



NSW Food Authority

Code of Practice for Collection of  
Milk from Dairy Farms.

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## **INTRODUCTION**

NSW Food Authority (NSWFA) has prepared the Code of Practice for the Collection of Milk from Dairy Farms as a guide for any person or company involved in the collection of milk from farms.

The Code outlines NSW Food Authority requirements for farm milk collection and is aimed at assisting grader drivers in performing their duties.

Should you require any further information please contact your nearest NSWFA Office (please refer to the list on page 26).



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**5<sup>th</sup> April 2004**

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## 1. DEFINITIONS

In this Code:

“access roadway” means the road travelled by the bulk milk collection tanker from a public road to the dairy building.

“approved” means approved by an officer of the NSW Food Authority.

“authorised officer” means an officer of the NSW Food Authority.

“bulk milk collection tanker” means any vehicle used to collect milk from a dairy farm.

“NSWFA” means the New South Wales Food Authority.

“dairy building” means a combination of two or more of the following:

- (a) milking unit;
- (b) milk room;
- (c) wash room;
- (d) engine room;
- (e) staff amenities;
- (f) external bulk milk tank.

“dairy farmer” means any person involved in the milking of milking animals.

“dairy premises” means the land and buildings used for the milking of milking animals.

“Department” means NSW Agriculture.

“depot” means the unloading section of the factory receiving the milk.

“grader/driver” means any person involved in the collection of bulk milk from farms.

“milk room” means the section of the dairy building where milk is stored other than milk which is stored in an external bulk milk tank.

“sampling cock” means a device installed on bulk milk tanks specifically designed for sampling the milk.

## **2. REQUIREMENTS FOR MILK TRANSPORTATION**

### **2.1 Use of milk tanker for vessel for bulk milk transportation**

The operator of a milk tanker or vessel that is used for the bulk transportation of milk must not use the tanker or vessel for any purpose except:

- a) the collection of milk from dairy farms, or
- b) the transportation of milk or cream, or
- c) the transportation of clean water or food – grade liquids that will not contaminate or affect the quality of the milk or cream or leave residual odours.

### **2.2 Cleanliness of a milk tanker or vessel used for bulk milk transport**

The operator of a milk tanker or vessel that is used for the transportation of the milk must not use the tanker or vessel to transport milk or cream, unless the tanker or vessel is in good repair and has been cleaned to ensure that its interior surfaces are free of contaminants and that there are no unusual odours in the tanker or vessel.

### 3. THE ROLE OF THE RECEIVAL FACTORY

The manager of a dairy product factory must ensure that the following requirements are complied with in respect to the collection of milk from dairy farms for delivery to the dairy product factory:

- a) the frequency of milk collection from dairy farms must be such as to permit the cleaning and sanitising of the farm vat after emptying and before any more milk is placed in the vat.
- b) Milk is **not to be** collected from any farm vat unless the temperature has been reduced to **4°C or less**, unless specifically authorised in a particular case by NSWFA.
- c) Milk collection must be in accordance with the requirements of the publication *Code of Practice for Collection of Milk from Dairy Farms* published by NSWFA.

## 4 THE ROLE OF THE TANKER GRADER/DRIVER

The role of the tanker grader/driver is critical in ensuring that milk of the highest quality is collected from dairy farms for processing and manufacturing purposes.

### **Qualifications**

It is recommended that all grader/drivers involved in the collection of farm milk be the holder of an appropriate qualification to grade and collect milk. This qualification is to be documented in the factory or contractors HACCP Quality Management System that covers the factories or contractors procedure for the collection of farm milk.

NSWFA will take appropriate action against any factory, contractor or their employees engaged in the collection sampling and grading of milk from farms if on any occasion NSWFA is satisfied that the person collecting, sampling and grading the milk has:

- (a) falsely record the temperature of the milk
- (b) collected milk from a farm not in accordance with NSWFA policy
- (c) falsely graded milk;
- (d) failed to grade milk;
- (e) inaccurately graded milk;
- (f) being a person who is employed by or has contracted with a factory to collect milk from farms failed to comply with any reasonable requirement made by the employer or made under contract relating to the taking of temperatures, and samples, the making or keeping of records or any other matter relating to the collection of the milk;
- (g) conducted a test that is not of a kind specified in the qualification held by that person;
- (h) failed to comply with the procedures set out in the Code Of Practice for the Collection Of Milk From Dairy Farms published by NSWFA;
- (i) become incapable of grading milk;
- (j) been convicted of an offence against the SafeFood Production Act 1998 or the Regulations thereunder or the Food Act 2003 or the Regulations thereunder;
- (k) Become not, for any other reason, in the opinion of NSWFA a fit and proper person to be involved in the collection and grading of milk from farms.

5. **PROCEDURES TO BE UNDERTAKEN BY THE TANKER GRADER/DRIVER PRIOR TO DEPARTING THE FACTORY**

Ensure that:

- (a) Clothing and boots are clean.
- (b) The road tanker has been cleaned and sanitised.
- (c) The pumping equipment assembly including the transfer hose is clean and satisfactory.
- (d) Sample bottles and the necessary sampling equipment are available.
- (e) A supply of paper towels are available for use when measuring milk volumes by means of a dip stick and to dry hands.
- (f) A suitable spanner is available for connecting and disconnecting the transfer hose.
- (g) A supply of crushed ice is available for storing samples at 4°C or less, unless other approved sample storage facilities are provided.
- (h) A supply of a suitable sanitiser solution at the recommended concentration for sanitising sampling equipment is provided.
- (i) A spare supply of sanitiser with a measuring device to replace contaminated sanitiser
- (j) There is full awareness of the suppliers to be collected, samples to be taken, documents to be completed or delivered as well as any other matter pertinent to the run.

## 6 PROCEDURE TO BE FOLLOWED BY THE TANKER GRADER/DRIVER ON ARRIVAL AT THE DAIRY

- (a) Upon arrival at the dairy collect books, sampling equipment and clean paper towels from the tanker.
- (b) On entering the dairy determine the number of bulk tanks to be emptied. Turn the agitator motors off to allow the milk to settle before measuring the volume.

NB: Collection of milk is not to take place if milking is still in progress and milk is still entering the farm bulk tank.

- (c) The operator **must** wash his/her hands to ensure that any samples, equipment or milk are not contaminated with dirt, bacteria or any other substance.
- (d) Grade the milk by sight, smell and/or taste. If the milk is of unacceptable quality, it must not be picked up. If possible and practicable the dairy farmer should be notified by the grader/driver. If the dairy farmer is not available, the factory is to be notified by the grader/driver as soon as possible after returning to the factory to enable the dairy farmer to be contacted without un-due delay.

NB: Irrespective of the grade of the milk details such as the grade, volume and temperature of the milk is still recorded on the Tanker Log Sheet and farm docket.

- (e) Determine the volume by reading the sight tube or dip stick and record the volume on the Tanker Log Sheet and farm docket. This step is not necessary if a calibrated flow meter is used.
- (f) Switch on the agitator/s. The milk should be agitated for a period of at least **2 minutes**. Note the temperature reading on the bulk milk tank/s thermometer. An independent temperature reading may be made using a calibrated hand held thermometer. The probe of the thermometer is to be sanitised by dipping it into a sanitising solution prior to use to prevent contamination of the milk.

**NB Milk with a temperature greater than 4°C is not to be collected unless specifically authorised in a particular case by NSWFA i.e. >4°C and <10°C mil can be collected, but factory to be informed and appropriate corrective action taken. >10°C NSWFA to be informed prior to collection and authority to collect issued on a case-by-case basis.**

- (g) Record the temperature of the milk on the Tanker Log Sheet and farm docket.
- (h) Remove the cap from the tanker hose and the plug from the bulk milk tank outlet, connect the hose to the bulk milk tank, and turn on the outlet tap.
- (i) Before the milk is pumped from the farm tank/s, sediment and bacteriological samples as required are to be taken. Ensure the milk has been agitated for at least 2 minutes before taking the samples (see Section 11- Sediment Samples and Section 12 - Microbiological Samples) and immediately place the samples in the ice in the sample boxes.
- (j) Ensure the bleed sample container is empty. Start pumping and immediately check that the bleed system is working. (Refer to Section 10)
- (k) Enter the appropriate details on the Tanker Log Sheet or docket while milk is being pumped into the tanker and leave a copy or record the relevant information in an appropriate manner for the farmer.
- (l) Each bulk milk tank/s must be completely emptied at each collection to allow for proper cleaning of the farm bulk milk tank/s and also to enable a proportional sample to be prepared by the factory laboratory when the collection is from more than one tank
- (m) Disconnect the hose, replace the cap on the end of the hose and return the hose to its position on the tanker.
- (n) Take a chemical sample from the bleed sample container and place it in the sample box after suitably identifying the sample as per laboratory instructions.
- (o) Empty or drain the bleed sample container.
- (p) Rinse out the vat with water under pressure from a hose or connect the farm bulk tank to its CIP system. Hose any spilt milk from the milk room floor or concrete pad.
- (q) Close the milk room door or cabinet door in respect of external vats.

## 7 DETERMINING THE GRADE OF MILK

### 7.1 Purpose:

To determine the grades of milk so as to prevent substandard milk from entering the system thus helping to ensure that the final product is of the highest quality.

- A qualified milk grader must grade all farm milk.
- The milk is to be graded by sight and smell and/or taste.
- Milk must be pure, sweet, clean and free from taints, foreign matter and any abnormalities.

### 7.2 Action:

There are two grades of milk - processing grade and reject grade.

#### 7.2.1 Processing Grade:

Processing grade is milk, which is not reject grade.

This milk may be used for all purposes and may be pumped into the tanker with other processing grade milk. The grade should be recorded on the Tanker Log Sheet or docket.

#### 7.2.2 Reject Grade:

Reject grade is milk which:

- (a) On a sensory evaluation, is of a quality unsatisfactory for use in the production of dairy products or is found to contain antibiotics, pesticides or other residues.

When milk is graded as such the milk is left on the farm. The volume and temperature of reject grade milk is to be recorded on the Tanker Log Sheet or docket.

### 6.3 Method:

#### 6.3.1 Conventional Type Bulk Milk Tanks (with opening lids)

- Lift lid(s)
- Observe milk for:
  - ◇ any discolouration that may indicate the presence of blood or antibiotics;

- ◇ the presence of any extraneous contaminants;
- ◇ the consistency of the milk, to ensure the milk has not curdled or soured.
- Smell the milk:
  - ◇ to determine if it has a sour, chemical, feed or unclean smell.
  - ◇ the milk may be tasted. If so use a clean spoon *or container*. It is optional as to whether or not the milk is tasted.

### **7.3.2 Silo or Horizontal Bulk Milk Tanks Without Lids**

- Mechanically agitate the milk for at least 2 minutes.
- Bleed a small amount of milk from the sample cock to flush out any residue.
- Bleed a sample of milk from the sample cock into an approved clean container.
- Grade the milk by sight, smell and/or taste (optional).

## **8 DETERMINING THE VOLUME OF MILK**

### **8.1 Purpose:**

To accurately determine the volume of milk in the farm bulk milk tank(s).

### **8.2 Methods:**

#### **8.2.1 Bulk Milk Tanks With Dipsticks**

- Turn the agitator off and allow the milk to settle.
- Remove and dry the dipstick by wiping it horizontally with a paper towel, then measure the milk.
- Repeat the above procedure and measure milk a second time.
- If the same reading is obtained, record that reading.
- If a different reading is obtained repeat process of drying the dipstick and re measuring until satisfied that readings are the same.

#### **8.2.2 Bulk Milk Tanks With Sight Tube**

- Turn the agitator off and allow the milk to settle.
- Open the tap to the sight tube slowly and wait until the level of the milk stabilises and read the volume of milk.
- Discard the milk in the sight tube and repeat the process.
- If the same reading is obtained record that reading.
- If a different reading is obtained repeat the process until satisfied that the reading is correct.

### **8.3 Recording The Volume Of Milk:**

#### **8.3.1 Single Bulk Milk Tanks**

Record volume of milk in Tanker Log Sheet and farm docket.

#### **8.3.2 Multiple Bulk Milk Tanks**

Allocate a number to each bulk milk tank and record the volume of milk and the bulk milk tank number in the Tanker Log Sheet and farm docket, ie:

- Vat 1 - 790 litres
- Vat 2 - 520 litres

#### **8.3.3 Flow Meter Collection**

In cases where farm milk is collected by a bulk milk collection tanker with a calibrated flow meter, manual measurement of the volume of milk is not required. However, if the tanker flow meter is faulty, manual measurement from the vat must be made.

## **9 DETERMINING THE TEMPERATURE OF MILK**

## 9.1 Purpose:

To ensure that milk complies with NSWFA requirements.

NSWFA requires that milk shall be reduced to a temperature of 4°C or less within 3 ½ hours from the commencement of milking and held at that temperature during the period of storage in the farm tank.

**Farm mil is to be collected at 4°C or below which is the desired collection temperature.**

**However farm milk collection is permitted on occasions where the temperature is >4°C but <10°C. Factory management must be notified of the collection of warm milk and take appropriate corrective action.**

**Where milk is greater than 10°C at the time of collection, the NSWFA is to be notified immediately prior to milk collection. Authorisation to collect the milk will be made on a case-by-case basis by the NSWFA**

Milk stored at above 4°C allows bacteria to grow causing spoilage to the milk or the product manufactured from the milk.

## 9.2 Method:

Agitate the milk for **two** minutes and note the temperature reading on the farm tank thermometer. An independent temperature reading may be made using a hand held thermometer. (This thermometer should be regularly calibrated against a standard thermometer). The probe of the thermometer is to be sanitised by dipping into a sanitising solution prior to use.

## 9.3 Actions:

### 9.3.1 Single Bulk Milk Tank

Record the temperature on Tanker Log Sheet or docket.

### 9.3.2 Multiple Bulk Milk Tanks

Using the same number allocated to the bulk milk tank when measuring the volume record the temperature and bulk milk tank number on the Tanker Log Sheet or docket.

## **10 COMPOSITE SAMPLES - FAT AND PROTEIN**

### **10.1 Purpose:**

To ensure an accurate representative composite sample can be made to reflect the fat and protein of milk produced.

### **10.2 Method:**

It is recommended that all samples be obtained by an in line sampler.

#### **10.2.1 Milk Collected on a Skip-A-Day Basis**

- Agitate the milk for at least two minutes
- Obtain a sample by means of the In-Line sampler fitted to the tanker in accordance with the prescribed procedures.
- Place the sample in an insulated container containing ice.

#### **10.2.2 Milk Collected on a Daily Basis**

- Obtain a sample as for skip a day collection
- Mark the sample bottle to indicate that it is a single day's production collected from the farm.

#### **10.2.3 Milk Collected After Each Milking**

- Obtain a sample as for skip a day collection
- Mark the sample bottle to indicate that it represents one milking and the volume of milk collected from the farm tank. This must be done in a manner, which will enable Laboratory staff to prepare an accurate aliquot sample representative of the whole day's production.

### **10.3 In-Line Sampling Devices (Bleed Samplers)**

These are sampling devices installed in bulk milk collection tankers to enable representative samples to be taken as milk is transferred from farm tanks to road tankers.

#### **10.3.1 Location of Bleed Samplers**

Bleed samplers should be positioned in a straight vertical pipeline on the tanker not less than 10 pipe diameters above the pump and within 1.5 pipe diameters of a union, any overhead flange or bend. The pipeline design should be such that the section of line in which the device is located will be free draining. It is mandatory that the tanker be overhead filled.

The diameter of the sampling orifice should be consistent with the sampling rate required. In general an 0.8 mm orifice will yield a satisfactory sampling rate of approximately 50 mls per 100 litres of milk pumped.

### **10.3.2 Criteria for Ensuring Accurate Representative Samples Are Obtained.**

- (a) Before being pumped from the bulk tank the milk should be agitated for at least two minutes.
- (b) The sample must be taken continuously during the pumping operation.
- (c) The volume of sample can only be adjusted by changing the orifice size ie, change the sampling orifice to a different size. Under no circumstances should the sampling orifice size be changed once pumping of the milk from the farm bulk tank has commenced. The sample line between the exit point in device and the sample collection container should be free and open at all times during the transfer operation.
- (d) The flow from the sampling device to the sample container should be by gravity, without syphon effect.
- (e) The hose from the farm tank to the tanker must be emptied after each pickup.

### **10.3.3 Procedure for Obtaining Samples by Means of a Bleed Sampler.**

#### **10.3.3.1 Collected By Using A Conventional Type Container (Not Fully Enclosed)**

- (a) Agitate milk in the bulk tank/s for a minimum of 2 minutes.
- (b) Connect the transfer hose to the bulk tank and ensure that all taps and pipe work are connected to ensure that the milk is pumped into the collection tanker.
- (c) Ensure that the receival jug is clean and dry (first farm on run) and that milk from previous collections has been emptied from the receival jug
- (d) Start the pump
- (e) Check the bleed sample device and ensure it is working and allow the first milk to go to waste and then place the tube into the sample

- jug. (Ensure the sample jug is large enough to hold the largest supplier)
- (f) As soon as pumping is completed pour a sample of milk from the jug into the composite sample container. (Plastic bottle/plastic whirl bag etc)
  - (g) Discard the milk in the sample jug and store jug upside down until it is required at the next farm.
  - (h) Place the sample in an insulated container with crushed ice.

### 10.3.3.2 SAMPLES COLLECTED BY USING A FULLY ENCLOSED CONTAINER.

Ensure that the sample cock location and the orifice size of the sampling device enables an adequate composite sample to be taken from the smallest supplier on the run.

#### **Procedure to be followed:**

- (a) Agitate the milk in the bulk vat or vats for a minimum time of two minutes.
- (b) Connect the transfer hose to the bulk vat and ensure that all taps and pipe work are connected to ensure that the milk is pumped into the collection tanker.
- (c) Start the pump.
- (d) Immediately turn on the in-place-cleaning valve for the fully enclosed drip feed container and flood with milk for about one second or until milk can be observed entering the sight glass, and then turn off.
- (e) Discharge milk from the container and turn on sample cock. (This will drain all milk from container and remove milk residue from sample cock).
- (f) Check if drip sample device is working by observing milk flow in the sample tube.
- (g) When all milk is pumped from the bulk milk tank/tanks take an adequate sample of milk from the sample cock.

**Note:**

If the fully enclosed drip feed container is not large enough to hold all of the sample from the collection, the collection pumping should be split. The pump is started and before the container overflows pumping is stopped - A sample is taken and the sample bottle marked to indicate the volume of milk pumped. Pumping is then recommenced, the container is drained and collection of the drip sample is continued and a second sample is taken.

- (a) Drain all milk from the fully enclosed drip sample container and then turn the pump off.
- (b) Store the sample in an insulated container containing an ice slurry.

## 11 SEDIMENT SAMPLES

### 11.1 Purpose:

To obtain a 200ml sample of milk representative of the volume of milk supplied on either a skip a day or each day collection basis. The sediment test is conducted to determine that it is clean, free from foreign matter or any visible abnormality.

### 11.2 Method

#### 11.2.1 Single Bulk Milk Tanks With One Or More Lids, Skip A Day/Daily Collection

- Agitate the milk for at least two minutes.
- Using a clean, sanitised dipper take a 200 ml sample from the bulk milk tank. When sanitised dippers are used ensure that the dipper is rinsed in the milk prior to taking the sample.
- Pour the sample into a clean, dry sample bottle.
- Place sample in a cool insulated container after marking as per laboratory instructions.

#### 11.2.2 Silo Or Horizontal Bulk Milk Tanks Without Top Access

- Agitate the milk in the bulk milk tank/s for at least two minutes.
- Turn on the sample cock tap and allow approximately one litre of milk to pass through the sample cock.
- Obtain a sample by placing the sample container under the outlet of the sample cock.
- Mark the sample container as per the laboratory instructions and place the sample in a cool insulated container.

In those instances where it is not possible to obtain a sample in accordance with the above procedure in respect of silo or horizontal tanks without top access, a sample may be obtained in the following manner:

- Agitate the bulk milk tank/s for at least two minutes.
- Pump the milk from the tank/s until the level of milk drops below the door. Open the door and dip a 200 ml sample of milk from the bulk milk tank/s.
- Pour the sample into a clean dry sample bottle.
- Place the sample in a cool insulated container after marking as per laboratory instructions.

### **11.2.3 Multiple Bulk Milk Tanks And One Milking Collection**

- Sample each bulk milk tank using the appropriate method as above.
- However record on the sample bottle the volume of milk and the bulk milk tank number (using the same bulk milk tank number as for recording the volume and temperature), to allow the Laboratory staff to apportion a sample representative of the entire consignment.

## 12 MICROBIOLOGICAL SAMPLES

### 12.1 Purpose:

To obtain a representative aseptic sample of milk to determine its bacterial counts which are used as a rejection/acceptance of the milk. High bacterial counts cause spoilage of milk and a shorter shelf life of finished products.

### 12.2 Method:

#### 12.2.1 Single Bulk Milk Tanks With One Or More Lids, Skip A Day/ Daily Collection

- Agitate the milk in the bulk milk tank for at least two minutes.
- Dip an aseptic sample of milk from the bulk milk tank (see Section 13 Procedure for Taking Aseptic Samples).
- Mark the sample container as per the Laboratory instructions and place the sample in ice water, or alternatively in a specially constructed stainless steel storage box containing frozen water with provision for the sample bottle to fit into tubular holes in the box.

#### 12.2.2 Silo Or Horizontal Tanks Without Top Access

- Agitate the milk in the bulk milk tank for at least two minutes.
- Turn on the sample cock tap and allow approximately one litre of milk to pass through the sample cock.
- Obtain a sample by placing the sample container under the outlet of the sample cock (see Section 13 Procedure for Taking Aseptic Samples).
- Mark the sample container as per the Laboratory instructions and place the sample in ice water or a specially constructed stainless steel storage box containing frozen water with provision for the sample bottles to fit into tubular holes in the box.

In those instances where it is not possible to obtain a sample in accordance with the above procedure in respect of silo or horizontal tanks without top access, a sample may be obtained in the following manner.

- Agitate the milk in the bulk milk tank for at least two minutes.
- Pump the milk from the tank until the level of milk drops below the door level. Open the door and dip a sample of milk from the bulk milk tank (See Section 13 Procedure for Taking Aseptic Samples).

- Mark the sample container as per the Laboratory instructions and place the sample in ice water or a specially constructed stainless steel storage box containing frozen water with provision for the sample bottles to fit into tubular holes in the box.

### **12.2.3 Multiple Bulk Milk Tanks and One Milking Collection**

- Agitate the milk in the bulk milk tanks for at least two minutes.
- Dip an aseptic sample of milk from the bulk milk tank (see Section 13 Procedure for Tanking Aseptic Samples).
- Mark the sample containers with the bulk milk tanks numbers and the volume of milk to enable the Laboratory staff to apportion a sample representative of the entire consignment.
- Place the sample in ice water or a specially constructed stainless steel storage box containing frozen water with provision for the sample bottle to fit into tubular holes in the box.

## 13 PROCEDURE FOR TAKING ASEPTIC SAMPLES

### 13.1 **Ensure That:**

- The milk is agitated for not less than two minutes before taking the sample.
- The cap is not removed from the sample bottle until immediately prior to taking the samples and not laid down while the sample is being placed in the bottle.
- Every care is taken during sampling not to contaminate the sample, the cap or neck of the bottle.
- If there be any cause for doubt, a fresh sample is taken.
- Sample bottles are not over filled, the bottle should only be three-quarters filled to allow space for mixing of the sample.
- Immediately after the sample is taken it is placed in ice water or a specially constructed stainless steel storage box containing frozen water with provision for the sample bottles to fit into tubular holes in the box.

### 13.2 **Method A – Sampling Tongs**

- Remove the sampling tongs from the sanitiser solution.
- Using the tongs dip a pre-sterilised sample container into the milk.
- The sample container opening should face into the flow of the milk.
- Recap the sample bottle/seal the container.
- Rinse the sample tongs in water and immediately return them to the sanitiser solution.

### 13.3 **Method B - Sampling Dipper**

- Use a dipper, which has been wrapped and sterilised, or immersed in a sanitiser solution. When sanitised dippers are used ensure that the dipper is rinsed in the milk prior to taking the sample.
- Dip the sample of milk from the farm tank and pour it into a sterilised sample container.
- Recap the sample bottle/seal the sample container.
- Rinse the dipper in water and immediately return it to the sanitiser solution.

**NB: If the dipper is attached to the end of a chain to reach the milk then the chain must also be immersed in a sanitiser solution.**

### **Method C - Sample Cock**

- Turn on the sample cock tap and allow approximately one litre of milk to pass through the sample cock.

- Place the sample container under the outlet of the sample cock, turn on the sample cock tap and fill the sample container to approximately three-quarters of its capacity.
- Recap the sample bottle/seal the sample container.

**NB: This method is only to be used when samples cannot be taken from a farm tank by either Method A or B referred to above.**

## 14 SOMATIC CELL COUNTS (SCC) SAMPLES

### **Purpose:**

To ensure an accurate representative sample is obtained to reflect the Somatic Cell Count in the milk. The taking of Somatic Cells Count samples is now a factory requirement and not a NSWFA requirement.

### **Method:**

For those farms on every day or skip-a day collection, the sample is taken at the farm from the chemical bleed sample. In respect of those farms where the milk is collected after each milking, the sample must be taken from the aliquot sample prepared at the laboratory to be representative of the farms daily production - see Section 10, Composite Sampling for Fat and Protein.

### **Note:**

Ensure bleed sampler containers are completely drained before pumping commences to ensure there is no carryover from previous farm.

## 15 ENZOOTIC BOVINE LEUCOSIS (EBL) SAMPLES

### 15.1 Purpose:

To ensure an accurate sample is taken to reflect the EBL status of a dairy herd. It is the goal to eradicate EBL from all New South Wales dairy herds.

### 15.2 Method:

EBL samples are taken by the same method as sediment samples - see Section 11 for Sediment Samples or by the same method as Microbiological samples - see Section 12 for Microbiological Samples.

An adequate sample is required normally less than that required for the sediment test. Store the samples as per Microbiological Sample - see Section 12.

#### **Note:**

**Under no circumstances is an EBL sample to be obtained from milk collected through a bleed-sampling device.**

**16 TRANSPORT AND STORAGE OF SAMPLES (MICROBIOLOGICAL /SEDIMENTS/ COMPOSITE)**

Immediately after taking any sample the tanker grader/driver must ensure it is clearly identified and immediately placed in an approved sample storage container.

**(a) Microbiological Samples**

Samples are to be stored at 0-4°C until tested. This will entail the use of crushed ice and water where the sample is immersed in the ice/water mixture. Alternatively, a specially constructed stainless steel storage box containing frozen water with provision for the sample bottle to fit into tubular holes in the box is acceptable.

**(b) Chemical Samples**

To be stored in an insulated container containing ice or frozen ice bricks.

**(c) Sediment Samples**

To be stored cool in an insulated container.

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**17 PROCEDURE TO BE FOLLOWED ON ARRIVAL OF THE TANKER AT THE FACTORY**

**17.1** All farm collection tankers must be sampled and graded immediately on arrival at the factory.

**NB: Make sure hands are clean and aseptic sampling techniques are used.**

**17.2** All samples must be taken to the Laboratory/Test Room and refrigerated as soon as possible.

**17.3** Appropriate factory personnel must be notified of any:

- a) Any milk left on farm
- b) Any necessary sample not taken
- c) If any irregularity occurs during the pick up appropriate factory personnel must be notified as soon as possible.

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## APPENDIX A

### Minimum Tests to be applied to Farm Milk

Test	Test Method	Frequency of test	Standard under Food Act	Penalty / Corrective Action for Non Compliance
Temperature		Farm Milk: before every milk collection from farm	4°C	Milk may be collected between 4-10°C and factory to take corrective action. Milk >10°C – NSWFA to be notified prior to collection
		Tanker Milk: every load on receipt at factory	5°C	Milk may be received between 5-10°C if it is immediately cooled. Appropriate investigation and corrective action must be recorded. Prosecution on repeated or major breach
Sensory Grading		Farm Milk: before every farm milk collection	Free of taint suggestive of chemical contamination	Milk not picked up
		Tanker milk: every load on receipt at factory	As above	Milk to be rejected
Sediment test (This test is not necessary if the milk is clarified as the factory using a clarifier as a matter of routine)	Method in the Dairy Test Manual	From each tanker run each week Alternative schemes involving testing of tankers and / or farm vat samples may be used subject to NSWFA approval	No excessive sediment (per NSWFA standard)	Factory to test next and subsequent delivery from the failed tanker run. Failed batches must be clarified before use. Corrective action appropriate to the alternative scheme that would prevent excessive sediment in the final product
Standard Plate Count (or equivalent)	SPC, MPC or alternative methods in the Dairy Test Manual	Farm Milk: two times per month	150,000 cfu/mL	Factory to test next prick-up from implicated farm. Farm supply to be rejected for food use upon further failure and until compliance with standard achieved
Anti-microbial drug residues	Delvotest SP or alternative methods in the Dairy Test Manual	From every tanker load or otherwise approved by NSWFA	Maximum Residue Level (MRL) as specified in the Australian Food Standards Code	Milk is not to be used for human consumption; NSWFA must be notified within 24 hours. Investigate the cause of the contamination – test the milk of all farms that contributed to the failed tanker