Arlagården® Quality Assurance Programme

Version 6.1
With effect in Denmark from July 2019

Content

To all members

"Arlagården Quality Assurance Programme" (in the following referred to as "Arlagården") establishes a number of requirements applicable to all farms that supply milk to Arla Foods.

Arlagården is updated regularly, partly to meet the requirements and wishes from Arla Foods' customers and consumers, but also in order to take into account those changes in the conditions and possibilities relevant to the members.

Arlagården is applicable to suppliers in Denmark, Sweden, Germany, Luxembourg, Belgium, Holland, Austria and the United Kingdom.

Arlagården version 6.1 is in force from 1th July 2019. The latest and only valid version of this document can be found on Arla Foods' websites.

Arla Foods Quality Policy for farms

The purpose of Arlagården is to implement Arla Foods' quality policy on dairy farms. This quality policy is based on the following four cornerstones:

Milk composition

We strive to ensure that the milk has a composition that guarantee that the finished product meets the consumer's needs and wishes.

1. The milk must have a natural composition of fats, proteins, minerals and other essential nutrients.
2. The milk must have a good and fresh taste.

Food safety

We strive to offer consumers safe dairy products, which originate on the farm.

1. The milk must not contain undesirable substances.
2. We must ensure a good hygiene in order to avoid the risk of contamination and/or sickness.

Animal welfare

We strive to meet the animals' basic physiological and behavioural needs, which will ensure their health and welfare.

1. The animals must be healthy.
2. The animals must be kept and looked after in a suitable environment.

Environmental considerations

We strive to ensure that farming activities are environmentally friendly and respect nature.

1. Farms must safeguard the surrounding environment and the cultural landscapes.
2. Farms must optimise the exploitation of nutrients and use only a minimum amount of chemicals (based on risk assessment principles).

Arlagården is part of our business strategy and marketing plan

Arlagården is an important part of Arla Foods' business strategy. Through Arlagården, Arla Foods guarantees that the milk, like any other raw material, is produced in a responsible manner and is of high quality, to meet modern demands. Therefore, it is crucial that Arlagården is continuously developed and that all members do their utmost to live up to it, so that it remains a robust and competitive quality programme.

Arla Foods' vision is to design the future dairy, which will bring health and inspiration to the world, in a natural way. Our mission is to ensure the highest possible value for our farmers' milk and create opportunities for their growth. Arlagården makes an important contribution to the realisation of Arla Foods' vision and mission.

Arlagården also plays an important role in Arla Foods' Code of Conduct, also known as "Our Responsibility".

Arla Foods' marketing strategy is built around the concept "Closer to Nature" and this involves milk production in different ways. Conformance with Arlagården ensures therefore the credibility of Arla Foods' marketing strategy.

Arlagården is also used as a tool to inform customers and consumers about how dairy production takes place on the farm. Arlagården is therefore a mean of communication with consumers regarding farm visits, in-store activities, advertising, etc.

Arlagården is a registered trademark owned by Arla Foods amba.

Arlagården is available at Arla Foods' websites www.arla.com and www.arlafoods.co.uk

Content of Arlagården

Arlagården is systematically divided into different subjects and contains an overall description of:

- The most significant regulatory requirements applicable to all members as food producers.
- The additional requirements that the dairy industry and the elected leadership of Arla Foods have adopted.
- The recommendations that Arla Foods encourages to follow.

Each topic contains a review of applicable requirements, which are complemented with a brief instruction for their implementation. These requirements are written in bold and are supplemented with the following indication, depending on their type:

- Legal requirements (**red**).
- Requirements from the dairy industry or from Arla Foods (**blue**).
- Recommendations from Arla Foods (**green**).

All requirements described in Arlagården sustain the cornerstones of Arla Foods Quality Policy and/or allows Arla Foods to collect the milk at the lowest possible cost.
In addition to this quality assurance programme, a number of supplementary documents are also available. (See a more detailed description in Section 81).

Arlagården does not cover all legislative elements applicable to dairy farms, such as the whole of the EU Food Hygiene Regulations. Therefore, dairy farmers must also be familiarized with other important documents such as "Industry Code for Self-monitoring in Dairy Farms" (*"Branchekode for Egenkontrol i mælkeleverende besætninger"*), "Industry Code for Self-monitoring Regarding Animal Welfare" (*"Branchekode for egenkontrol med dyrevelfærd"*) and "Guidance on Good Manufacturing Practices in Primary Production" *("Vejledning om god produktionspraksis i primærproduktionen"*). These documents contain rules and guidance about food hygiene, pest control, training requirements, etc., which are also subject to control by the Local Authorities.

After each section or chapter there is a list of the documentation that is needed in order to verify conformance with these requirements.

Record keeping

Record keeping is required when Local Authorities, consultants or Arla Foods' customers wish to follow up on Arlagården.

Records must be kept for three years, unless otherwise specified within the paragraph explanatory text (see also Section 92). These documents include invoices and delivery notes, and must be made available during an Arlagården audit, if requested.

A number of informative documents and checklists can be available by Member Services upon request.

Example of record keeping requirements:

	Requirement	Paragraph	Where are records kept?
Feed invoices/delivery notes	YES	111 112	***Records folder***
Feed composition	YES	113	***In the yellow folder "Feed labels"***
GM crops log	YES	114	***We do not grow GM crops***

There must always be records available if "YES" is written under the "Requirement" field. These records are checked by the auditor during an Arlagården audit.

When the "Requirement" field is left blank, it is optional for the auditee to provide records to support conformance.

Information and contact

Further information about Arlagården can be obtained at Arla Farmers www.farmers.arla.com (in Danish) or by contacting Member Services on telephone no. (+45) 7643 4545.

Member's responsibilities

It is the member's responsibility to comply with the applicable law at all times.

The dairy farmer is responsible for the milk that is delivered to Arla Foods.

All new dairy farms must be registered by the Danish Authorities (the CHR-register) before the milk can be collected.
(Arla Foods requirement)

All dairy farms must be approved in relation to their conformance with Arlagården before the first collection can take place. This also applies after a temporary cease of milk collection.

Member Services must be notified at least 14 days before the desired start or resumption of milk collection. Moreover, significant changes in the milking times (e.g. from two milking/day to three milking/day), must also be notified to Member Services one month before the planned change.
(Arla Foods requirement)

Modifications concerning milk collection conditions must be notified to Arla Foods.
(Arla Foods requirement)

Major changes to buildings, installations or equipment involving milking and milk storage must be notified to Arla Foods. It is recommended that Member Services is informed already at the planning stage, in order to avoid misguided investments or additional costs as a consequence of Arla Foods' requirements and recommendations being overlooked.

It is the member's responsibility to make sure that the access road, milk collection area, farmyard and milk storage room meet those requirements regarding milk hauliers' good working environment conditions.
(The Danish Working Environment Act ("Arbejdsmiljøloven"))

It is the member's responsibility to contact the Local Authorities as well as Member Services in the event of any food safety or animal health risks, for instance if receiving feed in bad condition or animals with contagious diseases.
(Food Hygiene Regulations)

Wishing for a fruitful cooperation.
Arla Foods

1. Feed and water

We strive to achieve a milk composition that ensures that the finish product meets the needs and wishes of the consumers. Feed and water of high quality are essential for healthy and productive cows, which produce milk of high quality.

11 Feed growing and purchasing

111 Livestock may only be given feed that complies with the relevant legal requirements.
(The Danish Animal Feed Act ("Foderstofloven"))

This requirement applies to both home-grown and purchased feed. Feed must not contain, for instance, meat, bone or fish meal. If the feed is directly imported by the farmer, this must be registered by The Danish AgriFish Agency (*"NaturErhvervstyrelsen"*).

Only feed from approved or registered establishments may be purchased. Silage agents must also be approved.

Delivery notes and invoices must be requested for each purchased batch. Delivery notes must be kept as long as the batch is in use. Invoices are to be kept for 5 years (see Section 92).

112 All purchased feed must be of good quality.
(Food Hygiene Regulations)

The purposes of this requirement are, among others, to ensure a good hygienic quality as well as to avoid the presence of undesirable substances in the feed. Undesirable substances are, for example, toxins derived from fungal growth as a result of wrong storage conditions, or dioxins, which may be present in feed due to contamination during production processes. This requirement also applies to, for instance, by-products from the food industry, coarse fodder from feed supplying companies or grains from other farms or agricultural establishments.

It is recommended that feed suppliers are requested to make sure that their feeds are produced in accordance with Arlagården (see Chapter 4 for requirements applicable to the use of residual products).

The Danish Agricultural Advisory Service (*"SEGES"*) has issued the document "Agreement for the purchase of feed" (*"Aftale om køb af foder"*), which can be used as a support document when showing conformance with this requirement (see Section 91).

113 All feed must be purchased from approved suppliers, who openly indicate all components contained in their feed.
(The Danish Animal Feed Act ("Foderstofloven"), Industry requirement, Arla Foods requirement)

Purchased feed includes feed raw materials, compound feed (feed supplements), mineral feed and milk replacers. A full list of approved feed suppliers in Denmark is available from The Danish AgriFish Agency ("*NaturErhvervstyrelsen*").

Feed may only be purchased from companies and agricultural establishments that have signed a voluntary agreement with the feed industry and SEGES (Cattle division) confirming that it is free from aflatoxins and animal fat. A list of companies that have signed the agreement is available at www.landbrugsinfo.dk.

Grains are excluded from this requirement and may therefore be purchased directly from other farms or agricultural establishments.

All feed must be labelled in Danish, with a description of the raw materials that this contains (in decreasing percentage order) and can be displayed on the packaging or as a separate document. This is to ensure that the feed is used properly.

114 The cultivation of genetically modified (GM) crops must comply with all applicable legal requirements.
(Food Hygiene Regulations)

In order to be able to grow GM crops, approval must be granted by the Local Authorities.

GM crops must be securely stored and kept separate from other crops. If GM crops are grown, this must be reported to The Danish AgriFish Agency ("*NaturErhvervstyrelsen*").

Record keeping requirements Section 11:

	Requirement	Paragraph	Where are records kept?
Feed invoices/delivery notes	YES	111 112	
List of feeds being used		111 112	
Feed composition	YES	113	
GM crops log	YES	114	

12 Feeding

121 Animals must be provided with adequate quantities of feed and water of good quality.
(The Danish Animal Protection Act ("Dyreværnsloven"), Food Hygiene Regulations, Arla Foods requirement)

The feed given to the livestock must ensure an adequate and balanced nutritional intake.

Feed and water must be fresh and of good quality. If water for animal consumption is derived from private water supply, an analysis must be carried out every 5 years to assure that it has drinking water quality.

Animals must be fed according to their specific needs, and the feeding must be performed in a hygienic manner.

All animals over 14 days of age must have free access to fresh drinking water at all times and in abundant quantities. Calves less than 14 days of age must have feed and water ad libitum (see also "Danish Recommendations" (*"Dansk Anbefalinger"*) issued by the Danish Agricultural Advisory Service (*"SEGES"*)).

The chlorination of the drinking water that is given to the livestock is permitted, provided that the concentration of chlorates does not exceed the one in municipal water and that this practice is included in the farm HACCP-based management system.

122 Dairy cows must not be given feed that may have a negative impact on the quality of the milk.
(Arla Foods requirement, Arla Foods recommendation)

The use of feed that may negatively affect the taste and quality of the milk must be minimised or avoided. Examples of such feeds are orange pulp, fodder kale, cabbage and onions. It is recommended that feed with a high concentration of spores is also avoided, as this may increase the risk of presence of spores in milk.

Insecticide-treated grains may not be used as feed.

When using crop protection chemicals on crops intended to be used as feed, the interval between application and harvest must comply with legal requirements. (See also Chapter 4).

Record keeping requirements Section 12:

	Requirement	Paragraph	Where are records kept?
Water analysis (private well)	YES	121	
Feeding plan		121	
Feed analysis		121	

13 Conservation/drying and storage

131 All feed must be conserved/dried, stored and handled in such a way that their quality properties are not compromised.
(Food Hygiene Regulations, Arla Foods requirement)

Feeds must not be contaminated with soil, manure or any other undesirable materials. Special attention must be paid when using moist feeds, e.g. by-products from the food industry.

Feed storage areas and equipment must be kept clean and in good condition. There must also be appropriate conditions for the access to silos and other storage areas. All feeds and feed supplements must be safely stored and kept separate from crop protection agents and other chemicals. Feed storage areas must be inaccessible to livestock, vermin or wild animals and must not come into contact with feed intended for other species, which may contain, for instance, animal fat. If necessary, pest control programmes and/or a better maintenance of the storage areas must be established in order to avoid pest infestations. (See paragraph (367)).

2. Livestock

We strive to produce healthy milk from healthy animals. Animal production must therefore take place in such a way that both animal health and welfare are enhanced. Daily supervision and care must be ensured from birth to slaughter. Veterinary medicinal products are to be used only for the treatment of livestock and always under veterinary supervision.

21 Animal welfare

210 **All stabled animals must be supervised daily, while grazing livestock must be checked regularly. All animals must be handled with care.**
(The Danish Animal Protection Act ("Dyreværnsloven"), Council Directive protection of calves, Arla Foods requirement)

Animals must be fed, watered and looked after in such a way that their needs are fully met. All calves and youngsters that are not fed with automatic feeding systems or ad libitum must be able to eat together and rest at will. Animals that are sick or do not thrive must be treated accordingly.

New born calves must be taken care of as well as given colostrum at the right times and in sufficient amounts.

Calves must be able to freely see and touch other calves. This requirement will be audited according to the national guidelines.

211 **Deleted.**

212 **Calves must be anaesthetised before dehorning.**
(The Danish Animal Protection Act ("Dyreværnsloven"))

The dehorning may be performed by farm staff, once a veterinarian has anaesthetized the animal. Calf ID-nos. must be recorded in the detention sheet/veterinary medicinal products record.

213 **Animals must be kept clean, well-groomed and with hoofs in good condition.**
(Food Hygiene Regulations)

Animals must, for instance, not show faecal contamination on legs or udders.

Livestock must be provided with regular hair and hoof trimming and must be kept free from external parasites.
Cows must show an adequate body condition, according to their stage in the lactation stage. Weight and body condition in calves and youngsters must be the appropriate for their age and size.

214 It is recommended to allow livestock to graze on pastures, when this is beneficial to their health and well-being.
(Arla Foods recommendation)

It is recommended that livestock is allowed to come out and graze on pastures. Grazing animals are easily noticeable to consumers and outsiders, having therefore a very positive influence on the farmers' and Arla Foods' image.

However, animal welfare is first and foremost. Grazing is no longer beneficial to animals if, for instance, the passageways for the livestock get muddy in rainy periods, which may cause health problems.

Record keeping requirements Section 21:

	Requirement	Paragraph	Where are records kept?
Veterinary medicinal products records	YES	212	
Detention sheets	YES	212	

22 Healthy animals

221 Farmers should participate in performance schemes or similar control schemes.
(Arla Foods recommendation)

222 Farmers should participate in an ongoing assessment of animal health and welfare, in collaboration with veterinarians and other relevant advisors.
(Arla Foods recommendation)

223 When animals suffering from pathological conditions are identified, measures must be taken in order to improve the general health of the whole herd.
(Arla Foods requirement)

Animals suffering from pathological conditions must be examined and treated when necessary. In those cases where an acute treatment of an animal or group of animals is not enough to solve a specific health issue, an action plan of preventive measures must also be developed and implemented in order to decrease its incidence and severity.

224 It is recommended that breeding programmes have a holistic approach, where animal robustness, health and productive capacity are all taken into consideration.
(Arla Foods recommendation)

225 Animals with known genetic defects that may have a negative impact on them or on the quality of the milk must not be included in breeding programmes. Breeding strategies must not involve genetic engineering, cloning or any other equivalent technology. It is recommended to breed animals that are genetically polled.
(Industry requirement, Arla Foods requirement, Arla Foods recommendation)

226 All live animals intended to be moved to a different location must be fit for transport. Livestock intended to be slaughtered can only be sent to approved slaughterhouses. Euthanasia or emergency slaughter of animals must only be performed by trained individuals.

(Regulation on the Protection of Animals During Transport, Food Hygiene Regulations (EC) No. 852/2004 and 853/2004, the Danish Slaughter and Euthanasia of Animals Act ("Bek. om slagtning og aflivning af dyr"))

Record keeping requirements Section 22*:*

	Requirement	Paragraph	Where are records kept?
Reference to contract or agreement with animal health advisor		222	
Insemination records or registration block		224 225	

23 Veterinary medicinal products

231 All veterinary medicinal products intended for livestock as well as any related equipment must be stored safely.

(Order No. 1646 of 18th December 2018 on use of veterinary medicinal products and official controls and food businesses self-monitoring of residue levels,("Bekendtgørelse nr. 1646 af 18. december 2018 om dyreejeres anvendelse af lægemidler til dyr samt offentlig kontrol og fødevarevirksomheders egenkontrol med restkoncentrationer", Arla Foods requirement)

Veterinary medicinal products must be stored safely at all times, so the risk of their misuse or of contamination of feed or milk from these is avoided.

Ideally, medicines should be kept in a place where no milk is stored and where no milk or animals are handled. However, in case they are, these must be kept in a locked cabinet.

232 Livestock may only be treated with approved and registered veterinary medicinal products, or with homeopathic and herbal products, of which the content is known.

(Order No. 1646 of 18th December 2018 on use of veterinary medicinal products and official controls and food businesses self-monitoring of residue levels "Bekendtgørelse nr. 1646 af 18. december 2018 om dyreejeres anvendelse af lægemidler til dyr samt offentlig kontrol og fødevarevirksomheders egenkontrol med restkoncentrationer")

Medicinal treatments of livestock may only be carried out in those circumstances and by those persons described in the relevant legislation.

All treatments must follow those instructions described by the farm veterinarian as well as comply with the applicable legislative requirements in terms of use and register. Registration records must be available for at least 5 years.

The approval and registration of medicinal products intended for veterinary use are carried out by the Local Authorities. For products without veterinarian prescription (e.g. herbal products), suppliers must prove that these are approved and registered, for instance by providing the package leaflet or a copy of the marketing authorisation.

233 Milk from cows under medicine treatment must not be supplied to the dairy. All treated cows (included antibiotic treated dry cows) must be clearly identified and milked last or by using special milking equipment, and their milk must be stored separately.
(Food Hygiene Regulations, The Danish Medicines Act ("Lægemiddelloven"), Arla Foods requirement, Arla Foods recommendation)

Milk from cows that have been treated with veterinary medicinal products for which a withdrawal period has been established, must not be delivered to the dairy until this period has expired.

Medicinal treatments and withdrawal periods must be monitored and, when necessary, adjusted in order to avoid the risk of residues in milk. Withdrawal periods should be extended, for instance, when the treated cow produces less milk than usual.

Those animals that need to be milked separately must be clearly identified, both in conventional milking systems and in establishments with AMS. Animals (including dry cows) under antibiotic treatment must be marked with two red bands on their ankles before the first treatment. In establishments with AMS, these bands can be attached to the tail.

All livestock under treatment must be clearly identified throughout the whole withdrawal period. In computerized milking systems, treated cows must be registered before the treatment begins.

A written procedure describing how all treated animals are identified, registered, handled and milked must be in place. This procedure may be elaborated taking as a reference the document "Safe milking" ("*Sikker malkning*") (which can be downloaded from the Arla Farmers) or by seeking advice from the Danish Agricultural Advisory Service ("SEGES"). All staff involved in the milking routines must be familiarised with these procedures.

When milking treated animals, it is recommended to use equipment (bucket milkers, milking clusters and pulsators) that is intended only for this purpose. By doing so, it is ensured that this milk is kept separate from the milk delivered to the dairy at all times. The vacuum supply to the bucket milker must be connected to the pulsator line, never to the milk line. All equipment must be thoroughly cleaned after use.

Individual identification is optional in those establishments where the animals that are under medicinal treatment are kept in an isolated building and milked with separate milking equipment. The milk from these animals must also be stored in a separate bulk tank (not intended to be delivered to the dairy).

Milk suspected to contain antibiotic residues must not be delivered to the dairy. If in doubt, this can be tested either at the dairy or on the farm, as described in the pamphlet "Quick test for antibiotic residues" ("*Hurtig test for antibiotika*"), issued by the Danish Agricultural Advisory Service ("*SEGES*").

234 Deleted.

235 Antibiotics must not be used for preventive purposes, but only to cure or alleviate diseases.
(The Danish Medicines Act ("Lægemiddelloven"))

Only veterinarians may diagnose and treat livestock with antibiotics.

These treatments must be performed following their instructions.

236 Antibiotic treatments of dry cows must be focused on each particular cow.
(The Danish Medicines Act ("Lægemiddelloven"), Arla Foods requirement)

Dry cows must only be treated with antibiotics when the veterinarian has identified a need for it. All such treatments must be recorded.

237 Animals must not be given hormones with the purpose of boosting growth or milk yield.
(The Danish Medicines Act ("Lægemiddelloven"))

238 Livestock is only treated with hormones that are approved and registered as veterinary medicinal products for the treatment of diagnosed pathological conditions in specific individuals.
(The Danish Medicines Act ("Lægemiddelloven"))

239 Hormonal synchronization of the oestrus may never be practiced in lactating animals.
(Arla Foods requirement)

Oestrus synchronization consists of two injections given to a group of animals 9 to 11 days apart. This requirement does not prohibit ordinary reproduction control practices (heat induction is allowed on individual animals).

Record keeping requirements Section 23:

	Requirement	Paragraph	Where are records kept?
Animal medicine records	YES	232 233 235 236 237 238 239	
"Safe milking"	YES	233	

3. Dairy farm

Farms must give a good impression to visitors. By farm it is understood all production buildings as well as the land associated to them.

31 General

311 Dairy farms must give a good impression to visitors.
(Arla Foods requirement)

Farms must inspire confidence and give the impression that they are safe places to produce food. The farmyard and the road leading to the farm must be easily accessible and kept in good condition. Waste, such as packaging, old plastic and metal scrap, must be assembled and disposed of regularly.

All buildings must either be kept in good condition or removed.

312 Waste must be disposed of in accordance with Local Authorities' instructions. However, other collection systems may also be used.
(The Danish Environment Protection Act ("Miljøbeskyttelsesloven"), Food Hygiene Regulations)

Hazardous waste must be handled and stored in such a way that animals, staff or visitors do not get injured or the milk is contaminated. Examples of hazardous waste are waste oil, oil filters, solvents and medicinal products.

Hazardous waste must be handled and disposed of in accordance with instructions from the authorities.

313 Appropriate facilities and resources must be in place in order to be able to milk the cows in the event of a power outage.
(Arla Foods requirement, Arla Foods recommendation)

In order to safeguard animal welfare, it is imperative that the cows can also be milked in the event of a power outage (see also paragraph (513)).

All farms must have either emergency power supply (generator) or a trustworthy written plan for how the situation will be handled in case of power failure.

This can be achieved by complying with at least one the following:

1. There is a socket for an emergency power supply and an agreement is in place for the loan/lease of a power supply system that can be connected within 6 hours of the power failure.
2. The herd has no more than 15 cows (according to the official register), which can be milked by hand.
3. There is a tractor/engine-driven vacuum pump, fitted with the necessary equipment to run the milking system.
4. There is a documented plan for effective management of the milking operation in the event of a power outage.

An emergency power supply system should be established when constructing new buildings. Automatic feeding systems should also be connected to this in those situations where a power outage makes the feeding impracticable.

It is recommended that generators are checked regularly.

32 Milk handling and storage

Facilities where milk is handled or stored must comply with regulations for handling and storage of foodstuffs. These facilities include the room (traditionally called the milk storage room) with the outlet from the storage tank, whereas the storage tank is placed partly or totally inside or totally outside, but with all accesses from inside.

321 The milk storage room must be kept in a good hygienic condition as well as clean, tidy and free from domestic animals, rodents and flies.
(Food Hygiene Regulations)

There must be direct access to the milk storage room without having to walk through the cowshed.

Besides being kept in a good hygienic condition, clean, tidy and with a clean smell, the milk storage room must be well ventilated and protected against pests. Animals are not allowed here at any time.

Windows and doors are to be kept closed or screened. There must be no direct access to the toilet from the milk storage room.

Equipment intended for the milk feeding of calves may be present in the milk storage room, as long as this is thoroughly cleaned after use and the room is kept in a tidy condition.

Member Services must always be contacted before building or rebuilding of the milk storage room.

(See industry codes).

322 Walls, ceilings and floors must be easy to clean and disinfect in the milk handling and storage facilities.
(Food Hygiene Regulations)

Walls, ceilings and floors must be whole, water-resistant and easy to clean. The floor must be self-draining and the drain must be fitted with a water trap.
For more information, the document "Guide for the setting up of milk storage rooms" (*"Vejledning i indretning af mælkerum"*) may be consulted.

323 The milk storage room must be fitted with facilities that provide sufficient hot and cold running water.
(Food Hygiene Regulations, Arla Foods requirement)

This applies to activities such as pre-rinsing and washing of the milking equipment and the bulk tank.
(See industry codes).

324 All accesses to the milk storage room must be fitted with doors.
(Food Hygiene Regulations)

All access points to the milk storage room, including from the cowshed or the milking area, must be fitted with a door. Doors must preferably be self-closing and must close tightly, in order to prevent rodents and other animals from entering. Doors must remain closed when not in use.

(See industry codes).

325 Only products intended for the handling of milk may be stored in the milk storage room, provided that these do not represent a risk of contamination.
(Food Hygiene Regulations)

The milk storage room must not be used for the storage of products that are not intended for the handling of milk. Products that cannot be identified must be removed.

Detergents and disinfectants must be stored safely, so that the milk does not get contaminated, for instance, should these tip over. Only detergents and disinfectants that are in use may be stored in the milk storage room, as long as they do not impede or difficult the cleaning of walls and floors. All containers must be properly labelled, so that their content can be easily identified at all times.

(See industry codes).

326 Chemical pesticides, such as those against flies, must not to be used in the milk storage room.
(Arla Foods requirement)

Glue/mechanical traps or UV traps are a good alternative to chemical pesticides, provided that they are placed in such a way that there is no risk of contamination of the milk.

33 Milk cooling tank (bulk tank)

331 It is recommended that the bulk tank is fitted with an alarm, which in addition to the alarm function it can also continuously record milk temperatures and cleaning processes.
(Arla Foods recommendation)

A tank alarm is a computerized device installed in or near the bulk tank, which monitors and records the condition of both the milk and the tank itself, as well as any possible incidents that may occur. A tank alarm is a fully automatic device, which under normal circumstances does not need to be operated and that can be integrated into the cooling tank control unit.

The purpose of the tank alarm is to visualize, monitor and document milk storage conditions, thus contributing to maintaining a good milk quality. Monitoring measurements can be used as records of conformance.

The tank alarm shows both a critical and an informative warning. Normally, critical warnings cannot be reset before the milk is collected and it therefore provides the haulier with useful information about any possible abnormalities during the cooling/storage process since the last collection.

It is the farmer's responsibility to take the appropriate action if the tank alarm goes off.

Contact Member Services for more information about requirements and purchasing of tank alarms.

332 If the bulk tank is replaced, the new tank must be fitted with a tank alarm.
(Arla Foods requirement)

Bulk tanks that have been produced after 1st March 2007 must be fitted with a tank alarm.

All tank alarms installed before 1st March 2007 are approved.

Tank alarms that have been installed after 1st March 2007 must show the following critical alarms:

- Power outage for over 30 minutes. [1]
- No stirring for over 60 minutes. [1]
- Milk temperature above 9 °C for at least 3 hours. [1]

[1] *For a consecutive period.*

The tank alarm must fulfil the requirements in "Technical Specifications for Arla Tank Guard" A list of approved tank alarm suppliers (called "Green list" ("*Grønne liste*")) is available by contacting Member Services.

333 Only approved refrigerants may be used in the bulk tank's refrigeration system.
(The Danish Environment Protection Act ("Miljøbeskyttelsesloven"))

Refrigerants R12 and R22 (HCFC) are harmful to the ozone layer, and therefore their use is not permitted (neither in new installations nor as recycled refrigerant or "top-up" in existing tanks).

The most widely used refrigerants in milk cooling systems are HFC 134a and R404a, which are also very powerful greenhouse gases. The trend is therefore towards the use of natural refrigerants, such as propane. All refrigerants must be handled in such a way that any potential risk of release to the environment is avoided.

The refrigerant in use must be indicated on the tank or in the tank log.

334 The bulk tank's cooling system with more than 5 tons CO2 equivalent refrigerant must undergo a leakage test annually, within 12 months of last recorded check. This test must be performed by an authorized refrigeration company.
(The Danish Food Act ("Fødevareloven"))

The leakage of refrigerant may affect the performance of the cooling system as well as harm the environment.

All bulk tanks' cooling system must undergo a leakage test according to the intervals described in EU/517/2014.

In addition to the compulsory leakage test, it is recommended that the cooling system is regularly serviced. The outcome of the leakage test must be recorded in the bulk tank log or service report.

335 When a bulk tank is scrapped, the refrigerant must be extracted by an authorized refrigeration company.
(The Danish Environment Protection Act ("Fødevareloven"))

Refrigerants must be drained out of the bulk tank cooling system before this is scrapped or sold. This operation must be performed by an authorized refrigeration company, which must be able to document the type and amount of refrigerant handled.

336 Water supply, washing facilities and cleaning agents must ensure an efficient and satisfactory cleaning of the bulk tank. It is recommended that cleaning agents are free from chlorates.
(Food Hygiene Regulations, Arla Foods requirement, Arla Foods recommendation)

In order to minimize bacterial growth, the bulk tank must be thoroughly cleaned every time this is emptied.

A pre-rinse of the cooling tank at 35-38 °C, followed by a wash at higher temperatures (60-80 °C, measured at the end of the wash), for a minimum of 5 minutes, provides good results. An adequate water volume/flow and temperature throughout all the cleaning process as well as making use of the appropriate detergents in their correct dosage must also be taken into consideration.

In order to ensure a sufficiently high water temperature throughout the entire cleaning process, this must be of 85-90 °C at the inlet. The washing must be completed before the temperature of the water drops below 42 °C (measured at the outlet). This temperature must therefore be measured regularly. It is recommended to measure water temperatures at inlet and outlet at least once a month.

Cleaning agents and disinfectants must be rinsed before the cooling tank can be filled up with new milk.

5-step washes, where acidic and alkaline agents alternate, is the most effective in removing milk residues and debris. If needed, it is recommended that the cleaning is followed by disinfection, in order to destroy any remaining bacteria or inhibit their growth.

Products that are intended for the cleaning and disinfection of milking equipment and surfaces must not contain quaternary ammonium compounds (QACs).

It is also recommended to have a written procedure in place, describing how the cleaning of the cooling tank must be carried out. See supporting documents for suggestions about washing procedures.

We recommend using cleaning agents that are free of chlorates . The use of such products reduces the environmental impact of farming activities and improves the working environment.

Cleaning agents should be approved by the Swedish organization “Good Chemical Advice” (“*Bra Kemråd*”).

Record keeping requirements Section 33:

	Requirement	**Paragraph**	**Where are records kept?**
Sign on tank or service report/log	YES	333	
Service report/log	YES	334 335	
Regular monitoring of final washing water temperature (not below 42°C)	YES	336	
Monthly monitoring of washing water temperature at inlet and outlet		336	
Description of washing procedures		336	

34 Milking equipment

Milking pits and control rooms in AMS are also places where foodstuffs are handled and therefore equivalent requirements as in milk storage rooms apply.

341 Milking equipment and bulk tanks must be made of materials that are resistant to corrosion and are approved for food handling.
(The Danish Food Act ("Fødevareloven"))

All suppliers of milking systems must be able to prove their compliance with the applicable legislation. All new components to be fitted in the milking system after servicing or reparation must bear the symbol "food contact material" (see Section 91) or show an equivalent symbol or labelling. It is also accepted that this is only stated in the delivery note.

The demanded labelling demonstrates that spare parts do not contain phthalates, a plasticiser used in plastics and rubbers. Phthalates are suspected to act as endocrine disruptors in animals and humans.

(See industry codes).

342 Milking equipment must be well maintained and in such condition that the risk of both milk quality and animal welfare issues is reduced.
(Food Hygiene Regulations, Arla Foods requirement)

Milking systems must be serviced regularly. The replacement of liners, hoses, brushes (in some AMS) and all other related equipment must be carried out as described in the provided instruction manual.

The service of the milking system can be performed by the farmer, as long as records are kept. These records can be in the form of service reports or logs.

By servicing the milking system periodically, issues like for instance poor vacuum performance or abrasion of rubber parts can be minimized, contributing therefore to maintaining an acceptable udder health, bacteria/cell count and organoleptic quality.

(See industry codes).

343 The quality of the water that is used in milking and cleaning operations must comply with the standards set up by the Local Authorities.
(Food Hygiene Regulations)

The water used for the cleaning of the milking system must be of potable quality. This is ensured by having a direct municipal water supply or, in the case of private wells, by undertaking annual water analyses.

(See industry codes).

344 Only disinfectants that are approved by the Local Authorities may be used.
(Food Hygiene Regulations)

All disinfectants that are intended to be used in milk production operations must be approved by the Local Authorities.
A link to the full list of approved disinfectants can be found under Section 91.

(See industry codes).

345 Water supply, washing facilities and cleaning agents must ensure an efficient and satisfactory cleaning of the milking system and related equipment. It is recommended that cleaning agents are free from chlorates.
(Food Hygiene Regulations, Arla Foods requirement, Arla Foods recommendation)

Milking facilities must be cleaned after each milking. AMS must be cleaned at least twice a day, which also includes filter change. It is recommended, though, that the cleaning and filter change are carried out more frequently.

The temperature of the washing water must never drop below 42 °C, also towards the end of the washing cycle. This temperature must be measured regularly. It is recommended that washing water temperatures at both inlet and outlet are recorded at least once a month. These records must be available upon request. (See paragraph (336) for more detailed information about washing procedures).

It is recommended to have a written procedure in place, describing how the cleaning of the milking facilities must be carried out.

Products that are intended for the cleaning and disinfection of milking equipment and surfaces must not contain quaternary ammonium compounds (QACs).

We recommend using cleaning agents that are free of chlorates. The use of such products reduces the environmental impact of farming activities and improves the working environment.

Cleaning agents must be approved by the Swedish organization “Good Chemical Advice” (“*Bra Kemråd*”).

(See industry codes).

346 Farms equipped with AMS must meet specific regulations in force.
(Industry requirement, Arla Foods requirement)

AMS stands for Automatic Milking Systems. AMS must, as for 1st January 2006:

- Automatically identify abnormal milk from individual cows, with the same accuracy as per visual inspection (pre-milking).
- Automatically discard abnormal milk before or during milking.

(See industry codes)

347 Milk pipes should be as short and insulated as possible in order to minimize the risk of any potential milk quality issues.
(Arla Foods recommendation)

The use of long milk pipes allows the formation of free fatty acids (FFAs), which may cause undesirable changes in the taste of the milk. This also reduces the flow through the pipe and decreases the temperature of the washing water, which may reduce the efficiency of the cleaning and therefore result in an increased bacterial growth inside the pipes.

It is recommended to insulate the milk conduits, as fluctuations in ambient temperatures may make it difficult to maintain the ideal temperature for both milk and washing liquids.

Pipe angles and bends must be avoided as far as practicable.

Record keeping requirements Section 34:

	Requirement	Paragraph	Where are records kept?
Replacement of rubber parts and control of vacuum performance	YES	342	
Water analysis (private well or municipal supply)	YES	343	
Invoices or delivery notes	YES	344	
Periodic verification that the final temperature of the washing water is above 42 °C	YES	345	
Monthly check of washing water temperatures at inlet and outlet.		345	
Description of washing procedures		345	

35 Milking

351 All milk delivered to the dairy must have a normal composition.
(Food Hygiene Regulations)

Milk with visible abnormalities or from cows in the beginning of the lactation must not be delivered to the dairy. Normal milk is produced by the cow approximately three days after calving (five milkings, with two milkings a day). A milk production of 8-10 kg also increases the risk of unsatisfactory smell and taste.

The milk must be inspected prior milking, either visually or in some other suitable manner. All requirements applicable in AMS must be complied with.

The milk must be filtered before being pumped into the bulk tank. Milk from cows with symptoms of infectious diseases or poisoning may not be delivered either.

352 Teats and surrounding areas must be thoroughly cleaned before milking.
(Food Hygiene Regulations)

Teats must be wiped down thoroughly before milking, in order to remove any possible dirt, manure or spores. By doing so, the risk of bacterial contamination is minimised, avoiding therefore a too high cell count and spore concentrations in milk. It is also important that teats are free from any residual teat cleaners before milking. At least one clean cloth must be used per cow. Brushes or similar may also be used in establishments with AMS.

353 Veterinary medicinal products, udder and hoof care products as well as disinfectants must be used in such a way that the milk is not contaminated.
(Food Hygiene Regulations, Arla foods requirement, Arla Foods recommendation)

Livestock must not be given veterinary medicinal products during the milking process. However, the use of oxytocin both before and during milking is allowed.

All products for udder preparation must be approved and used according to the manufactures instructions. The products used before milking must be wiped or washed off before milking.

Hoof washes and disinfectants must be applied before or after milking.

Udder and hoof care products, as well as products intended for the cleaning and disinfection of milking equipment and surfaces must not contain quaternary ammonium compounds (QACs).

Surfaces in rooms adjacent to areas where milk is handled may still be washed/disinfected with these products, as long as special precautions are taken to avoid the contamination of the milk.

All products that this requirement applies to must be approved by the Local Authorities (see Section 91 for further information about where to find a full list of approved products).

Record keeping requirements Section 35:

	Requirement	Paragraph	Where are records kept?
Invoices or delivery notes	YES	353	

36 Cowsheds and other buildings

361 New buildings and major renovations of existing buildings for cattle must be in the form of loose-housing systems.
(Danish Law on Housing of Dairy Cattle ("Lov om hold af malkekvæg")

According to the Danish Law on Housing of Dairy Cattle and their offspring ("*Lov om hold af malkekvæg*"), it is not allowed to build or expand tie-up systems after 1st July 2010. Tie-up systems must not be used after 1st July 2027.

362 Stalls must be kept clean and animals must be provided with soft and dry bedding.
(Danish Law on Housing of Dairy Cattle ("Lov om hold af malkekvæg"), Council Directive protection of calves, Industry requirement, Arla Foods requirement)

By soft it is meant that the material the bedding is made of can adapt to the shape of the animal to some extent. Beddings must also be of good hygienic quality.

Beddings must be kept dry and free from manure and feed leftovers.

All calves under four weeks of age must be provided with bedding so that the bed is soft. Calves over four weeks of age should also be provided with bedding so that the bed is soft.

363 Cowsheds must be fitted with calving pens when constructing new buildings or undertaking renovations.
(Arla Foods requirement)

All new or converted cowsheds must be fitted with an isolated area for the housing of calving animals. Sick and calving animals are to be kept segregated.

364 Calves under six months of age must not be tied up.
(The Danish Animal Protection Act ("Dyreværnsloven"))

365 Cowsheds and other buildings involved in milk production activities as well as grazing fields and pathways must be kept in such condition as to ensure a satisfactory performance of milking operations and an adequate hygiene and animal health and welfare.
(Food Hygiene Regulations, The Danish Animal Protection Act ("Dyreværnsloven"))

The risk of direct or indirect harm to animals by the surrounding environment must be minimised. Floors (including stall floors) must be smooth and non-slippery. Sheds must be adequately ventilated and provide suitable climatic conditions for the livestock, which includes windows or other openings for daylight.

Cattle pathways that are in a bad condition may cause hoof injuries or other pathological conditions. These may also increase the risk of spores in milk from dirty udders.

366 The milk collection area must be kept clean and it must be located away from cattle pathways in and out the cowshed.
(Arla Foods requirement)

The milk collection area is the area where the tank truck is stationed while the milk is being collected, as well as the room needed for the haulier to operate, which includes the area around the tank truck and up to the milk storage room. The floor by the collection area must be made of concrete, asphalt, washed gravel/shingle or similar and must be kept clean and free from mud and manure.

The suction hose must be kept clean, in order to avoid the risk of disease spreading between farms.

367 Measures must be in place to minimize the entrance of insects, rodents and other pests into the milk storage room. If the presence of pests has been verified, pest control measures must be taken.
(Food Hygiene Regulations, The Danish Environment Protection Act ("Miljøbeskyttelsesloven"))

If poisons are used as a pest control method, it is important to make sure that they are handled in such a way that there is no risk of contamination of animal feed or for animals or humans to be harmed. When pest control measures are in place, these must be recorded. Records must be kept for at least 5 years.

368 Poultry and pigs must be kept separately from housing/production facilities covered by Arlagården.
(Arla Foods requirement)

Record keeping requirements Section 36:

	Requirement	Paragraph	Where are records kept?
Agreement for pest control services (when necessary)	(YES)	367	

37 Disease transmission control

371 All cattle must be tagged and registered.
(Danish Law on Diseases and Infections in Animals ("Lov om sygdomme og infektioner hos dyr"))

Cattle must be tagged according to EU and national legislation.

372 Members of the staff, especially those involved in milking and milk handling operations, must maintain a high level of personal hygiene at all times, including wearing clean clothes and washing hands as needed.
(Food Hygiene Regulations)

The purpose of this requirement is to reduce the risk of contamination of the milk from the milker, minimizing therefore the risk of transmission of disease to humans or animals.

There must be facilities for washing hands available in or in the immediate vicinity of the milk storage room, as well as in the area where the cows are milked.

373 Persons who may pose a risk of disease transmission to humans or animals (either directly or via the milk) must avoid taking part in milking or milk handling activities.
(Food Hygiene Regulations, Arla Foods requirement)

In order to prevent disease transmission, it is recommended that the milker wears coating gloves (e.g. thin disposable gloves). If the milker has wounds in his or her hands, the use of disposable gloves is compulsory. It is also important to bear in mind that those persons who come from or have been travelling to certain countries may also pose a risk of transmission to other people or animals.

374 A 48-hour quarantine period must be respected between visiting farms located in different countries. This applies to both visitors and farm staff.
(Arla Foods recommendation)

Clothing and footwear should be washed and disinfected after visiting farms abroad.

375 Special protective clothing (including Wellington boots) should be available at the farm in the event of any business-related visits.
(Arla Foods recommendation)

It is recommended that a sufficient amount of clean protective clothing and boots is available for business-related visits.

Visits by kindergartens and schools, open house events, etc. pose a lower risk than those visitors who have recently been in contact with cloven-hoofed animals.

376 When constructing new buildings or undertaking renovations, the cowshed should be fitted with an entrance without relation to the milk storage room. This entrance should be fitted with washing and disinfection facilities.
(Arla Foods requirement)

377 Hauliers should avoid entering the cowshed when picking up livestock from the farm.
(Arla Foods recommendation)

In order to reduce the risk of disease transmission, hauliers should avoid entering the cowshed when picking up livestock. If this cannot be avoided, protective clothing should be worn and Wellington boots should be washed between farms.

378 When constructing new buildings or undertaking renovations, livestock collection/delivery areas should be established.
(Arla Foods requirement)

Designated livestock collection/delivery areas (such as, for instance, designated stalls or boxes) must ensure that the haulier does not come into contact with the rest of the livestock. Guiding references can be found under Section 91.

379 The dairy farm must participate in existing national disease eradication schemes.
(Danish Law on Housing of Dairy Cattle ("Lov om hold af dyr"), Arla Foods recommendation)

Denmark is officially free of leucosis, tuberculosis, brucellosis, foot and mouth disease, infectious bovine rhinotracheitis (IBR)/infectious pustular vulvovaginitis (IPV) as well as bovine viral diarrhea (BVD).

If infection with Mycobacterium paratuberculosis (MAP) is suspected, it is recommended to register the farm in the Danish Agricultural Advisory Service's (*"SEGES"*) disease eradication programme.

It is recommended that dairy farms with salmonella level 2 follow an eradication programme for Salmonella Dublin.

3710 When livestock is imported, recommendations from the Danish Agricultural Advisory Service (*"SEGES"*) must be followed.
(Arla Foods recommendation)

Imported animals from outside EEC are inspected at the border to EEC. Inside the EEC there is no inspection at borders between member countries. The inspection is carried out at arrival to the final destination.

3711 Legal requirements regarding import of semen and embryos must be complied with.
(Danish Law on Housing of Dairy Cattle ("Lov om hold af dyr"))

Handling of embryos may only be carried out by either authorised veterinarians or inseminators trained by these, and they must provide evidence of their activities if requested by the Local Authorities.

In order to avoid disease transmission, imported semen must not be sold to or distributed among livestock owners. Private import of semen may only occur from EU approved bovine semen collection centres and only provided that the importer is registered by the Local Authorities.

3712 Fallen and euthanized livestock must be kept covered or screened off until the time of collection for further destruction.
(Food Hygiene Regulations, Arla Foods requirement)

Dead animals that are kept uncovered and exposed, for instance by a public road may cause an unpleasant impression on outsiders and create therefore a bad image for Arla Foods.

Both fallen stock and collection vehicles represent a significant risk of disease transmission. Collection areas should therefore be placed away from the rest of the livestock, areas designated for the handling of animal feed, milk storage rooms and milk collection areas. For further information see references in Section 91.

3713 Deleted.

Record keeping requirements Section 37:

	Requirement	Paragraph	Where are records kept?
Livestock register database or livestock register log	YES	371	

38 Staff

381 Members of the staff must be well instructed in the different activities and tasks that they are involved in. They must also be fully aware of any possible risks to human or animal health, or of contamination of the raw milk.
(Food Hygiene Regulations)

Some of the main areas that the staff must be instructed in are:

- Animal health and welfare.
- Feed and milk hygiene.
- Use of veterinary medicinal products.
- Waste management.
- Use of chemicals.

All instructions must be written in a language that members of the staff are able to understand.

4. Environment

We endeavour to make use of the dairy farm's natural resources in the best possible way, so that the exploitation of nutrients in the farm production cycle is always optimized. We know the origin of the means of production used on the soil, and we use insecticides and pesticides in a responsible manner.

41 **Farming activities should take into consideration the biodiversity and habitats that these may affect.**
(Arla Foods recommendation)

42 **The use of nitrogen (N) must be documented.**
(The Danish Environment Protection Act ("Miljøbeskyttelsesloven"))

Fertilizer invoices are used to record the usage of nitrogen (N) on the farm.

43 **The use of phosphorus (P) and potassium (K) should be documented.**
(Arla Foods recommendation)

It is recommended that these nutrients are exploited optimally within the farm production cycle. The elaboration of a fertilizing schedule greatly facilitates the appropriate use of these nutrients.

44 **The balance between nitrogen (N) and phosphorus (P) should be maintained.**
(Arla Foods recommendation)

It is recommended to make sure that these nutrients remain in the farm production cycle. This can be achieved by the elaboration of a fertilization schedule.

45 **Sewage sludge must not be spread on fields that are used in farm production activities.**
(Industry requirement, Arla Foods requirement)

It is not permitted to fertilize fields with sewage sludge from municipal sewage treatment plants or private domestic sewage treatment plants, as this may pose a risk of introduction of unwanted substances into the farm production cycle.

Arla Foods has approved the document "Policy on the use of sludge and waste products on fields" ("*Politik for anvendelse af slam og restprodukter på marker*") (see reference in Section 91).

Brief definitions

Sewage sludge

Organic fertilizer originated from human activities. Sewage sludge derives from municipal sewage plants, where the sludge is subjected to mechanical, biological or chemical treatment.

Catering waste

According to the by-product regulations, catering waste is all waste food originated in restaurants, catering facilities and kitchens, including central kitchens and organic household waste. Catering waste can be used in biogas plants or processed into fertilizers and soil improvers.

Animal by-products and derivative products

Traceable and risk-assessed products derived from the whole or parts of an animal, or from animal products that are not intended for consumption.

Other residual products and by-products

Traceable and risk-assessed products derived from foodstuffs or feedstuff companies and which are not intended for consumption.

46 Special rules must be followed with regards to slurry and spreading of composted waste, etc.

(The Danish Environment Protection Act ("Miljøbeskyttelsesloven"))

Arla Foods' Board of Representatives has approved the "Policy on the use of sludge and waste products in fields" ("*Politik for anvendelse af slam og restprodukter på marker*").

The spreading on fields of sewage sludge from municipal sewage treatment plants or private domestic sewage treatment plants is banned. However, a phasing-out period has been established following an agreement with the Association of Biogas Plants, allowing farms that have been affiliated to biogas plants from before 1st October 2003 be temporarily subject to especial requirements.

For matters such as waste products, by-products, transitional schemes, etc., refer to industry policies (see references in Section 91).

47 Coarse fodders grown in fields in which sewage sludge has been spread may not be purchased.

(Industry requirement, Arla Foods requirement)

This requirement applies to crops that are harvested fresh (turgid), such as beets, whole crops (silages), grass and hay. It also applies to heat-treated forages, such as forage pellets.

Suppliers of coarse fodder must certify that their crops have not been grown in fields where sewage sludge has been spread (see paragraph (45)). This also applies to coarse fodder that has been purchased through several intermediaries.

48 **If sewage sludge has been spread on fields, no coarse fodder may be grown in these for at least three years from the time of spreading.**
(Industry requirement, Arla Foods requirement)

Even though industry policies state that this period must be at least 1 year, Arla Foods requires at least 3 years from the time of spreading to the use of these fields for the growing of coarse fodder.

49 **All chemicals must be used safely.**
(The Danish Environmental Law ("Miljøloven"), Food Hygiene Regulations)

Chemicals include cleaning agents, disinfectants, teat sprays/dips, crop protection agents and insect poisons.

Manufacturer's instructions for the use of chemicals must be followed at all times, so that they do not pose a risk of contamination of feed or milk, or of harm to humans or animals. Material safety data sheets (MSDSs) must be easily accessible in the event of an accident.

All crop protection agents must be approved. They must also be used in those crops and in those dosages indicated by the manufacturer. However, it is recommended to aim for a low treatment frequency.

Records must be kept at all times, even when the spraying is performed by a contractor.

410 **All chemicals must be stored safely, out of the reach of children and animals, and away from foodstuffs, beverages and fodder.**
(The Danish Environmental Law ("Miljøloven"), Food Hygiene Regulations)

Chemicals must be stored in such a way that they do not pose a risk of contamination of feed or milk, or of harm to humans or animals. They must be stored in their original containers or in clearly labelled containers, so their identification cannot be mistaken.

Crop protection agents must be kept under locked storage. The storage room must be well ventilated and the floor must be whole and with no drainage.

Record keeping requirements Chapter 4:

	Requirement	Paragraph	Where are records kept?
Fertilizer invoices	YES	42 48	
Fertilization schedule	YES	45	
Invoices or delivery notes	YES	47	
Agreement for the purchase of feed		47	
Safety data sheets. Invoices or delivery notes	YES	49	

5. Contingency plans and compensations

Good animal welfare and milk quality must be ensured at all times. This also applies in the event that members of the staff suffer from accidents or diseases or when unexpected accidents occur.
In order to reduce the risk of accidents and their consequences, it is highly recommended to have a description of the operation procedures in place at all times. An easily accessible phone list can also be an important tool when seeking the appropriate assistance in each situation.

51 Contingency plans

It is recommended to have a description of the measures to be taken in the event of, at least, the following incidents:

- Inadequate cooling of milk (paragraph (511)).
- Residues of veterinary medicinal products and other sources of contamination of milk (paragraph (512)).
- Power outage (paragraph (513)).
- Contamination of animal feed or water (paragraph (514)).
- Disease outbreak in animals and humans (paragraph (515)).

It is also recommended to develop a contingency plan in case of fire or other natural disasters, such as hurricanes or floods.

Templates are available for development of contingency plans.

511 Inadequate cooling of milk.

Milk for which the cooling chain has been interrupted may not be supplied to the dairy (see collection requirements in Section 63). In the unfortunate event this happens, Member Services can be contacted in order to discuss the destination of the milk. The red STOP sign must be displayed at all times, and the discarded milk must be disposed of through the slurry outlet.

(See industry codes).

512 Residues of veterinary medicinal products and other sources of contamination of milk.

Milk with residues of veterinary medicinal products or other undesirable substances may not be supplied to the dairy. Member Services must always be contacted in case of suspicion of contamination from such substances. The red STOP sign must be always displayed (see also paragraph (628)).

In doubtful cases, a milk sample can be analysed after agreement with Member Services. Even when no antibiotics are detected, milk quality is still the farmer´s responsibility if delivered to the dairy.

Contaminated milk may not be delivered to the dairy. Discarded milk must be disposed through the slurry outlet.
(See industry codes).

513 Power outage.

Animals must have access to feed and water at all times and it must be possible to milk them when necessary, also in the event of a power outage. According to legislation, livestock owners must be able to provide evidence on how they ensure this (see also paragraph (313)).

514 Contamination of animal feed or water.

If contamination of feed or water is suspected, it must not be given to the livestock. Regarding air pollution instructions from the Local Authorities must be followed.

A dairy feed advisor and/or veterinarian may be contacted for further advice and assistance.

515 Disease outbreak in animals and humans.

Certain diseases are transmissible from animals to humans (zoonoses) and vice versa. In the event of a zoonosis outbreak, a veterinarian must be consulted and an action plan describing the measures to be taken in order to minimize the risk of disease transmission among members of the staff must be implemented.

Similar measures must be taken in order to minimize the risk of disease transmission to animals or microbial contamination of milk from farm workers.

52 Compensations

521 Compensations for milk that is not collected.

Arla Foods grants compensation in those instances where the milk cannot be collected due to reasons that are outside the farmer’s control and cannot be remedied by this.

6. Milk collection

This chapter describes those requirements applicable to milk collection conditions and procedures as well as the administrative arrangements associated to them.

61 Newly constructed buildings and extensive renovations

611 When undertaking any new construction or extensive renovation that may affect the conditions in which the milk is collected (as described in Chapter 6), Arla Foods' long-term goals become requirements, local conditions permitting.
(Arla Foods requirement)

In order to avoid unnecessary expenses when undertaking new constructions or major renovations on the farm, Arla Foods' long-term goals must be borne in mind already at the planning stage. Member Services must be informed about any intended new construction or major renovation as soon as possible. (For more information, see the document "Layout of milk storage rooms – Guidance" ("*Indretning af mælkerum - Vejledning*").

Arla Foods offers the possibility to reach an agreement for the collection of milk regardless of milking times, which also provides for the grant of a premium. This agreement can be achieved, for instance, by installing a buffer tank. (Contact Member Services for more information).

Arla Foods' long-term goals are:

- Milk hauliers must be able to collect the milk without having to reverse on the road (see also paragraph 621).
- Milk hauliers must be able to collect the milk regardless of milking times (see also paragraph 671).
- Arla Foods must be able to make use of tank trucks with a length of 16,5 metres in all farms (see also paragraph 621).
- The tank outlet valve faces the door leading to the milk collection area (see also paragraph 626).

When undertaking construction or renovation works, paragraph 376 (entrance without relation to the milk storage room. This entrance should be fitted with washing and disinfection facilities) and paragraph 378 (livestock collection/delivery areas should be established) must be followed.

62 Access road, milk collection area and milk storage room

621 Both the access road leading to the farmyard and the milk collection area must be suitable for a fully loaded tank truck. Hauliers must be able to collect the milk all year round without compromising their health and safety, wasting time or jeopardizing the condition of the vehicles.
(Arla Foods requirement, Arla Foods recommendation)

In order to make sure that the tank truck can reach the milk collection area without any risks or inconveniences, there must be a clear width and height of at least 4 metres. The turning area must have a diameter of at least 23 metres in order to allow a 13-metres long tank truck to easily turn around.

With the purpose of minimizing the transportation costs bigger vehicles are used. The haulier must be able to both access and leave the public road without having to reverse. In order to allow tank trucks with a length of 16,5 metres to collect the milk a turning area of at least 26 metres is recommended. Arla Foods must notify the farmer at least 3 months before starting to make use of these long vehicles.

622 In wintertime, access roads, farmyards and milk collection areas must be free from snow and gravelled as necessary.
(Arla Foods requirement)

Milk hauliers have the responsibility to determine whether the access road is passable or not. If the farmer considers that the access road may not be passable or may be too dangerous for the haulier to drive through it, this must be reported to the transport department or haulier as soon as possible.

623 If the entrance door to the milk storage room is located under an eaves overhang, this must be fitted with a gutter.
(Arla Foods requirement)

This is a contribution to ensure an adequate working environment for the milk haulier to be able to operate quickly and properly.

624 The ceiling of the milk storage room must be high enough to ensure that the bulk tank manhole cover can be opened, so both the milk and the inside of the tank can be easily inspected.
(Arla Foods requirement)

The bulk tank manhole cover must be easy to open, so milk hauliers can check the milk before this is collected. There must also be sufficient light in the milk storage room and the bulk tank must be placed in such a way so the milk can be easily inspected.

In establishments where renovations have been undertaken in the milk storage room after 1st January 2008, the distance between the bulk tank and the ceiling must be at least 0.6 m.

Milk hauliers must be able to easily and safely access the bulk tank manhole in order to take milk samples and check the cleanliness of the tank internal surface. A ladder or staircase must be present for this purpose.

Special requirements apply for outdoor bulk tanks.

625 The bulk tank discharge valve must be easily reachable using a 6 metres long suction hose.
(Arla Foods requirement)

The suction hose is approximately 6 metres long. Longer suction hoses reduce the pumping performance, slowing down the emptying of the tank and increasing the risk of mechanical strain of the milk.

626 Milk hauliers must be able to easily connect the suction hose to the bulk tank. They must also have access to hand washing facilities in the proximity of the tank.
(Arla Foods requirement, Arla Foods recommendation)

The haulier must have clear access to the bulk tank so he or she can operate quickly and unhindered. Arla Foods requires at least 0.9 metres of clear working space around the discharge valve, although it is recommended that this is 1.2 metres or more.

When undertaking construction or renovation works in the milk storage room, it is recommended that these allow the tank outlet valve to face the door leading to the milk collection area.
Hauliers must be able to wash their hands in the proximity of the bulk tank.

627 The light switch and a place for dialogue/communication must be placed in a suitable location at the entrance from the collection area to the milk storage room. The lights can alternatively be switched on with a movement sensor.
(The Danish Working Environment Act ("Arbejdsmiljøloven"), Arla Foods requirement)

A suitable place for the dialogue/communication between the farmer and the haulier must be located near the entrance to the milk storage room, where for instance instructions regarding tank alarms or barcode labels for milk samples can be available.

628 In those situations where the milk haulier is not supposed to collect the milk, the sign "STOP – milk must not be collected" must be clearly displayed.
(Arla Foods requirement)

This requirement has the purpose to avoid the collection of defective milk.

The STOP sign must be placed on the bulk tank and it must be clearly noticeable to the haulier. This sign is to be used, for instance, if antibiotic residues in the milk are suspected, after a cooling failure or following detention due to high SCC/TBC in the milk or unacceptable audit outcome. If in doubt, the STOP sign must be displayed until it has been decided that the milk can be collected. STOP signs are provided by Member Services upon request.

Arla Foods recommends contacting the transport department or, when outside office hours, to ring directly to the haulier.

63 Bulk tanks – milk refrigeration and storage

Definitions

Bulk tank (milk cooling tank)
An insulated tank, with agitator and cooling system. It can be either type "standing" or "lying".

Buffer tank
A milk cooling tank that allows the storage of milk, while ensuring that the collection can take place regardless of milking times. Buffer tanks are placed between the milking system and the main bulk tank. They must be fitted with a cooling or pre-cooling system.

The buffer tank should be placed in such a way so that the milk does not need to be actively pumped into the bulk tank. However, should this be necessary, an approved pumping system must be used and the process must be carried out carefully, so that the risk of negative alterations in the quality of the milk is minimised.

The use of buffer tanks must also allow the inspection of the milk before this is pumped into the main bulk tank.

Outdoor bulk tank
A bulk tank that is approved to be placed outdoors (i.e. outside the milk storage room) and with all pipe connections (including the outlet pipe) leading into the milk storage room.

Extra tank
An additional bulk tank that is located next to the main tank.

631 All bulk tanks must comply with the specifications described in the document "Technical requirements for milk cooling tanks" (*"Tekniske krav til mælkekøletanke"*).
(Arla Foods requirement)

This document describes the technical requirements applicable to bulk tanks, regardless of whether these are placed indoors or outdoors. It can be requested from Member Service.

632 The refrigeration of the milk must begin within 45 minutes from the first milking after the last collection.
(Arla Foods requirement)

This applies to all types of bulk tanks, including buffer tanks.

In order to ensure a satisfactory shelf life, it is important that the cooling down of the milk starts as soon as possible. However, it is also important to make sure that there is enough milk in the tank before this process begins, in order to avoid any potential whipping of air into the milk (agitator) and/or that the first milk freezes.

633 The milk must be cooled down to a maximum of 4 °C within 2 hours after the milking operations have concluded and must be kept refrigerated until the moment of collection.
(Food Hygiene Regulations, Industry requirement, Arla Foods requirement)

When the milk is collected right after milking, this must not exceed 12 °C in every-other-day collections or 20 °C in daily collections.

If the milk is refrigerated during the milking, this must be below 10 °C once the milking operations have concluded. A temperature of above 10 °C indicates that the refrigeration system may be inadequate.

In AMS, the milk may exceed 4 °C for a maximum of two consecutive hours between two successive collections.

See Chapter 5 for instructions on how to handle the milk in the event of a failure in the cooling system.
Tank truck receipts or similar must be kept for one week.
(See industry codes).

634 The milk must be stirred throughout the cooling down process, as well as from the last milking until the time of collection.
(Arla Foods requirement)

The agitator must be active for at least two minutes after every fifteen minutes period, in order to ensure the best possible cooling performance as well as to make sure that milk samples are most representative. Larger tanks may require further agitation (contact the supplier if in doubt).

635 If the bulk tank is fitted with a detachable inlet or pump pipe, it must be detached when not in use.
(Arla Foods requirement)

If the inlet or pump pipe is permanently attached to the tank, the risk of washing water coming into the tank may increase and the proper cleaning of the pipe may be compromised, both leading to damaged milk.

636 The bulk tank must have a capacity of at least the maximum amount of milk expected to be produced between two consecutive collections, usually every other day.
(Arla Foods requirement, Arla Foods recommendation)

For suppliers with more than one truckload of milk per pick up point[1] every other day the required bulk tank capacity is limited to one truckload (DK: 35.000 L.).

In certain occasions, the milk can be collected daily, in which case smaller tanks are accepted.
Since the collection may be delayed, it is recommended that bulk tanks are able to store milk from an extra milking or an equivalent volume in AMS.

[1]Pickup Point: A physical location, usually the farm, where the presence of a refrigerated milk tank allows the collection of milk for transport. If there is more than one tank on the farm it will still be the same pickup point as long as the tanker does not have to move to collect the milk.

637 The bulk tank must be fitted with an accurate temperature gauge, which can be read in the milk storage room.
(Arla Foods requirement)

Milk hauliers must check the temperature of the milk upon arrival (before collection). If the bulk tank is fitted with an alarm and this shows that critical temperatures have been registered, the haulier must follow Arla Foods' instructions, regardless of what the temperature at the time of collection is.

Record keeping requirements Section 63:

	Requirement	Paragraph	Where are records kept?
Tank truck receipts	YES	633	
Frequent self-monitoring of the refrigeration cycle		633	

64 Buffer and extra tanks

641 Buffer and extra tanks must meet the specifications described in the document "Technical requirements for milk cooling tanks" (*"Tekniske krav til mælkekøletanke"*).
(Arla Foods requirement)

This document describes the technical requirements applicable to buffer and extra tanks and can be requested from Member Services.

642 When making use of buffer tanks, the milk in the bulk tank may never be older than the number of hours in the collection interval agreed with Arla Foods.
(Arla Foods requirement)

If the tank truck is delayed, the buffer tank is used for the storage of milk produced after the usual time of collection in order to avoid variations in the amount of milk delivered per collection.

643 Those specifications required for bulk tanks are also applicable to extra tanks.
(Arla Foods requirement)

When making use of an extra tank, the milk is collected from two tanks. When this is the case, it must be possible to collect milk from both tanks without having to move the tank truck. Bulk tanks cannot be interconnected.

An additional tank can be used as buffer tank, but the collection only occurs from one. No allowances for collection regardless of milking times will be granted if the buffer tank is also used as an extra tank. Extra tanks may only be used after agreement with Member Services.

644 A sign must be displayed on the extra tank to indicate that this is approved for the collection of milk.
(Arla Foods requirement)

This sign informs the hauliers of whether they can collect the milk or not. These signs are provided by Member Services on request.

65 Collection weight and washing

651 The minimum collection weight is 50 kg.
(Arla Foods requirement)

Arla Foods has set up a minimum collection weight of 50 kg, as smaller quantities increase the risk of both measurement errors and quality issues, such as whipping of air (agitator) and/or freezing.

Before a temporary cease of collection due to insufficient milk, Member Services must ensure that this is not a one-off incident and that the weight will not reach at least 50 kg within the following few days.

652 Significant variations in the weight of milk expected to be collected (as compared to the previous collection) must be notified to the haulier.
(Arla Foods requirement)

The weight of milk to be collected determines how the haulier should set up the automatic sampling system. A variation of ± 20 % (as compared to the previous collection) is considered significant.

653 Milk hauliers must be able to start the bulk tank automatic washing system, for which instructions must be available.
(Arla Foods requirement)

The haulier must be able to start the tank washing system if desired and spending only a few seconds on this operation. Instructions on how to do so must be clearly visible in the proximities of the tank. Arla Foods cannot be held responsible for any damage to the bulk tank, related equipment or the milk itself as a consequence of inappropriate tank washing operations.

66 Collection frequency and milk age

Every other day collection is the standard in Arla Foods. If the farmer needs everyday collection it will be charged. There will be no charge if Arla Foods request every day collection e.g. due to a special contract or if the farmer produces more milk than one truckload every other day.

661 Arla Foods has the right to collect milk from selected dairy farmers on a daily basis.
(Arla Foods requirement)

Specific market, transport or production conditions may require daily collections.

In the event that Arla Foods may wish to alter the collection frequency from daily to every other day, the farmer has 4 months to seek for a suitable tank capacity.

If Arla chooses to collect milk every day the farmer will not be charged.

662 **Arla Foods has the right to collect only part of the milk stored in the bulk tank at a time.**
(Arla Foods requirement)

This requirement applies regardless of the milking system (conventional or AMS).
In order to fill the tank truck completely and thus optimize collection operations, Arla Foods has the right to collect the milk with shorter intervals than agreed. Daily collections performed in every-other-day collection agreements are also considered as partial.

Bulk tanks must be washed every time they are emptied.

663 **When the milk is collected every other day, this must not be older than 48 hours.**
(Arla Foods requirement)

In special circumstances, as, for instance, in case of heavy traffic, the milk may be stored in the bulk tank for up to 72 hours after the first milking.

664 **Dairy farmers may order extra collections over an extended period of time, subject to availability of hauling resources and at the farmer's own expense.**

Daily collections can help avoid the necessity for the farmer to purchase a larger bulk tank. However, these are subject to availability of hauling resources.

If the farmer needs everyday collection it will be charged. Farmers are entitled to one annual extra collection, free of charge.

Daily collections must be requested from Member Services as far in advance as possible, so that the probability of having the necessary hauling resources available within the desired first daily collection is higher.

665 **Dairy farmers may order extra collections over a limited period of time, subject to availability of hauling resources and at the farmer's own expense.**

Extra collections can be arranged in the event of, for instance, replacement of bulk tanks or reparation of refrigeration systems.

If the farmer needs everyday collection it will be charged.

Farmers are entitled to one annual extra collection, free of charge.

666 **Deleted.**

667 **Deleted.**

67 Time of collection

671 Milk collection may take place at any time of the day.
(Arla Foods requirement)

One of Arla Foods' long-term goals is that the collection can be done regardless of the milking times. This is currently a requirement when undertaking new constructions or major renovations at the farm (see paragraphs (611) and (674)).

672 Collections between 04:30 and 07:00, and between 15:00 and 18:00 can only take place after agreement with the farmer.

The more individual agreements between Arla Foods and the farmers that are reached, the better Arla Foods can optimise the use of resources, minimising therefore the hauling fees.

In those circumstances where the farmer wishes to decide when the milk should or should not be collected, it is recommended the establishment of an agreement on collection regardless of milking times. Information about this kind of agreements can be obtained from Member Services.

673 Milk must not be transferred into the cooling tank while this is being pumped into the tank truck.
(Arla Foods requirement)

Milking operations must be interrupted if the milk is being transferred into the bulk tank at the time of collection. This is to ensure the representativeness of the milk samples.

It is the farmer's responsibility to make sure that the bulk tank is properly washed after this is emptied and before milking operations can continue.

674 A special agreement can be reached with Arla Foods in those cases where the milk can be collected regardless of milking times.

This agreement entitles the farmer to receive a compensation for the additional costs that this practice may incur.

A number of conditions must be met before this agreement can be reached:

- Milk can be collected anytime and without undue delay.
- Milk must not be transferred to the bulk tank while this is pumped into the tank truck.
- The haulier must within one minute be able to stop the pumping of milk from the milking equipment or the buffer tank by pressing a button, switching a valve or by moving a hose. A clear instruction to the haulier must be in the milk storage room.

Information regarding the above can be provided by Member Services upon request.

7. Milk composition and quality

The dairy farmer is responsible for the milk that is delivered to Arla Foods. The haulier has the right to reject the collection of the milk due to quality issues.

71 Sampling procedures

Samples are taken from each load at the time of collection. Eurofins Steins Laboratories arranges the dates for the analysis of quality parameters that are not measured every collection.

All samples are kept refrigerated for at least three days in order to facilitate any further follow-ups that may be considered necessary.

72 Analyses and intervals

Fats, proteins, somaticsomatic cell count (SCC), concentration of urea and freezing point are analysed every collection. Total bacterial count (TBC) and antibiotics are analysed at a lower frequency.
Premiums and deductions for somatic cell count (SCC) and total bacterial count (TBC) are based on a geometric mean per calendar month.
(See how premiums and reductions are calculated in table Section 73).

Extra analyses beyond the standard analyses can be performed, and these can also form a basis for settlement.

Service analyses ordered by members do not affect the settlement.
Urea is analysed for information and does not affect the settlement.

73 Overview of parameters and quality payment

Parameter	Frequency	Basis for settlement/sanctions/information	Limits	Premium and deduction, % of raw milk value
Fat and protein	Each collection	Single analyses		
Somatic cell count (SCC) [1] 1000 cells/ml	Each collection	Geometric mean per month	0 - 200	+ 2 %
			201 - 300	From + 2 % to 0 %, stepwise per 1000 cells
			301 - 400	From 0 % to - 5 %, stepwise per 1000 cells
			401 -	- 10 %
Total bacterial count (TBC) [1] 1000 bacteria/ml (IBC)	3-5 times a month	Geometric mean per month	0 - 60	+ 2 %
			61 - 120	+ 1
			121 - 240	0
			241 - 480	- 5 %
			481 -	- 10 %
Antibiotics	5 times a month	Single analyses	Detected, not detected [2,3]	See below [2,3]
Smell, taste and visibly abnormal milk	(See Section 754)	Single analyses	Negative/Note [3]	
Freezing point	Each collection	Informative analyses	Negative/Note [3]	
Spores	(See Section 761)	Informative analyses		
Urea	Each collection	Informative analyses		

[1] Follow-up also on EU legislation on geometric mean (see Section 841).

[2] The first time presence of antibiotics in milk leads to a rolling 12 month's deduction equivalent to 125% of the contaminated supply. A second occurrence within a rolling 12 month's period results in a deduction equivalent to 150% of the contaminated supply and a fine of 400 Euro. A third and subsequent occurrences results in a deduction equivalent to 200% of the contaminated supply and a fine of 400 Euro.

[3] If deviant milk leads to milk being discarded, the farmer is responsible for the costs (see Section 79).

74 Fat and protein

In general, one analysis for fat and protein is carried out per collection day. The results of these analyses are used as the basis for the calculation of the raw milk value.

75 Quality parameters

751 Somatic cell count (SCC).

One routine analysis is undertaken per collection.

Premiums and deductions are calculated based on the geometric mean per calendar month. The geometric mean will be calculated per calendar month from the available results. If an analysis result is missing for a whole month, the result from the previous month is used.

752 Total bacterial count (TBC).

3-5 ordinary analyses per month.

Premiums and deductions are calculated based on the geometric mean per calendar month. The geometric mean will be calculated per calendar month from the available results. If an analysis result is missing for a whole month, the result from the previous month is used.

753 Antibiotics.

5 ordinary analyses per month. In addition, samples from all tankers are analysed. If any of these analyses show the presence of antibiotics, samples are taken from all loads that have entered the tank. The outcome of these analyses are the basis for the settlement.

In the event that antibiotics are detected, a follow-up analysis is undertaken at the next collection. The outcome of this analysis is the basis for the settlement.

If antibiotics are detected, the farmer receives a deduction penalty equivalent to 125% of the contaminated supply. If antibiotics are detected again within a rolling 12-month period, the deduction penalty is equivalent to 150% of the contaminated supply and 400 Euro fine. A third and subsequent positives for antibiotics within a rolling 12-month period results in a deduction penalty equivalent to 200% of the contaminated supply and 400 Euro fine. Every time a farmer has a positive result for antibiotics, the farmer will have a visit from the advisory service.

If the farm's milk causes the discarding of a tanker load, the farmer must reimburse Arla Foods for the occurred costs (see Section 79).
When the concentration of antibiotics in milk exceeds the limits set by the European Union, the Local Authorities must be notified (cross compliance). Eurofins Steins Laboratories is responsible for this procedure.

754 Smell, taste and visibly abnormal milk.

The milk contained in every tank truck is checked for smell, taste and visibly abnormal milk by the dairy. In the event that this check gives an unacceptable result, all samples are double-analysed by Eurofins Steins Laboratories.

Farmers with problems regarding smell, taste and visibly abnormal milk are offered advisory services paid by Arla Foods. If the problem continues to exist and the farmer does not take necessary actions, advisory services paid by the farmer may be charged.

If the farm's milk causes the discarding of a tanker load, the farmer must reimburse Arla Foods for the occurred costs (see Section 79).

755 Freezing point.

The freezing point of the milk is analysed every collection and is not a basis for settlement. The normal freezing point of the milk varies from -0.515 °C to - 0.545 °C. A freezing point outside this range indicates that the milk is likely to have an abnormal composition and can therefore be used as an indicator of potential irregularities during the production process or inappropriate milk handling practices, which should be investigated and addressed.

If water added to the milk causes the discarding of a tanker load, the farmer must reimburse Arla Foods for the occurred costs (see Section 79).

76 Other analyses

761 Spores.

The concentration of spores is checked by screening. In regions with high values, analyses of milk of single farms can be conducted. Advisory services are offered to farmers with spores problems, paid by Arla Foods. If the problem continues to exist and the farmer does not take necessary actions, advisory services paid by the farmer may be charged.

762 Urea.

Urea analyses are undertaken every collection.

763 Analyses in exceptional circumstances.

In those instances where there is a risk of contamination of the milk by foreign substances or microorganisms, special analysis programmes are put in place. In these circumstances, Arla Foods may also decide to modify the current milk collection conditions.

764 Service analyses.

Additional milk quality analyses can be arranged that are not a basis for settlement. They must be ordered in due time before milk collection. Service analyses can be ordered by contacting Member Services. Charges apply for these analyses. Prices are available by contacting Member Services. Service analysis results will be shown at the tank trucks receipts.

77 Reporting of analysis results

771 Arla Farmers.

Analysis results can be found at Arla Farmers. Please contact Member Services if you have any questions.

772 Tank truck receipts.

Analysis results are also shown at the tank truck receipts, which are usually available on the following collection.

78 Advisory services

A number of quality advisors are available in the event of milk quality issues on the farm. Member Services can also contact these if necessary. Arla Foods pays for an annual advisory visit, where SCC, TBC including smell, taste and visibly abnormal milk are analysed. Further visits as well as testing of milking systems and bulk tanks are undertaken on the farmer's own expense. Arla Foods pays for all advisory visits related to antibiotics.

79 Responsibility for discarded milk

If the farm's milk causes the discarding of a tanker load, the farmer must reimburse Arla Foods for the occurred costs. The claim for compensation applies to the milk in the tank truck or and trailers, which are the not owned by the farmer. For the farmer's own milk, no payment will be made in case of discarding caused by taste, smell, visible abnormal milk or freezing point. If the discarding is caused by antibiotics the ordinary deduction applies, which is explained in Section 73. The farmer is also responsible to compensate Arla Foods for the additional costs occurred (such as cleaning, transport and more).

8. Administration of Arlagården

81 Farm auditing

The administration of Arlagården is based on conformance audits performed at the farm. These audits are conducted by qualified auditors, who make use of the Arlagården Audit Manual as a reference tool. This document contains detailed information on how to meet those requirements described in the assurance programme and has been issued to ensure a uniform assessment of conformance as well as a standardized follow-up of non-conformances.

During the audit, observations are recorded on a checklist. A copy of this checklist is enclosed in the letter sent to the farmer to confirm the agreed time for audit.

Once the audit has been completed, an audit report is generated and a copy of this is handed to the farmer. The audit report contains details about the farm, as well as potential non-conformances that may have been identified, deadlines for the completion of the corrective actions for these non-conformances and any necessary following-up. A copy of this report must be kept at the farm, as this might be requested in future audits, either by Arla Foods or by the Local Authorities.

Arlagården audits include the control of those requirements described in the "Industry Code for Self-monitoring in Dairy Farms" ("*Egenkontrol i mælkeleverende besætninger*"), in a so-called joint control. Arla Foods also makes every effort to coordinate Arlagården audits with those performed by the Local Authorities, so these have a minimum adverse impact on the farm and costs can be kept low.

Arla Foods performs the following four types of audits:

- Routine audit (hereinafter called Arlagården audit).
- Start-up audit.
- Follow-up audit.
- Reopening audit.

811 Arlagården audit.

Each farm is audited at least once within a 3-year period.

Arlagården audits are usually agreed with the farmer in advance, although they may also be unannounced.

Besides Arlagården audits, other sources of information such as milk quality analysis results, CHR-register or The Cattle Database may also be used during the following-up process.

812 Outcome of Arlagården audits.

The possible outcomes of an Arlagården audit are: approved, temporarily approved or not approved in relation to Arlagården.

- Approved: when no non-conformances are identified.

- Temporarily approved: when non-conformances are identified. Furthermore:

    - If less than 6 minor non-conformances are identified, approval will be granted upon submission of a written confirmation that the appropriate corrective actions have been taken within the agreed deadlines specified in the audit report.
    - If one or more major non-conformances are identified or recurring difficulties in complying with the quality programme have been noticed, the farmer may exceptionally be temporarily approved with ongoing submission of documentation. Such documentation must ensure a stable and lasting improvement by means of cooperation with farm advisors. Arla Foods will then assess whether these corrective actions are appropriate, taking into account the auditor´s own approach.

    - A follow-up audit will be necessary in the following cases:

        - One or more major non-conformances have been identified.
        - One or more of the non-conformances identified have also been recorded in previous audits (after 1st January 2016). This applies regardless of whether these non-conformances have been rectified since.
        - More than 5 minor non-conformances have been identified.
        - Written confirmation that the appropriate corrective actions have been taken within the agreed deadlines has not been submitted.
        - Temporal approval with ongoing submission of documentation.

- Not approved: when one or more of the following is the case:

    - If one or more major non-conformances related to animal welfare or food safety have been identified.
    - If the assessment of the overall production conditions leads to the suspicion of a high or acute risk of non-conformance with Arlagården.
    - If there have been identified any other major non-conformances that pose a risk for Arla Foods and the collection of milk are identified.

In the event that a farm is not approved, this results in a temporary cease of milk collection. It is the farmer's responsibility to contact Arla Foods and request a re-opening audit, if desired.

Some non-conformances can also lead to penalties (see Section 82).

813 Start-up audit.

Before a new member can start supplying milk to Arla Foods, a start-up audit must be performed at the farm. The new member must contact Member Services at least 14 days prior to the desired first collection day. Start-up audits are carried out under the same principles as in Arlagården audits.

Figure 812 shows schematically the possible outcomes of both Arlagården and start-up audits.

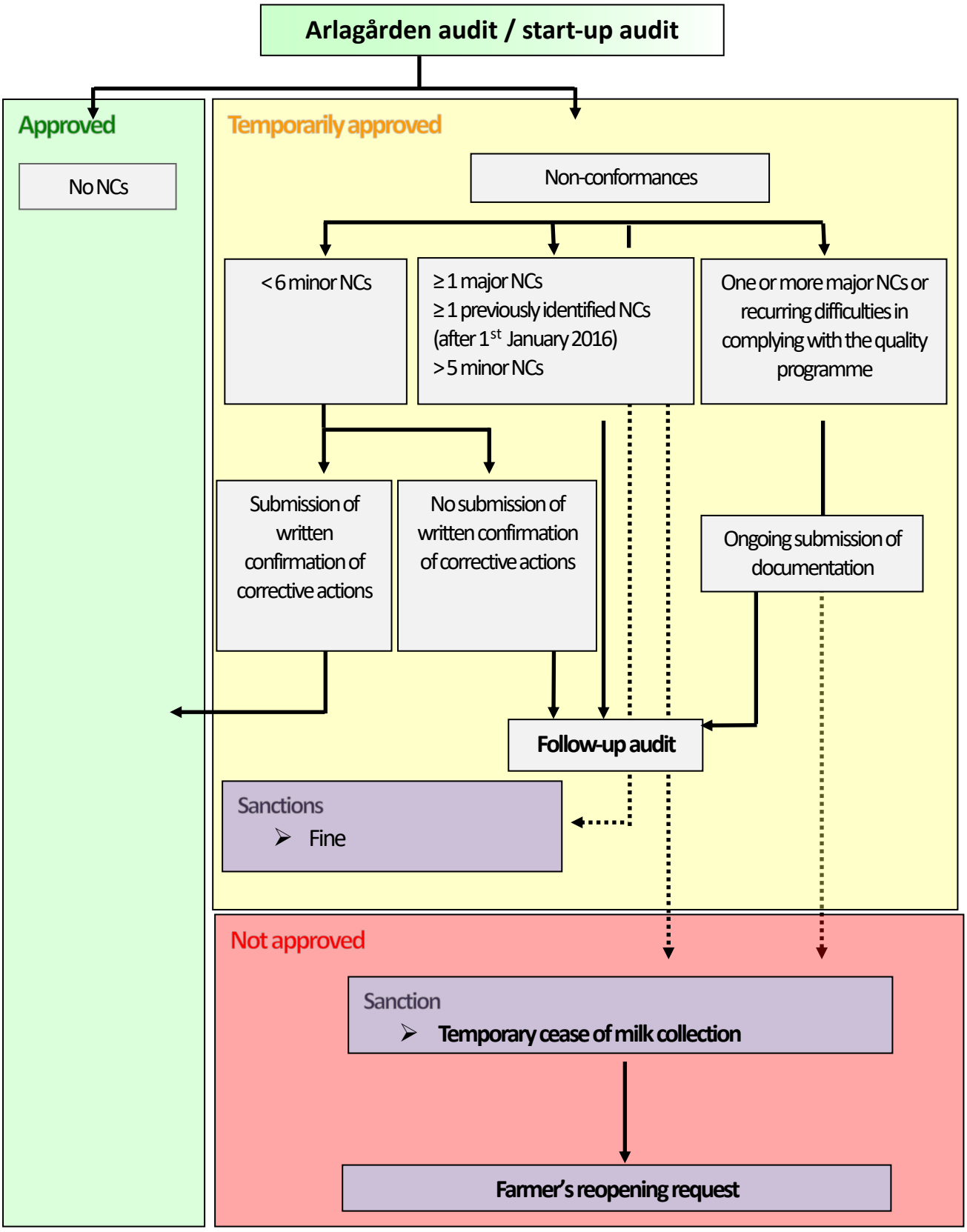

Figure 812. Possible outcomes of Arlagården audits / start-up audits.

814 Follow-up audit.

Follow-up audits are necessary in those 5 situations described in an Arlagården audit. Follow-up audit and an Arlagården audit as an ending of the process with ongoing submission of documentation are performed at the farmer's own expense.
A follow-up audit may cover the entire Arlagården Quality Assurance Programme if seemed necessary, but it may also only be focused in the assessment of those non-conformances that led to it.

The possible outcomes of a follow-up audit are: approved, temporarily approved or not approved in relation to Arlagården.

- Approved: when no non-conformances are identified.
- Temporarily approved:
    - When less than 6 minor non-conformances are identified, of which the causes have been addressed and eliminated. Approval will be granted upon submission of a written confirmation that the appropriate corrective actions have been taken within the agreed deadlines specified in the audit report.
    - If one or more major non-conformances are identified or recurring difficulties in complying with the quality programme have been noticed, the farmer may exceptionally be temporarily approved with ongoing submission of documentation. Such documentation must ensure a stable and lasting improvement by means of cooperation with farm advisors. Arla Foods will then assess whether these corrective actions are appropriate, taking into account the auditor´s own approach. This period ends latest after 6 months, when the farmer will be either approved, or not approved on an Arlagårds audit performed at the farmer's own expense.
- Not approved: when one or more of the following is the case:
    - One or more major non-conformances are identified.
    - One or more of the non-conformances identified have also been recorded in previous audits (after 1st January 2016). This applies regardless of whether these non-conformances have been rectified since.
    - Minor non-conformances have been identified, of which the causes have not been addressed and eliminated through the appropriate corrective measures.
    - Written confirmation that the appropriate corrective actions have been taken within the agreed deadlines has not been submitted.
    - One or more major non-conformances related to animal welfare or food safety have been identified.
    - The assessment of the overall production conditions leads to the suspicion of a high or acute risk of non-conformance with Arlagården.
    - There have been identified other major non-conformances that pose a risk for Arla Foods and the collection of milk.

In the event that a dairy farm becomes not approved, this results in a temporary cease of milk collection. It is the farmer's responsibility to contact Arla Foods and request a re-opening audit, if desired.

Some non-conformances can also lead to penalties (see Section 82).

815 Reopening audit.

Reopening audits are carried out under the same principles as for follow-up audits and are performed at the farmer's own expense.

Figure 814 shows schematically the possible outcomes of both follow-up and reopening audits.

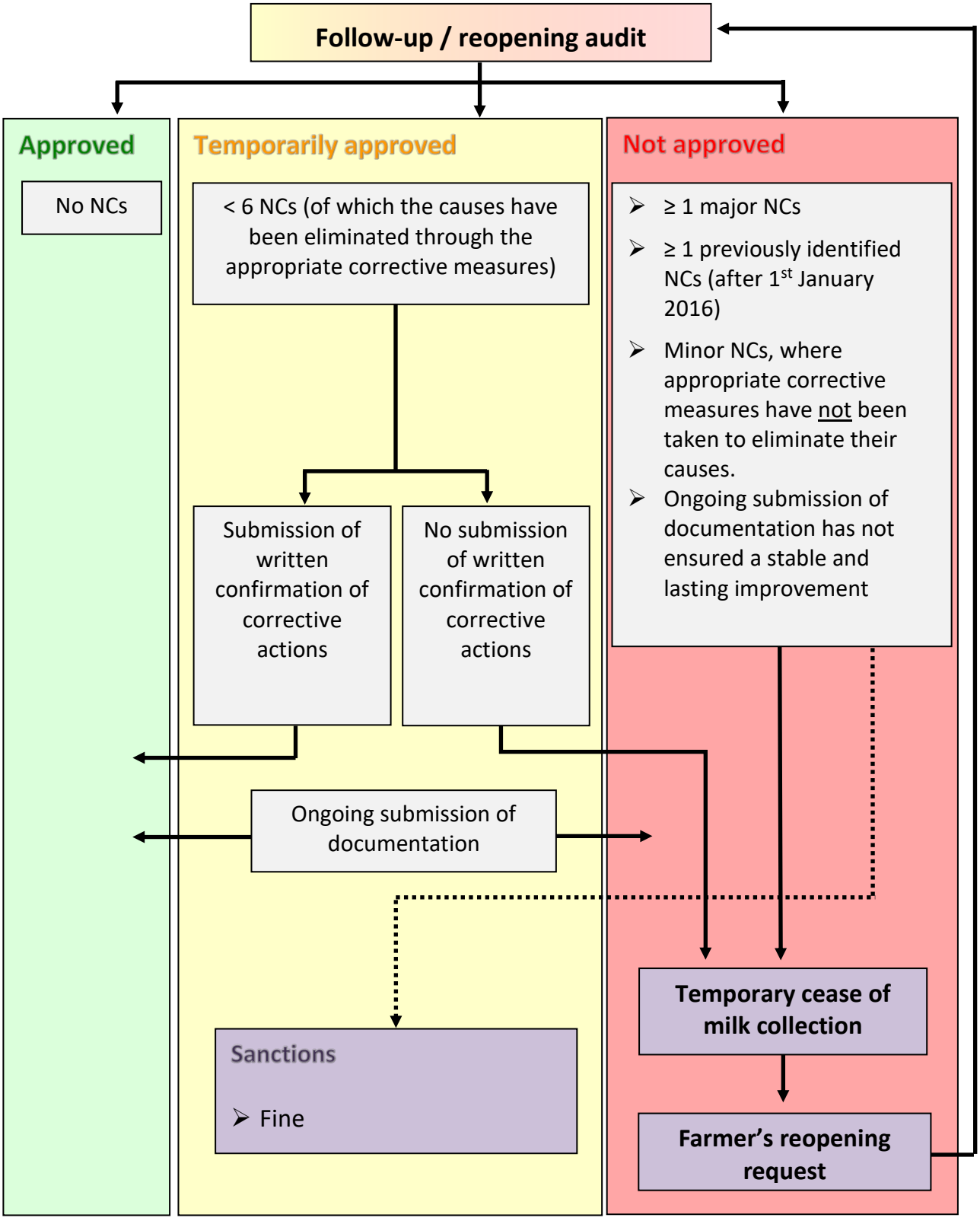

Figure 814. Possible outcomes of follow-up/reopening audits.

82 Sanctions

All milk that is supplied to the dairy must be normal and unadulterated. This must also comply with all the relevant legal requirements from the Local Authorities, as well as with the standards set by Arla Foods' Board, including those requirements set out in Arlagården Quality Assurance Programme. Production conditions at the farm must also ensure conformance with these requirements.

Arla Foods has the right to impose sanctions in those instances where either the milk or the production conditions at the farm do not meet the applicable requirements.

Sanctions are proportional to the nature and severity of the non-conformances that have been identified.

There are two types of sanctions[1]:

- Fine.
- Temporary cease of milk collection.

821 Fine.

Certain non-conformances may result in an immediate fine, without neither warning nor possibility for the implementation of an action plan. These fines are usually applied when the non-conformance has already occurred and cannot be reversed, for instance, but not exclusively, when veterinary medicinal products have been used illegally.

822 Deleted.

823 Temporary cease of milk collection due to unacceptable audit outcome or audit refusal.

A temporary cease of milk collection may be applied immediately:

- When the outcome of an Arlagården follow-up audit is unacceptable (as described above).
- In those instances where the farmer refuses to be audited.
- When there is evidence of the spreading of sewage sludge on fields used in farm production activities.

The temporary cease of milk collection lasts for a minimum of 4 days, as it is necessary to arrange a reopening audit and this must be agreed with Member Services minimum 2 working days prior to the desired first collection day. It is the farmer's responsibility to contact Arla Foods and request a reopening audit, if desired.

In order to resume the collection of milk, the outcome of the reopening audit must be approved or temporarily approved.

[1] The application of sanctions does not deprive Arla Foods of the right to claim compensation pursuant to the article of association § 6, paragraph (5).

824 Temporary cease of milk collection due to unacceptable milk quality.

Temporary cease of milk collection occurs when:

- TBC (as geometric mean) is still higher than 100,000 three months after the first warning.
- SCC (geometric mean) is still higher than 400,000 three months after the first warning.

Temporary cease of milk collection can also occur in the following circumstances:

- Repeated instances of milk being disposed of (tank truck or dairy's silo tanks).
- Repeated instances of milk being rejected at the farm.
- Repeated instances of class 3 milk being delivered to the dairy.

Temporary cease of milk collection lasts at least 2 days/at least 1 collection.

In order for Arla Foods to resume milk collection activities, the farmer must provide evidence that all non-conformances have been rectified or that the circumstances that led to these non-conformances have been addressed and eliminated through the appropriate corrective actions.

825 Extraordinary sanctions after audits.

The administrative body of Arlagården issues the necessary sanctions according to the principles described above. However, the Board of Arla Foods may also impose special penalties in particular cases.

826 Sanctions in case of audit refusal.

In those instances where the farmer refuses to be audited, a warning of temporary cease of milk collection will be handed, followed by a notice, if an agreement can still not be reached.

Same procedure applies in the case of refusal of compulsory advisory visits.

827 Sanctions in case of penalties from the Local Authorities.

Dairy farms are monitored by the Local Authorities. In those instances where these have reported non-conformance with any legal requirement at the farm, this also implies a lack of conformance with Arlagården, which may result in a penalty from Arla Foods.

828 Sanctions in case of poor or unacceptable milk quality.

Specific sanctions are applied in the event of poor or unacceptable milk quality (see Chapter 7). These may be due to too high TBC/SCC (see Sections 73, 75 and 84) or because of abnormal/unacceptable smell and/or taste (see Sections 73 and 75).

83 Appeals

In the event of disagreements with decisions or sanctions in relation to Arlagården, Arla Foods offers the possibility to appeal.

Further information can be sought from Member Services.

84 Follow-up on poor milk quality

Arla Foods lays great emphasis on the need to address the causes of poor quality in milk as well as minimize the risk of this reaching the dairy. Therefore deductions apply in the event of poor or unacceptable quality, as described in Chapter 7.

841 Geometric mean.

(Food Hygiene Regulations)

The EU Hygiene Regulation 853/2004 states the maximum permissible geometric mean for TBC and SCC. The boarders for TBC in the EU Hygiene Regulation are calculated in CFU. Arla Foods' settlement is based on IBC, but in the reporting to authorities TBC is shown in CFU.

First warning is given:

- When the geometric mean for TBC measured over the latest 2 months exceeds 100,000 bacteria/ml (CFU).
- When the geometric mean for SCC measured over the latest 3 months exceeds 400,000 cells/ml.

Second warning is given:

- 2 months after the first warning, if the geometric mean is still over 100,000/ml for bacterial or 400,000/ml cells.

If the limits are not met within 3 months after the first warning, it is prohibited to deliver milk. The temporary cease of milk collection occurs if the geometric mean is still higher than 100,000 for total bacteria count (CFU) and 400,000 for somatic cell count. The geometric mean is calculated taking as a reference all routine analysis results and it influences the settlement.

85 Resumption of milk collection after a temporary cease

851 Unacceptable audit outcome or audit refusal.

The temporary cease of milk collection lasts for a minimum of 4 days, as it is necessary to arrange a reopening audit and this must be agreed with Member Services minimum 2 working days prior to the desired first collection day. It is the farmer's responsibility to contact Arla Foods and request a reopening audit, if desired.

In order to resume the collection of milk, the outcome of the reopening audit must be approved or temporarily approved.

852 Unacceptable milk quality.

The temporary cease of milk collection lasts always at least 2 days/1 pickup. Before Arla Foods can resume the collection, the farmer must provide evidence that either all non-conformances have been rectified or that the causes of the non-conformances have been addressed by means of appropriate corrective actions.

In order to be able to resume the collection after a too high geometric mean for TBC, a representative sample must be taken from the bulk tank. The analysis must show that the TBC does not exceed 100,000 bacteria/ml.

Each load is analysed for SCC, therefore it is not necessary to take a representative sample after a temporary cease due to a too high geometric mean. Instead, the first routine analysis after the temporary stop must show that the concentration of somatic cells in milk is not higher than 400,000/ml.

A 60-day control period must be established after the collection has been ceased due to a too high geometric mean. During this period, all TBC results must be under 100,000 bacteria/ml and all SCC results must be under 400,000 cells/ml.

If unsatisfactory results are obtained, the collection must be suspended again. In this case, milk cannot be collected for 2 days and a new representative sample must be taken.

The control period may not exceed 60 days from the first sampling after restarting the collection. However, this period can be interrupted if the geometric mean falls again under 100,000/ml for TBC and 400,000/ml for SCC.

9. References and documentation requirements

This chapter contains the references mentioned in previous chapters. Additional information can be made available by Arla Foods, the Local Authorities or other organizations.

Arla Foods Member Services (*"MedlemsService"*) Sønderhøj 14 8260 Viby J Denmark Tel. (+45) 76 43 45 45 www.arla.com www.arlafoods.co.uk	**Danish Agricultural Advisory Service (*"SEGES"*)** Agro Food Park 15 Skejby 8200 Århus N Denmark Tel. (+45) 87 40 50 00 www.seges.dk	**Danish Veterinary and Food Administration (*"Fødevarestyrelsen"*)** Stationsparken 31-33 2600 Glostrup Tlf. +45 72 27 69 00 E-mail:fvst@fvst.dk www.fvst.dk
Danish Agriculture & Food Council (*"Landbrug & Fødevarer"*) Axeltorv 3 1609 København V Denmark Tel. (+45) 33 39 40 00 www.lf.dk	**The Danish AgriFish Agency (*Landbrugs- og Fiskeristyrelsen)*** Nyropsgade 30 1780 København V Denmark Tel. (+45) 33 95 80 00 E-mail: mail@naturerhverv.dk www.naturerhverv.dk	**Danish Dairy Board (*"Mejeriforeningen"*)** Agro Food Park 13 Skejby 8200 Århus N Denmark Tel. (+45) 87 31 20 00 www.mejeri.dk
Danish Ministry of Justice – Department of Civil Affairs (*"Justitsministeriet - Civilstyrelsen"*) Gyldenløvesgade 11, 2. sal 1600 København K Denmark Tel. (+45) 33 32 52 22 E-mail : civilstyrelsen@civilstyrelsen.dk www.civilstyrelsen.dk	**Danish Ministry of Justice - Legal Information Division (*"Civilstyrelsen - Retsinformation"*)** Toldboden 2, 2. sal 8800 Viborg Tlf. 33 92 33 34 E-mail : civilstyrelsen@ civilstyrelsen.dk www.retsinfo.dk	

91 References

Reference	Contact
Housing design for cattle (recommendations)	Danish Agricultural Advisory Service (*"SEGES"*), "Housing Design for Cattle – Danish recommendations" (*"Indretning af stalde til kvæg – Danske anbefalinger"*).
"Industry Code for Self-monitoring in Dairy Farms" *("Branchekode for Egenkontrol i mælkeleverende besætninger"*)	Danish Agricultural Advisory Service *("SEGES"*)
"Industry policy for waste products" (*"Branchepolitik for restprodukter"*)	Danish Agriculture & Food Council (*"Landbrug & Fødevarer"*)
Arla Farmers	www.farmer.arla.com members' access to own settlements and quality data as well as to other useful information provided by Arla Foods.
Feed manufacturers - See also voluntary agreements	The Danish AgriFish Agency ("*NaturErhvervstyrelsen*") List of approved feed manufacturers is available from The Danish AgriFish Agency ("*NaturErhvervstyrelsen*")
Voluntary agreements	List of feed businesses adhered to the voluntary agreement regarding aflatoxin, animal fat and antibiotics in compound feeds is available from the Danish Agricultural Advisory Service (*"SEGES"*)
"Agreement for the purchase of feed" (*"Aftale om køb af foder"*)	Danish Agricultural Advisory Service (*"SEGES"*), "Agreement for the purchase of feed" (*"Aftale om køb af foder"*) (proposed standard agreement).
Milking routines	The document "Milking and hygiene" (*"Malkning og hygiejne"*), as well as other publications from the Danish Agricultural Advisory Service (*"SEGES"*) is available at the Danish Agricultural Advisory Service (*"SEGES"*)
Symbol "Food contact material" 	Material approved for food contact
Teat-dipping agents and disinfectants	The list of approved agents is available from the Danish Veterinary and Food Administration (www.fvst.dk) and from the Swedish Dairy Association (*"LRF Mjölk"*, www.brakemrad.se)
"Policy on the use of sludge and waste products on fields" (*"Politik for anvendelse af slam og restprodukter på marker")*	Danish Agriculture & Food Council (*"Landbrug & Fødevarer"*) or Member Services

Clean livestock	Danish Agricultural Advisory Service (*"SEGES"*) during their udder health campaign in 2003 as well as Cattle Info (*"Kvæginfo"*) no. 1100. Danish Agricultural Advisory Service (*"SEGES"*)
"Safe milking" (*"Sikker malkning"*)	Danish Agricultural Advisory Service (*"SEGES"*)
Disease transmission control	"Hints & tips on the prevention of disease transmission (cattle)" (*"Råd & Vink Smitteforebyggelse (kvæg)"*), document published by the Danish Agricultural Advisory Service (*"SEGES"*).
Tank alarm	Member Service
"Technical requirements for milk cooling tanks" (*"Tekniske krav til mælkekøletanke"*)	Member Service
Livestock collection/delivery areas	Danish Agricultural Advisory Service (*"SEGES"*), for example LBM news no. 1258 - Livestock collection/delivery areas
"Layout of milk storage rooms – Guidance" *("Indretning af mælkerum - Vejledning"*)	Danish Agricultural Advisory Service (*"SEGES"*)
Storage and collection of dead livestock	Daka bio-industries website (www.daka.dk), where there is a link to the Danish Veterinary and Food Administration's (*"Fødevarestyrelsen"*) consolidation act on the storage of dead livestock, which came into force 1st June 2011.

92 Documentation requirements

Document	Explanation	Saving time	Frequency
Feed invoices/delivery notes Agreement for the purchase of feed	Applies to all feed (raw feed materials, compound feeds, feed supplements, corn, roughage and by-products from the food industry). These documents must show the batch number.	5 years	Every purchase
Feed composition declaration	Declarations must be written in Danish. Applies to feed supplements, mineral feed and milk replacers.	3 years	Every purchase
Result of analysis of the water supply to the milk storage room and cowshed	Water from private water supplies (1-9 users) must be analysed by an approved laboratory. With a frequency depending of the use of the water: - For cleaning of milking system and storage tank: every year. - For watering of the livestock: every 5 years.	3 years 6 years	Every year Every 5 years
Records of veterinary medicinal products	Daily records of veterinary medicinal records that have been used. This applies to all treatments, except vitamins, serums or vaccines.	5 years (in chronological order)	Daily, after every treatment
Written procedures for safe milking	This document must describe how cows are identified, medicated and milked during or after a treatment with veterinary medicinal products that have a withdrawal period.	3 years	In the event of procedural changes
Approved refrigerants in bulk tanks	The refrigerant in use must be indicated in the annual inspection report or log.	3 years	When refrigerant is replaced
Bulk tank leakage test report	Applicable to all bulk tanks.	3 years	Every year
Control report or proof of scrapping for bulk tanks that are no longer in use or have been scrapped	These documents must show that the draining and further handling of the refrigerant have been carried out by an authorized refrigeration company.	3 years	When the bulk tank is scrapped

Document	Explanation	Saving time	Frequency
Self-assessment of the final temperature of the washing water (bulk tank and milking equipment)	The final temperature of the washing water in bulk tanks and milking equipment must be at least 42 °C. These documents must show date, temperature and signature.	3 years	Regularly
Service of milking system (control of vacuum) and replacement of rubber parts	Documentation from the service company or own records, if the service is carried out by farm staff. These documents must show date and signature.	3 years	After servicing and/or replace-ment of parts
Invoices or delivery notes for disinfectants and teat sprays/dips	These products must be approved by the Danish Veterinary and Food Administration (*"Fødevarestyrelsen"*).	3 years	Every purchase
Livestock register database or livestock register log	Registration of all livestock present on the farm. The database/log must be accurately and continuously updated.	5 years	When changes occur
GM crops log		3 years	Every year
Delivery notes/invoices or agreement for the purchase of feed	Suppliers must guarantee that their crops have not been grown in fields where sewage sludge has been spread in the last 3 years.	3 years	Every purchase
Delivery notes or invoices for purchased chemicals	Chemicals include cleaning agents, disinfectants, teat sprays/dips, crop protection agents and insect poisons.	3 years	Every purchase
Safety data sheets for chemicals used on the farm	Chemicals include cleaning agents, disinfectants, teat sprays/dips, crop protection agents and insect poisons.	As long as the product is in use	Every product
Tank truck receipts	These receipts show the temperature of the milk at the time of collection.	1 week	Every collection
Fertilizer invoices	Records of the use of nitrogen. Documentation of proof that no coarse fodder has been grown in fields where sewage sludge has been spread in the last 3 years.	3 years	Yearly
Fertilisation schedule	Documentation of proof that sewage sludge is not spread on fields that are used in farm production activities.	3 years	Yearly

Document	Explanation	Saving time	Frequency
Self-monitoring in AMS or specifications from AMS supplier	Documentation for sensitivity/specificity (milk examination).	As long as the product is in use	Every purchase