?	Yes ☐ No ☐
If yes, it is critical to the integrity of a quality system that staff training is undertaken, ensure duties and responsibilities as tabled in the 'Monitor Book' are completed or modified with the new details including the training column.	Training and records up-to-date Completed ☐

9. Sign Off

This self-audit has been completed by: _____(Name)

Signature: _____

Dated: _____