



***Guidelines for Award of  
Quality Mark for  
Milk and Milk Products***

15 March 2017

Committed to quality





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## Section – I

### 1. Introduction and Objectives

National Dairy Development Board (NDDB/The Board) is an Institution of National importance. The Board is mandated to work on promoting cooperative strategy in dairying in the country and spearhead activities for excellence in dairying covering entire milk chain i.e., milk production, procurement, processing and marketing. These activities are also aimed at ensuring availability of safe and good quality milk and milk products for the domestic and foreign markets.

As a part of the Board's continuous efforts to improve food safety and quality aspects of milk and milk products, it is decided to launch a quality and food safety initiative through "Quality Mark" signifying these aspects in a product. This document presents the general guidelines and procedures for the award of "Quality Mark".

It may be clarified that the guidelines for award of Quality Mark do not propose any new/additional system for Food Safety and Quality Management but only lays down the processes required for ensuring quality and safety of milk and milk products. Product liability remains the responsibility of the Quality Mark user organization.

The logo/symbol of Quality Mark on milk and milk product packages conveys that the unit has adopted and implemented all the processes required as per proper food safety and quality management system for manufacture of milk and milk products as per the set quality parameters.

### 2. Unique Logo of Quality Mark

The NDDB is in the process of registering the "Quality Mark" logo as given at **Annex- 1** under Trade Marks Act 1999.

### 3. Use of Logo of Quality Mark

Dairy units which meet the criteria for award of Quality Mark will be allowed to use this logo on the packages containing milk and milk products. It may be clarified that the award of Quality Mark shall be specific for the unit (location wise) as well as for the process for a particular product.



The mark may be applied to the wrapping or the packaging or printed on a label affixed to the package

The approval number along with the specified logo/symbol of 'Quality Mark: as given below, shall be printed/labelled on packages of milk and milk products. The marks shall be legible and indelible, and the characters easily decipherable and shall be clearly displayed.





## Section - II

### 4. Management of Quality Mark

A Management Committee shall manage all the activities related to the Quality Mark.

#### A. Management Committee

The composition of the Management Committee shall be as under:

- i. Managing Director or Executive Director or the senior most officer ( ex officio) of NDDB dealing with activities of Quality Mark. : Chairman
- ii. One Nominee from DAHDF,MOA : Member
- iii. Four representatives<sup>1</sup> from State Coop Dairy Federations/Dairy Organisation (One each from each Region of India) on Rotational basis (two years term)\* : Members
- iv. Minimum two subject matter expert (to be nominated by Chairman)- two years term\* : Members
- v. FSSAI representative : Special Invitee
- vi. GM/DGM of NDDB handling activities of Quality Management (ex officio) : Member Secretary

Notes: \*

- a. Only those State Federations/Dairy Organisations can be member which agree to the concept of Quality Mark and all/ three of its units (if number of units is more than 3) qualify to be awarded Quality Mark.
- b. The first term of two representatives out of four representatives from State Feds/Dairy Organisations (Sr. No. iii); shall be of one year duration. The two representatives whose first term shall be of one year shall be decided by draw of lots. By this arrangement every year two representative shall retire and two new representatives shall join the Management Committee. This is expected to result in active and enhanced representation for State Federations /Dairy Organisations in the Management Committee.

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<sup>1</sup> Representative should be Managing Director of the Cooperative Dairy Federation. Nominees shall be avoided.



However, the above arrangement regarding first term of the two representatives out of two representatives shall be operationalised after one year after the first meeting of the Management Committee.

- c. In case any member (from Sr. No. iii) resigns before completion of his term new member from among the Federations of same region shall be appointed for the remaining period.
- d. In case the Subject Matter Expert (Sr. No. iv) resigns before completion of his term, the Chairman shall appoint another expert. The term of such new appointee shall be two years.

The Management Committee shall meet minimum twice in a year. However, the Chairman of the committee may decide to hold additional meetings of the committee depending upon the need.

## **5. Eligibility to apply for award of Quality Mark**

### **5.1 Sector of the dairy plant/ unit**

The dairy units/organisations/units from the following sectors shall be eligible for use of Quality Mark subject to fulfilling other requirements specified in these Guidelines:

- i. Cooperative Dairy Organisations (Dairy Cooperative Federation/Milk Unions and Producers owned dairy organisations)
- ii. Subsidiaries of NDDB
- iii. Dairy Units of Educational Institutes (from Govt. /Govt. Universities/NDDB/State Feds/unions).
- iv. Govt. owned dairy units
- v. Any other unit specifically approved by NDDB

It may be mentioned that mere eligibility to apply for the Quality Mark, as per above, does not mean automatic grant of Quality Mark.

## **6. Application for award of Quality Mark**

The essential requirements for a unit to be eligible for submitting an application for award of Quality Mark are:





- i. The unit shall hold Valid License from the Food Safety Authority of India (FSSAI) as required under the Food Safety and Standards Act 2006 and Regulations there under.
- ii. The unit shall have valid accreditation of Quality and Food Safety Management System (such as ISO 22000 or ISO 9001 with HACCP Certifications-IS 15000).
- iii. The water being used for the operations of unit shall comply with relevant standards governing use of water in the food/milk processing unit (IS: 4251).
- iv. Valid clearance/approval from the concerned State Environment/ Pollution Control Board.

In case a unit does not have all the above mentioned statutory clearances; the unit is not eligible to apply for award/grant of Quality Mark.

The dairy plant/unit seeking award of Quality Mark and being eligible as per above shall submit the application to NDDB Anand along with the supporting documents and fees. The details about format of the application and the documents to be submitted are given in **Annex-2**.

Any application without required fees and incomplete details/information shall not be eligible for consideration for assessment.

## **7. Assessment of the unit / Procedure for award of Quality Mark**

A 2-step approach shall be followed for assessment of the unit for award of Quality Mark:

### **i. Preliminary Assessment**

The preliminary assessment shall be conducted based on the documents /information submitted along with the application.

The assessment norms and the methodology for assessing the unit is given in the **Annex- 3**.

The applicant unit may be asked to submit additional information if needed to complete the preliminary assessment.

### **ii. Final Assessment**

Only those units which qualify the preliminary assessment shall be considered for final assessment. The final assessment shall include an onsite visit by a team which will verify the facts given in the application, check adequacy of processes being followed for ensuring



food safety and quality of all the raw materials being used for manufacture of milk and milk products, assess the infrastructure, hygiene and sanitation and capability of the unit to continuously keep on manufacturing milk and milk products which are safe and of good quality etc. Desirable/recommended infrastructural facilities and operational parameters/ practices are detailed in **Annex 5**.

A team comprising up to 3 (three) members shall undertake onsite inspection of the unit, primary production site, supply chain, retail points etc. for assessment as mentioned above.

The format for the final assessment is attached at **Annex- 4**.

## **8. Award of Quality Mark**

The units shall be considered for award of Quality Mark for specific /identified products which:

- i. Successfully passes the preliminary assessment.
- ii. Scores satisfactory grade/ marks in the final assessment, and
- iii. Unit complying with the requirements listed at Sr. Nos. i and ii above; enters into an agreement with the NDDB. The agreement shall specify various terms and conditions for complying with the terms and conditions for award of Quality Mark.

### **i. Preliminary Assessment**

To pass the preliminary assessment, the unit must score at least 70 % marks in specified parameters as per Annex-3. In case a unit scores between 60-70 %, the unit shall have to give an assurance for improvement up to 70 % marks by the time inspection takes place.

### **ii. Final Assessment**

The rating system (of norms/parameters of Annex- 4) of final assessment will be as follows:

- a. Based on importance; each assessment norm/parameter is categorised into three categories viz., Critical, Major and Minor
- b. Status of implementation/compliance by the unit for each assessment norm /parameters is determined during inspection by the team (in terms of Yes or No).



The unit shall be considered for award of the Quality Mark if the unit achieves compliance / level of implementation as under:

Sr No	Importance of assessment norm/parameter	% of compliance/level of implementation
1	Critical	100%
2	Major	Minimum 85 %
3	Minor	Minimum 70 %

## **9. Scope for Improvement**

A unit may be given the opportunity for improvement in case the compliance is less than the required for award of Quality Mark (100 % for Critical, 85% in Major and 70 % in Minor category norms). However in such cases, the unit shall have to improve the compliance to required level within a time of maximum 6 months and shall be inspected again. If the unit fails to achieve the required compliance even after being given an opportunity, the application shall be rejected and unit shall have to apply again but not before a period of minimum six months from the date of re-inspection.

## **10. Quality parameters of Quality Mark**

The unit shall have and follow a scientific sampling plan for testing of raw materials, in-process and finished milk and milk products covered under the Quality Mark for following parameters:

1. Compositional aspects
2. Microbial Parameters
3. Presence of contaminants

The milk and milk products shall always conform to the quality norms as per the prevailing Food Safety and Standards (Food Standards and Food Additives) Regulations 2011 as amended from time to time.

In addition, the Management Committee is authorised to prescribe any additional quality parameters to be complied with and /or to modify the quality norms to be more stringent than the prevailing statutory norms.

Nevertheless, it shall be the responsibility of the unit to comply with all the provisions and requirements of the Food Safety and Standards Act, 2006 and all the Regulations thereunder.



The NDDB may also have the samples of milk and milk products covered under Quality Mark tested for different quality parameters, from time to time.

## 11. Record Keeping

Proper records shall be maintained by the unit at all stages of production, storage and transportation of milk products and should be made available to the Inspection Team during inspection for verification. The unit shall maintain the following basic records:

- i. Traceability records pertaining to the raw milk, other food ingredients, additives, preservatives etc.
- ii. Purchase of SMP and other conserved dairy commodities for use in manufacture of milk and milk products – supplier details/ results of analysis of such commodities etc. used by the unit.
- iii. Milk production monitoring records, including records of trainings imparted to producers and audit of primary milk production holdings.
- iv. Raw material receiving (including records for milk being received from Milk Collection Centres, BMCs, Chilling Centres) and evaluation records.
- v. Temperature records of chill room (s)/ storage tanks (when in operation), pasteurizer, chillers, driers etc.
- vi. Quality Control / Lab test reports records.
- vii. Consolidated daily production records
- viii. ISO 9001 and or ISO 22000 Certificates
- ix. Microbiological / /chemical test reports pertaining to milk and milk products, water, other food ingredients, additives etc.
- x. Packing/packaging material records
- xi. CCP monitoring records
- xii. Corrective action and verification records
- xiii. Cleaning, plant hygiene and sanitation records
- xiv. Pest Control records
- xv. Calibration records
- xvi. Infrastructure and equipment maintenance records
- xvii. Training records
- xviii. Health record of the employees ( involved in milk handling operations)



## **12. Validity of the Quality Mark and its renewal**

The award of Quality Mark shall be valid for three years, subject to maintenance of quality and food safety standards and compliance with terms and conditions of the agreement.

The unit shall be responsible for initiating the process for renewal of the Quality Mark (approval for continuing usage) well in advance (at least 6 months before the expiry) time so that all the required steps for assessment are completed and renewal is received before validity expires. The procedure for seeking renewal shall be same as applicable for new approval.

## **13. Surveillance Audit**

Though the approval for award of Quality Mark shall be valid for three years, the Surveillance Audit for checking compliance with the norms of Quality Mark shall be held once every year. The unit shall be responsible for initiating the process for Surveillance Audit of the certification well in time so that the Audit takes place within a period of twelve calendar months.

## **14. Surprise Audit**

In addition to the initial on-site inspection for award of certification and the annual surveillance audits, NDDB may decide to conduct surprise audit/ inspection/check of a unit holding Quality Mark.

In addition to the surprise audit/check of the units; NDDB may also undertake surprise check of quality aspects of milk and milk products manufactured by any unit to determine compliance of the milk and milk products with the prevailing Food Safety and Standards (Food Standards and Food Additives) Regulations 2011 as amended from time to time.

## **15. Composition of the Inspection Team**

The inspection team shall comprise following:

- i. One member from NDDB
- ii. Up to two subject matter specialist to be nominated by NDDB, from dairy industry/ educational institutes/Quality Certifying bodies / independent technical professional (dairy plant/quality aspects).

In case it is not possible for all three members to be available at one time due to unavoidable circumstances; a minimum of two members (including one from NDDB) out of three members are required for inspection.



#### **16. Expenses towards Inspection**

The unit shall pay a lump sum fees of Rs. 50,000 (Rupees Fifty Thousand only) plus taxes as applicable for inspection towards all the charges (including expenses towards travel, boarding and lodging of the team members) for all types of inspections (pre-award inspection, and surveillance/ surprise audits).

The Management Committee is authorised to enhance/reduce the inspection fees from time to time.

#### **17. User fees for Quality Mark**

The unit shall pay to NDDB user fees at the rate of Rupee 2.00 per 10,000 litres of liquid milk sold in case of liquid milk and raw milk consumed in case of milk based products. The Management Committee is authorised to enhance or reduce amount payable as user fees based on the actual expenditure for management of the Quality Mark (cost towards promotion, testing of milk and milk products etc.). The user fees shall be paid on quarterly basis within one month of completion of each quarter i.e., in months of April, July, October and January.

#### **18. Periodic Monitoring Visits by Quality Auditors/Technical Experts**

In addition to the above-mentioned formal inspections (pre-award inspection and surveillance/surprise audits), NDDB at its discretion can depute its quality auditors/ technical experts from time to time to check compliance of unit with the guidelines of the Quality Mark including checking of relevant records. The unit shall allow free ingress and egress to such quality auditors/ technical experts of the NDDB to its plant at all times. The charges towards such visits of the quality auditors / technical experts shall be borne by the NDDB and not by the unit.

In case of any non-compliance by the unit with the any of the guidelines for award of Quality Mark, the NDDB would recommend corrective actions to be implemented by the unit within stipulated time period. In case the unit fails to take corrective steps within stipulated time period, the NDDB may initiate suitable action including withdrawal of the Quality Mark.



#### **19. Sharing of information by the Unit and confidentiality of the data**

The unit shall freely share the information, as and when sought, about infrastructure for manufacture of milk and products including milk handling in rural area, processes adopted, laboratory testing set up, quality parameters achieved etc. with NDDB.

The information provided by a Quality Mark user organization shall remain confidential and NDDB shall not share the same with other cooperatives/companies etc. However, NDDB shall be free to provide the information to Government Departments, if required.

#### **20. Surrender of Mark by the user**

A Unit holding the Quality Mark shall be free to surrender the Quality Mark, if it so desires. The unit shall notify their intention to surrender the Quality Mark and withdrawal from the scheme at least one month before intended date of withdrawal. It should be the duty/ responsibility of unit to ensure that the milk and milk products marketed by it after the said date do not bear the “Quality Mark logo”.

#### **21. Withdrawal of the Mark by the NDDB**

The Quality Mark can be withdrawn by NDDB in case a user does not comply with any of the requirements of the terms and conditions of the prevailing Guidelines and the Agreement or the milk and milk products do not comply with the quality parameters as per the prevailing Food Safety and Standards (Food Product Standards and Food Additives) Regulations 2011. The final decision with regard to the withdrawal of the Quality Mark shall only be taken by the Management Committee of the Quality Mark. On withdrawal, the unit shall stop using the Quality Mark immediately.

#### **22. Resolution of Disputes**

In the event of any dispute and differences in interpretation or operation of any clause of the Guidelines and the Agreement, the matter would be settled by mutual negotiations failing which the matter would be referred to Chairman, NDDB or the nominee appointed by him for arbitration and final decision. The decision of the Chairman, NDDB or his nominee under the provisions of The Arbitration and Conciliation Act, 1996 or any amendments thereof from time to time, shall be final and binding on both the parties. The venue of the arbitration shall be at Anand and the courts at Anand shall have exclusive jurisdiction to entertain any disputes arising out of this agreement. The arbitration proceedings shall be in English.







**Section - III**

**Annex 1**







## Annex- 2

### Important Notes:

- 1. The applicant shall submit the application seeking approval /renewal for “Quality Mark” in the format given below and attach the required information as listed under enclosures.**
- 2. Separate application be made for each location of milk / dairy processing plant.**

From :

To :

National Dairy Development Board,  
Anand

Sir,

Sub: Application for approval/renewal for award of Quality Mark

We hereby apply for seeking approval/renewal for award of “Quality Mark”.  
We also submit details as listed under the enclosures.

Sr. No.	Particulars	Details
1	Name and address of the unit seeking approval/renewal ( detailed address with contact numbers and email)	
2	Name and address registered office, if any.	
3	Name of MD/GM/CEO (with contact number and email)	
4	Name and educational qualification of the key officer/s (other than MD/GM/CEO) associated with the Quality Mark certification( with contact no and email)	
5	Is the processing unit owned/leased/on rent	
6	If on lease/rent , pl provide name and	



Sr. No.	Particulars	Details
	address of the owner	
7	Month and year of construction	
8	Month and year of major alterations	
9	List of milk and milk products being manufactured at the unit for which the application is made	
10	Annual production capacity (product wise)	

Thanking you,

Yours sincerely,

List of enclosure/points with information :

1. Fees amounting to Rs 5,000.00 through a demand draft in favour of National Dairy Development Board and payable at Anand.
2. Copy of Valid License from the Food Safety Authority of India ( FSSAI) as required under the Food Safety and Standards Act 2006 and rules there under
3. Copy of valid accreditation of Quality and Food safety Management System from the certifying bodies as approved by the QCI /FSSAI.
4. Water (potability) test report that the water being used conforms to the relevant standards( IS :4251)
5. Copy of the valid clearance/approval from the concerned State Environment/ Pollution Control Board.
6. Details about Raw Milk Procurement system:
  - a. Procurement through own procurement set up or of other milk cooperatives/producer companies duly audited by the unit and by ensuring that all requirements as applicable to unit's own procurement system are being followed.
    - i. Number of Bulk coolers (capacity wise) installed and operated at village level collection centres.
    - ii. % of raw milk from village level BMCs.
    - iii. Number of conventional chilling centres with capacity of each and capacity wise number of bulk milk cooler operating as cluster BMCs.



- iv. % of raw milk from conventional chilling centres / cluster BMCs wherein a BMC receives milk from more than one DCS.
  - v. % of raw milk being procured through Cans and being received directly at the dairy plant.
  - vi. MBR time (minimum) of milk at dairy plant being received through BMC's at individual Village level [as per (a. ii) above].
- b. Percentage of raw milk being received, which is collected and handled by other vendors (pl provide details of vendors/suppliers)
7. Source of purchase of skim milk powder and butteroil for use in manufacturing.
  8. List of major processing equipment with capacity of each (pasteurisers, homogenizer, chiller, raw milk chiller, cream separators, milk packaging machines, powder making equipment). To also mention whether the equipment are being operated automatically or manually.
  9. List of manpower in top two/three levels (along with their educational qualification and experience, employed in the processing activity).
  10. List of laboratory equipments available in the laboratory and the list of tests being conducted regularly.
  11. List of laboratory manpower (top two levels) - along with educational qualifications.
  12. Methylene Blue Reduction Test (MBRT) time in minutes (minimum of year) and Standard Plate Count (SPC) in colony forming units per gram (cfu/g) (max in the year) of processed milk (after pasteurisation).
  13. Details about total number of vehicles for milk and milk products distribution, number of insulated/refrigerated vehicles etc.
  14. Details of samples taken by the FSSAI officials and details of testing thereof, whether any prosecution initiated etc.

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## Annex- 3

### Format for Preliminary Assessment along with Acceptance norms

The units which do not have required statutory clearances as mentioned in para no 6 of section II; shall not be considered for any further assessment.

Based on the information provided along with the application, a preliminary assessment shall be conducted as per details given below:

#### 1. Compilation of data

The details given in the application shall be tabulated in table as given below:

Sr. No.	Preliminary Assessment Criteria		Assessment Grade /Marks *
	Parameter	Actual Status/Value	
1	Raw milk procurement system		
1.1	Percentage of raw chilled milk coming from BMC set up either owned/controlled by the unit or by other organizations which follow the procurement system duly audited and certified by the unit.	<ul style="list-style-type: none"> <li>➤ Above 50%</li> <li>➤ 30-50%</li> <li>➤ Less than 30%</li> </ul>	<ul style="list-style-type: none"> <li>➤ Above 50% = 3</li> <li>➤ 30-50% = 2</li> <li>➤ Less Than 30% = 1</li> </ul>
1.2	MBRT time (minimum value in a year) of chilled milk from BMCs.	<ul style="list-style-type: none"> <li>➤ more than 120 min</li> <li>➤ 90 – 120 min</li> <li>➤ less than 90 min</li> </ul>	<ul style="list-style-type: none"> <li>➤ more than 120 min = 5</li> <li>➤ 90 – 120 min = 3</li> <li>➤ less than 90 min = 1</li> </ul>
1.3	MBRT time (minimum value in a year) of chilled milk from Chilling Centres (conventional) or un-chilled milk in cans at dairy dock.	<ul style="list-style-type: none"> <li>➤ more than 90 min</li> <li>➤ 60 – 90 min</li> <li>➤ less than 60 min</li> </ul>	<ul style="list-style-type: none"> <li>➤ more than 90 min = 3</li> <li>➤ 60 – 90 min = 2</li> <li>➤ less than 60 min = 1</li> </ul>
2	Processing Infrastructure and its Management		
2.1	Does the unit have proper infrastructure (past, separators etc.)	<ul style="list-style-type: none"> <li>➤ Adequate</li> <li>➤ Needs improvement</li> </ul>	<ul style="list-style-type: none"> <li>➤ Adequate = 3</li> <li>➤ Needs Imp = 1</li> </ul>
2.2	Is there adequate number of properly qualified and trained personnel ( pls. see note below)	As given below	As given below
3	Laboratory Infrastructure and its Management		
3.1	Is the laboratory set up equipment ) considered adequate	<ul style="list-style-type: none"> <li>➤ Adequate</li> <li>➤ Needs improvement</li> </ul>	<ul style="list-style-type: none"> <li>➤ Adequate = 5</li> <li>➤ Needs Imp = 2</li> </ul>



3.2	Is adequate number of properly qualified and trained manpower employed for laboratory operations ( <i>pls. see note below</i> )	As given below	As given below
4	MBRT time of processed milk Range (min. and max.)	<ul style="list-style-type: none"> <li>➤ Above 360 min</li> <li>➤ 330 – 360 min</li> <li>➤ Less than 330 min</li> </ul>	<ul style="list-style-type: none"> <li>➤ Above 360 min = 5</li> <li>➤ 330 – 360 min = 2</li> <li>➤ Less than 330 min = 0</li> </ul>
5	SPC of pasteurised milk in cfu/g (max. during year)	<ul style="list-style-type: none"> <li>➤ Less than 15000</li> <li>➤ Bet 15000 to 25000</li> <li>➤ Bet 25000 to 30000</li> </ul>	<ul style="list-style-type: none"> <li>➤ Less than 15000 = 5</li> <li>➤ Bet 15000 to 25000 = 3</li> <li>➤ Bet 25000 to 30000 = 1</li> </ul>
6	% of liquid milk being distributed/sold through insulated vehicles	<ul style="list-style-type: none"> <li>➤ 90- 100 %</li> <li>➤ 75-90 %</li> <li>➤ Less than 75%</li> </ul>	<ul style="list-style-type: none"> <li>➤ 90 – 100 % = 3</li> <li>➤ 75 to 90% = 2</li> <li>➤ Less than 75% = 1</li> </ul>
7	No of samples of products of the unit which failed on being tested by food regulators in last one year	<ul style="list-style-type: none"> <li>➤ Nil</li> <li>➤ 1</li> <li>➤ More than 1</li> </ul>	<ul style="list-style-type: none"> <li>➤ Nil = 3</li> <li>➤ 1 sample = 1</li> <li>➤ More than 1 = 0</li> </ul>

\*Note:

OK= Acceptable;  
 CD= Critical Deficiency;  
 MD= Major Deficiency;  
 MI = Minor Deficiency

### Assessment of Manpower

The desirable qualification and experience of the manpower should be as under:

S.No.	Designation	Qualification *	Marks
	Plant Manager and next in the line below (top two/three levels)	A. Minimum BSc/B.Tech. (Dairy Technology) with minimum 8 years' experience in dairy Plant B. Minimum MSc/M Tech in Dairy Technology, Dairy Chemistry, Dairy Microbiology; or M.Tech./ME in Food Technology after doing BE or B Tech in Food Technology with at least five years of experience in Dairy Units. C. Minimum BSc/B Tech (Dairy Technology) with minimum 4 years' experience in dairy Plant D. Other qualification such as B Sc /M Sc Science, Agriculture (with Dairy technology as one of subjects), with or without experience/or otherwise experienced senior managers.	If A and B = 3 If C and D = 2





	Laboratory Incharge and next level (two top levels) . The number of manpower shall depend upon level of automation etc- details to be provided.	A. Minimum MSc/MTech in Dairy Technology, Chemistry, Microbiology with 3 years' experience B. Minimum B Tech in Dairy Tech/Food Tech with min 5 years' experience C. BSc (Bio/Bio Tech/ Chemistry/ Biology and with 5 years' experience and with proper training at a reputed organisation in field of dairy lab training.	If A and B = 3 If C = 2
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Note: \*

The person holding graduation /post-graduation degree in Dairy Technology should have passed out from a reputed institutes.

## 2. Selection criteria for 2<sup>nd</sup> stage assessment

The unit will be cleared for 2<sup>nd</sup> stage of assessment (actual on site visit for inspection and records checking) in case if conforms to the following guidelines:

<b>Sr No</b>	<b>Assessment Score</b>	<b>Whether cleared preliminary Assessment and recommended for 2nd stage assessment (inspection etc.)</b>
1	Unit scores min. 70 % marks in parameters listed at Sr. No 1 to 7 ( <i>pls. also see note below</i> ).	Yes
2	Unit scores 60 to 70 % marks in parameters listed at Sr. No 1 to 7 ( <i>pls. also see the note below</i> ).	Yes, subject to unit giving assurance for improvement up to 70% marks by the time inspection takes place.
3	Unit scores less than 60% marks in parameters listed at Sr. No. 1 to 7 ( <i>pls. also see note below</i> ).	NO

Note: In case of units handling less than one lakh litres of milk per day (and having small milk procurement area) and which do not have BMC or chilling centre, the marks for Clause nos. 1.1 and 1.2 shall not be considered for calculation of percentage of marks.





**FORMAT FOR INSPECTION OF DAIRY UNIT FOR "QUALITY MARK" CERTIFICATION**

**Name of Processing Establishment:**

Address of the processing establishment:

Date of Inspection /Assessment:

S. No.	Requirement	Category	Status as observed (Yes/OK(✓)/No/ not OK (x))	Status of compliance (Y or N)
<b>1</b>	<b>General Information about technical personnel</b>			
1.1	Are adequate number of Technologists available in the establishment	Major		
1.2	Are adequate Number of Veterinarians available for handling quality and food safety aspects in Primary Production area.	Major		
1.3	Are personnel for developing, implementing and maintaining HACCP-based procedures adequately qualified and experienced. .	Critical		
1.4	Are sufficient number of supervisors/persons available (apart from the above), responsible for processing and maintenance of sanitation and hygiene in the establishment separately.	Major		
<b>2</b>	<b>Primary Production holding and raw milk collection</b>			
2.1	Whether the establishment have records to support the backward traceability.	Critical		
2.2	Are training programme organised by union/unit / through external agency for producers for CMP etc at regular interval - supported by records/ documents	Critical		
2.3	Are the surfaces of milk contact vessels/utensils used by farmer/producer to bring milk to DCS washable and non toxic (preferably SS - AISI 304)	Major		
2.4	Are effective steps taken by the unit ( education/training to producers) to prevent use of prohibited antibiotics/pharmacological substances and Chemicals at the primary production holdings.	Critical		
2.5	Are the samples (feed, water) drawn for testing /analysis to ascertain safety to human health and records maintained.	Major		
2.6	Is appropriate remedial action taken when informed of problems identified during audits/checks/routine monitoring - supported by records	Major		
2.7	Is there adequate protection from contamination from pests/insects/animals/environment at village collection centres	Major		
2.8	Do persons performing / handling of raw milk wear suitable clean clothes and maintain high degree of personal hygiene ?	Major		



S. No.	Requirement	Category	Status as observed (Yes/OK(✓)/No/ not OK (x))	Status of compliance (Y or N)
2.9	Are there suitable facilities for cleaning/ washing of hands and collection equipment .	Major		
3	<b>Premises of Unit/CC</b>			
3.1	Is the premises boundary properly constructed to prevent entry of animals etc.	Major		
3.2	Are roads -around the building- concreted or tarred or turfed?	Major		
3.3	Is the building premises free from swamps, stagnated water, dumps?	Critical		
3.4	Is the process building protected from entry of animals , pets etc	Critical		
3.5	Is the building protected /away from environmental contaminants e.g., smoke, objectionable odours, dust, etc.?	Critical		
3.6	Are the refuse collecting containers of self-closing type and located at strategic locations	Major		
3.7	Is there any documented procedure for pest control ( either by self or through outside agency)?	Major		
4	<b>Layout, design, construction, location and size of processing premises:</b>			
4.1	Does it permit good food hygiene practices, including pest control,insect etc	Critical		
4.2	Is it kept clean and maintained in good repair and condition?	Major		
5	<b>Lavatories/Toilets</b>			
5.1	Are there adequate number of flush lavatories available and connected to an effective drainage system?	Major		
5.2	Do Exhaust and door of lavatories open directly into rooms in which food is handled?	Critical		
5.3	Do the sanitary conveniences /toilets have adequate natural or mechanical ventilation .	Major		
5.4	Is there system to prevent exhaust from toilets etc to process hall or any food handling place to avoid entry of contaminated air .	Major		
6	<b>Washing facilities</b>			
6.1	Are there an adequate number of washbasins available, suitably located and designated for cleaning hands at all entry points to the food handling areas?	Major		
6.2	Are the washbasins for cleaning hands provided with detergent, disinfectant, etc. and for hygienic drying e.g. dryers, single use towels?	Major		



S. No.	Requirement	Category	Status as observed (Yes/OK(✓)/No/ not OK (x))	Status of compliance (Y or N)
6.3	Are foot disinfections facilities like foot dip provided, wherever applicable?	Major		
7	<b>Ventilation and lighting</b>			
7.1	Is there suitable and sufficient means of natural or mechanical ventilation ( sufficient exhaust fans)?	Minor		
7.2	Is there set up to prevent mechanical airflow from a contaminated area / external area to a clean area (process halls)	Major		
7.3	Are the ventilation systems so constructed as to enable filters and other parts requiring cleaning or replacement, readily accessible?	Minor		
7.4	Do the premises have adequate natural and/or artificial lighting?	Minor		
7.5	Are the lights sufficiently protected/covered?	Minor		
8	<b>Drainage facilities</b>			
8.1	Are these designed and constructed to avoid the risk of contamination to the food items	Major		
8.2	Are drainage channels properly covered as needed.	Major		
9	<b>Change room facilities</b>			
9.1	Are adequate changing facilities (change room and facilities therein), provided for personnel handling raw material, unprocessed products and processed products?	Critical		
9.2	Is there separate facility for male and female workers?	Minor		
9.3	Whether changing room facility is properly located i.e., integrated into the plant layout properly or if away whether provided with pucca road to prevent contamination from dust/dirt etc after worker leaves change room and enters process area.	Major		
9.4	Does the changing room have proper facilities - smooth walls, floors and washbasins with soaps, disposable towels and non-hand operable taps?	Major		
9.5	Whether there are arrangements for Change of footwear, Keeping street clothes separately, Lockable cupboards.	Major		
9.6	Is there suitable in-house/outside arrangement to launder the working clothes of the workers?	Major		
10	<b>Process Hall -General design and layout etc</b>			
10.1	Does design and layout permit good food hygiene practices, including protection against contamination between and during operations	Major		
10.2	Is the general working environment in process hall/ packing rooms suitable for hygienic and healthy operations - proper temperature , free of suffocation, without congestion/ cramping.	Major		
11	<b>Floors</b>			



S. No.	Requirement	Category	Status as observed (Yes/OK(✓)/No/ not OK (x))	Status of compliance (Y or N)
11.1	Is material of construction proper - mandana in process area, CI tiles in reception, kota stone / polycrrete etc in lab	Major		
11.2	Are the floors maintained in a sound condition , without damages, pot holes with accumulated water /water milk mix?	Major		
11.3	Is there water /water- milk mix accumulated on the floor due to slope/ poor cleaning.	Major		
12	<b>Walls</b>			
12.1	Are the surfaces maintained in a sound condition , free from cobwebs, seepage	Critical		
12.2	Is surface impervious, non-absorbent, washable and non-toxic material or appropriate to prevent contamination and does have a smooth surface up to a height ( approx 6 feet)?	Major		
12.3	Are there suitable arrangements ( SS railing/cladding) to protect damage to walls by equipments and other items ( trolleys etc)	Major		
13	<b>Ceilings</b>			
13.1	Is pucca ceiling provided in the entire milk processing area	Major		
13.2	Is the height of ceiling proper to allow hygienic operations and non suffocating operations( approx 5.5 mts)	Major		
13.3	Are the surfaces maintained in a sound condition , free from cowwebs, seepage, mould growth	Critical		
14	<b>Windows /doors and other openings</b>			
14.1	Are they constructed to prevent the accumulation of dirt?	Major		
14.2	Are those, which can be opened to the outside environment, where necessary, fitted with insect-proof screens, which can be easily removed for cleaning?	Major		
14.3	Are, where open windows would result in contamination, kept closed during production?	Major		
14.4	Are the doors easy to clean and, where necessary, to disinfect and have smooth and non-absorbent surfaces or appropriate to prevent contamination?	Major		
14.5	Are doors provided with automatic door closures	Major		
14.6	Are the doors provided with suitable air curtain /other arrangements to prevent entry of air when opened to prevent contamination	Major		
15	<b>Surfaces (including surfaces of equipment)</b>			
15.1	Are the outside surfaces of equipment, in general and in particular those which are in contact with milk/food , clean ( free from dried milk marks/ dust etc).	Major		



S. No.	Requirement	Category	Status as observed (Yes/OK(✓)/No/ not OK (x))	Status of compliance (Y or N)
15.2	Are these smooth, washable corrosion-resistant and non-toxic materials or appropriate preferably SS ( AISI 304)to prevent contamination	Major		
16	<b>Cleaning / sanitization facilities/Centralised CIP</b>			
16.1	Are adequate facilities provided, where necessary, for the cleaning, disinfecting of working utensils and equipment?	Critical		
16.2	Are these facilities have an adequate supply of hot and cold water?	Critical		
16.3	Are the cleaning agents and disinfectants stored separately under lock and key?	Major		
16.4	Are adequate facilities provided, for CIP , for the cleaning, disinfecting of equipment, pipes , silos etc?	Critical		
16.5	Is Centralised CIP System available? If Yes, whether of suitable capacity	Major		
16.6	Are the auto-controls working (timers, temperature controllers, valves)?	Major		
16.7	Is the effectiveness of cleansing ( absence of residual chemical ) verified periodically through laboratory tests?	Major		
<b>17</b>	<b>Plant Facilities</b>			
17.1	Are there Separate storage facilities for edible, non-edible constituents ( fuel/cleaning agents etc).	Major		
17.2	Are there Separate storage for wet and dry items	Major		
17.3	All the gauges, temperature including spares properly calibrated and in working order.	Critical		
<b>18</b>	<b>Raw Milk Reception</b>			
18.1	Is RMRD raised with sides and top sufficiently protected to prevent contamination while unloading of raw milk?	Major		
18.2	Are air curtain / fly proof mesh provided to prevent entry of flies	Major		
18.3	Are in-line filters for raw milk available?	Major		
18.4	Is the ceiling height ( min 5.5 M ) to prevent accumulation/condensation of moisture	Major		
18.5	Is there proper ventilation to prevent suffocation in the raw milk reception are ( can washer)	Major		
18.6	Are the can washing operations proper ( if can scrubber is used - are the cans cleaned properly and if can washer is used - are the cans cleaned properly and coming out dry)	Major		



S. No.	Requirement	Category	Status as observed (Yes/OK(✓)/No/ not OK (x))	Status of compliance (Y or N)
18.7	Are proper arrangements in place for cleaning, sanitisation of road milk tankers bringing chilled milk to processing unit.	Major		
18.8	Are Tanker cleaning facilities so designed to prevent contamination of fresh raw milk /food from water ( after cleaning) , detergents etc	Major		
<b>19</b>	<b>Processing Section</b>			
19.1	Are the entrances so designed to prevent entry of flies?	Major		
19.2	Is the system there so that Pasteurisation Temperature and holding time of milk. (ideally 72°C for 15 seconds for HTST) properly maintained	Critical		
19.3	Is FDV provided and whether working properly	Critical		
19.4	Are the facilities so designed to stop falling of water/water- milk mix ( from equipment/working tables) directly on the floor ( e.g., being drained through pipe).	Major		
<b>20</b>	<b>Equipments</b>			
20.1	Is the material of construction proper for milk handling/processing ( preferably SS 316)	Critical		
20.2	Are the equipments kept in clean state and properly sanitized.	Critical		
20.3	Are these provided with proper recording instruments ( temp /pressure/ flow rate)	Critical		
20.4	Are the process control equipment calibrated properly- proper records kept	Critical		
<b>21</b>	<b>Food Waste/ refuse</b>			
21.1	Are edible/ non edible By Products / waste food items removed quickly to prevent contamination.	Major		
21.2	Are edible/ non edible By Products / waste food items after removal kept at a far away place to prevent contamination.	Major		
21.3	Are the refuse storage areas free of animals,pets and pests.	Major		
21.4	Is the refuse handled in a hygienic manner as per the guidelines of pollution control deptt and also does not cause contamination to the processing area.	Major		
<b>22</b>	<b>Water</b>			
22.1	Is proper record of quality of Water used for the processing kept.	Critical		
22.2	If water obtained from external sources is tested /analysed and documented for its potability .	Major		
22.3	Does the dairy have water softening and water disinfection plant ( if needed)	Major		
22.4	Is capacity of facility ( softener/disinfection sufficient for operations	Critical		





S. No.	Requirement	Category	Status as observed (Yes/OK(✓)/No/ not OK (x))	Status of compliance (Y or N)
22.5	Is water stored in over head storage tanks protected from outside contamination?	Major		
22.6	Are such over head tanks easily accessible for cleaning; disinfection.	Major		
22.7	Is there Cleaning schedule for water storage tanks/facilities available and followed properly (by records)	Major		
22.8	Is water availability sufficient in relation to maximum daily production?	Major		
23	<b>Freezing/Cold Store Systems</b>			
23.1	Is there appropriate schedule for Maintenance, cleaning and disinfection of freezers/cold stores	Major		
23.2	Is the temperature of the freezers/ cold store recorded? If so, are the recording equipment calibrated and certified?	Critical		
23.3	Is Documentation of recordings of temperatures of the freezers/cold store available	Major		
23.4	Is the area of cold rooms sufficient for proper storage of milk and milk products ( 400 Lts/m2)	Major		
23.5	Is there proper ante room / air lock or suitable working arrangements ?	Minor		
23.6	Are the pallets made of non-absorbent materials other than wood?	Major		
24	<b>Packaging film, Packaging,pouch, crates and Storage</b>			
24.1	Is the packaging film made from virgin material.	Critical		
24.2	Is the film material fit ( food grade) for use for food items/milk and milk products	Critical		
24.3	Is there any instance of printing ink coming off the film and getting transferred to inside of film in rolls.	Critical		
24.4	Is the printing from ink approved for use for milk and milk products packet.	Major		
24.5	Is the film of proper thickness required for leak proof/ sturdy packing	Major		
24.6	Does the print matter broadly comply with the requirements of labelling requirement ( such as FSSAI licence number, type of product, use before date etc ) - as regards full compliance the unit is responsible.	Critical		
24.7	Packaging area well protected from rodents and pests	Critical		
24.8	Is the packing room hygienically maintained and free from waste film etc	Major		
24.9	Is the packaging material reused?	Critical		



S. No.	Requirement	Category	Status as observed (Yes/OK(✓)/No/ not OK (x))	Status of compliance (Y or N)
24.10	Are the packed units randomly weighed (for total weight of product and packaging material) and records maintained	Critical		
24.11	Is the temp of packed product checked periodically and records maintained.	Minor		
24.12	Are the crates of milk pouches in sound condition- without cracks, broken etc	Major		
24.13	Are the crates of milk pouches properly cleaned	Major		
24.14	Are the UV tubelights of packing machines working	Major		
25	<b>Steam and Air Supply and Effluent treatment systems</b>			
25.1	When steam / air comes in direct contact with food or food contact surfaces, is it free from substances that may (i) be hazardous to health (ii) contaminate the milk / milk products (iii) Free from oil or other such material	Critical		
25.2	Does the dairy have an working ETP?	Major		
25.3	Is capacity of ETP sufficient to take care of total load.	Major		
25.4	Does the discharged effluent comply with the statutory requirements in force (BOD, COD, etc)?	Critical		
25.5	Is smell observed near the ETP	Major		
26	<b>Maintenance/Calibration schedules</b>			
26.1	Is there a documented procedure for the maintenance of different sections of the dairy/ equipments/ plant and machinery/ laboratory items?	Major		
26.2	Is there a documented procedure for the calibration of instruments/gauges/ in different sections i.e. Engineering, Processing and laboratory?	Major		
27	<b>Quality Assurance systems and Laboratory Procedures</b>			
27.1	Are the certified QA systems of ISO and HACCP/FSMS ( ISO-HACCP - IS 15000/ ISO 22000 ) in place?	Critical		
27.2	Are the breakdowns /malfunctions/ Product failure recorded and proper traceability system in place?	Major		
27.3	Is there proper arrangement for pest, vermin control .	Critical		
27.4	Is there a separate laboratory ( away from main building) for pathogen testing or alternatively, pathogen testing are being done at outside labs at regular intervals.	Critical		
27.5	Is laboratory in good condition , having shelf / working table with acid resistant tiles in acid handling area.	Major		
27.6	Is working area on shelf / working table in good condition- not affected by acid .	Major		



S. No.	Requirement	Category	Status as observed (Yes/OK(✓)/No/ not OK (x))	Status of compliance (Y or N)
27.7	Are proper facilities there for compositional and chemical analysis	Critical		
27.8	Are proper facilities available for Microbial testing/ analysis	Critical		
27.9	Are personnel responsible for conducting microbiological and chemical analysis properly qualified/trained.	Major		
27.10	Are the proper sampling procedures followed for testing of raw material, in process and finished goods.	Major		
27.11	Is proper testing done on the raw material, in process materials and finished goods and records maintained.	Major		
28	<b>Personnel health and hygiene</b>			
28.1	Is the health of persons employed in processing section, milk products manufacturing, packaging, handling checked regularly so that they are disease free and fit to work in milk and milk products unit - health records verification.	Critical		
28.2	Is there any system/mechanism in place for checking hygiene and cleanliness of operators/workers on daily basis - supported by records/ documents	Critical		
28.3	Are the persons in milk process plant follow hygienic practices ( as per the observation of team )	Critical		
28.4	Is there a system to prevent any other person (from other departments) - suffering from contagious disease , open cuts, wounds, etc - coming in close proximity of milk processing /products handling area .	Critical		
29	<b>Transport vehicles for distribution</b>			
29.1	Are the vehicle kept in a clean condition	Critical		
29.2	Are all the vehicles used for distant places ( say more than 30 kms) insulated and covered	Major		
29.3	Are vehicles used within city or up to 30 kms insulated or properly covered.	Major		
30	<b>Retail Outlets/Points</b>			
30.1	Is the establishment owned (Booth or parlour) or leased retail outlet has hygienic surrounding ( free from Garbage, away from open drain etc)	Major		
30.2	Is the general hygiene inside the premises satisfactory.	Major		
30.3	Are the inside walls , ceiling etc free of cobwebs.	Minor		
30.4	Is the personal hygiene of retailer OK /proper	Minor		
30.5	In case of temporary/make shift retail out for liquid milk ; is any shade provided over crates and milk pouches.	Major		
30.6	Are there adequate cooling/chilling facilities ( refrigerator/digicooler) with the retailer to keep unsold milk of one shift .	Major		



S. No.	Requirement	Category	Status as observed (Yes/OK(✓)/No/ not OK (x))	Status of compliance (Y or N)
30.7	Is the behaviour of retailer with customers courteous and respectful	Minor		
31	<b>General feedback from customers</b>			
31.1	Does the establishment have proper and easy system to receive and resolve consumer complaints ( Email other than one with conditionalities through web site link, responsive telephone no).	Critical		





## **Recommended Infrastructural Facilities and Operational Parameters/Practices**

### **A. Milk production, and collection /handling of raw milk**

#### **1. Primary Production Holding**

The quality and food safety aspects of raw milk are influenced by a number of factors such as – nutrition, management, health status of milch animal, environment etc. Therefore, it is necessary that proper care is taken at the primary production holding and the guidelines and procedures prescribed by the Codex as per “Code of Hygienic Practice for Milk and Milk Products” are effectively followed.

The processing unit should be in a position to exercise effective control on the primary production holding to ensure that the quality and food safety aspects of the raw milk are taken care. The unit should arrange for providing training to milk producers to follow recommended practices for milch animal upkeep and adopting hygienic practices and records of such trainings shall be maintained properly.

In addition the unit should undertake periodic audit of primary production holdings to ensure that the recommended hygienic practices are followed.

#### **2. Collection and transportation of raw milk to processing unit**

2.1 As Raw Milk is highly perishable in nature; care should be taken during milk collection, storage and transportation to the processing unit so that the quality and food safety of milk are not compromised.

##### **i. At village collection level**

The care to be taken at the village level collection centre to include:

- a. Proper location, building quality so as to prevent contamination from chemicals, insect/pest, biological and other hazardous substances.
- b. Use of proper milk collection equipment's – preferably from SS (as per AISI 304 grade).
- c. Proper cleaning and sanitation of milk storage vessels (cans).
- d. The practical (as far as possible) arrangements for cooling the milk including use of suitable technologies (BMCs).



- e. Proper personal hygiene and cleaning /sanitation protocol at the centre.

## **ii. Transportation of milk to milk processing unit**

The transportation of raw milk to processing unit shall be done in clean vehicle/insulated milk tanker to avoid any chemical/biological contamination the raw milk. Adequate precautions also need to be taken to ensure that integrity of milk is maintained.

## **B. Processing unit**

### **3. Location and Surroundings**

- 3.1 The establishment shall be so located that neighbouring buildings or operation and land use present no source of potential contamination for the hygienic operation of the facility. The establishment shall be located in an area away from objectionable odours, smoke, dust, other contaminants including flooding; or near-by slaughter houses.
- 3.2 The surrounding shall be reasonably free from objectionable odours, smokes, dust and other contaminants. The establishment shall be reasonably away from sewage treatment plants, sewage pump stations, cemeteries, cement factories and or other chemical factories.
- 3.3 The premises shall be kept clean and roads in the premises shall be concreted / tarred or turfed to prevent windblown dust, formation of soil and water mix.
- 3.4 There shall not be any stagnant water or signs of any rodent harbourage inside the premises.

### **4. Constructions and Layout of building of Plant**

- 4.1 The establishment shall be housed in a building of permanent nature affording sufficient protection from the environment and shall be of sufficient size for the work to be carried out under hygienic conditions.
- 4.2 The design and layout shall be such as to preclude contamination.
- 4.3 The layout of different sections shall be such as to facilitate smooth and orderly flow of work and to prevent possible cross contamination and backtracking. All the milk products handling areas shall be separate from areas used for residential purpose.
- 4.4 There shall be adequate lighting and ventilation and light fixtures shall be protected with proper covering.
- 4.5 The layout shall ensure sufficient space in different sections for



machinery, equipment, personnel etc. without congestion.

- 4.6 The building shall provide sufficient protection against the entry and harbourage of rodent, insects, milch animals, other animals etc.
- 4.7 All the entry points shall have suitable air curtains or other suitable arrangements to prevent the entry of flies.
- 4.8 Non-operative areas inside the establishment shall be properly cordoned off to avoid possible cross- contamination.

## **5. Hard Park for receipt of vehicles for milk delivery by cans/other Vehicles**

The hard park area should not be '*kachha*' but properly cemented and should have proper slope and arrangements for drainage which does not cause contamination of raw milk, finished products etc.

## **6. Milk receiving section**

- 6.1 There shall be a raised platform for receiving the material and the sides and roof of the platform shall be so constructed to provide protection from extraneous contamination.
- 6.2 The outside of the platform should be provided with sufficient protection to avoid vehicles hitting the platform and damaging.
- 6.3 The raw milk receiving section shall be sufficiently separated from processing area to prevent contamination.
- 6.4 Signboards directing the employees to wash and sanitise hands before entering and after each absence shall be installed.
- 6.5 Air curtains/fly killers shall be installed to prevent the entry of flies when the door is opened.

## **7. Tanker Cleaning infrastructure**

The unit should have proper infrastructure for:

- a. Cleaning of outside the tankers, wheels / tyres etc. before these enter the milk reception/unloading area so that dirt and dust do not contaminate the milk and milk products.
- b. Cleaning and sanitation of the tanker including milk contact surface of barrel, hose pipe, pump etc. after unloading of milk.

## **8. Floors, walls and Ceiling**

- 8.1 The floor of the processing areas shall be smooth, impermeable and easy to clean and disinfect. There shall be no water stagnation on the floor.



The floor shall have sufficient slope opposite to the flow of work or sideways.

- 8.2 The wall to floor and wall-to-wall junctions shall be rounded off to facilitate easy cleaning.
- 8.3 The walls should be durable, smooth, light coloured and easy to clean and disinfect. The walls should preferably have glazed tiles/ other tiles up to a height of minimum six feet.
- 8.4 The walls should not have projections and the entire fitting on the wall shall be made in such a way so as to clean and disinfect them easily. If possible, the electric switches or other fittings shall be fixed in areas where no handling of milk product is carried out.
- 8.5 The walls and pillars should be suitably protected (by SS ring/cladding) to prevent damage by equipment hitting these.
- 8.6 The ceiling shall be free from cracks and open joints and shall be smooth and easy to clean.
- 8.7 If structural elements or fittings are suspended below the ceiling, suitable protection shall be given to prevent falling of debris, dust or bird dropping.

## **9. Doors, Windows, Ventilators, Stairs, Platforms and Stands**

- 9.1 All the doors shall be tight fitting and the windows and ventilators shall have fly proofing nets to prevent the entry of flies.
- 9.2 All doors and windows shall be durable and made of corrosion resistant material and windowsills, if any, shall slope inwards. The windows/ ventilators shall be constructed at least one meter above the floor.
- 9.3 The doors shall be of self-closing type.
- 9.4 Open windows are not permitted in areas where food is exposed, processed or packed.
- 9.5 Mechanical ventilation/ exhaust fans shall be provided in areas where stagnation of air, condensation of fluid etc. are present.
- 9.6 The opening of ventilation/ exhaust fan shall be provided with suitable fly proofing system.
- 9.7 Stairs, catwalks, platforms, stands, ladders and the like in processing areas shall be of a construction and material that is impervious, non-corroding, easy to clean and impact resistant. These should be situated and constructed so as not to cause contamination of food processing





areas, equipment and product by allowing potential contaminants falling onto them.

## **10. Drainage**

- 10.1 There shall be adequate drainage facility and slope of the drainage shall be opposite to the flow of work/material.
- 10.2 The open end of the drainage shall be protected against the entry of rodents.
- 10.3 The drains shall be of adequate size having sufficient slope for easy cleaning.
- 10.4 All drains shall:
  - be provided with AMUL type trap
  - have adequate access for cleaning
  - Where necessary, be adequately vented to the exterior of the building.
- 10.5 Floor drains shall not be connected to drains from toilets.
- 10.6 Floor drains should not be connected to the storm or rain water drainage system. Where this occurs they shall be designed and maintained in a manner to ensure that flooding of the premises cannot occur due to back-flow.

## **11. Tables, Utensils, Equipment's & Machineries**

- 11.1 All the utensils and equipment shall be made of non-corrosive material (SS as per ISI 304) and shall be smooth without cracks and crevices and easy to clean and disinfect.
- 11.2 All food contact surfaces shall be free from rust and paints.
- 11.3 Suitable arrangements shall be made to drain the water from the tables directly into the drainage without falling on the floor.
- 11.4 Freezing equipment shall be suitable to freeze milk products and shall achieve the required core temperature within the stipulated time. The equipment shall be fitted with necessary gauges to indicate the temperature, pressure etc. The recording devices shall be calibrated at specified intervals.
- 11.5 Pasteurisers of suitable capacity having capability to maintain required temperatures and time shall be provided with automatic calibrated temperature devices.
- 11.6 Milk products store rooms shall be clean having smooth floor, walls



and roof and shall have suitable mechanism to control the temperature, if required.

11.7 Spray drying facility shall be equipped with approved air filters.

## **12. Chill Rooms & Cold Storages**

12.1 Chill rooms/storage tanks/silos having adequate size with mechanical refrigeration system to maintain temperature at the required level (0°C to 4°C) shall be provided in the processing section or outside.

12.2 The cold storage shall have suitable refrigeration system to maintain the required product temperature.

12.3 The floor, ceiling and walls of the cold storage and other storage rooms shall be smooth and easy to clean and disinfect.

12.4 Proper steps shall be taken to avoid contamination of the materials stored.

12.5 There shall be adequate lighting with protective covers.

## **13. Change Rooms and Toilets**

13.1 Adequate number of change rooms for workers shall be provided for high risk and low risk areas.

13.2 The change rooms shall be of adequate size having smooth washable walls and floors.

13.3 There shall be flush lavatory and the lavatories shall not open directly to the working area.

13.4 The change rooms shall have foot-operated washbasins provided with adequate soap and single use towels. There shall be a foot operated waste bin to collect the used towels.

13.5 There shall be lockable cupboards and facility for keeping gumboots, shoes and chapels inside the change room.

13.6 Suitable arrangements shall be made by the establishment to launder the working clothes of the workers.

13.7 The toilets shall have self-closing doors and proper fly proofing system.

13.8 Toilets and toilet area should be adjacent but separate from change room and at the same time shall be integrated with the processing facility but completely separated from handling areas and not open directly onto these areas. These should be :

- designed to ensure hygiene removal of waste matter



- well lit, ventilated and maintained clean at all times.

a. The number of toilet bowls to be provided is as follow:

<u>No. of persons</u>	<u>No. of bowls</u>
1 to 9	1
10 to 24	2
25 to 49	3
50 to 100	5
For each additional 30 persons (in excess of 100 persons)	1 (additional bowl)

In male toilets, urinals can substitute for toilet bowls for up to 1/3<sup>rd</sup> of the total toilets required.

- 13.9 Entrance to toilets from processing areas shall be either through an intervening change room or an airlock that is vented to external air.
- 13.10 Doors for toilet cubicles where they are not in a separate toilet room must be self-closing and tight fitting.

#### **14. Workers entry points**

- 14.1 Suitable washing and sanitizing facilities for feet and hands shall be provided at the entry points.
- 14.2 The washbasins shall be provided with foot operable taps or non-hand operable taps.
- 14.3 Liquid soaps, disinfectants, single use towels / hand dryers etc. shall be provided in sufficient quantities at all entry points.
- 14.4 Waste bins provided for collecting used towels shall be of foot-operated type.

#### **15. Store rooms**

- 15.1 There shall be separate stores for wet and dry items and the chemicals/ disinfectants should be properly labelled.
- 15.2 Packing material store shall be of adequate size with proper fly and dust proofing system.
- 15.3 Cartons shall be kept on cleanable pallets other than wood, away from the walls and covered properly. There shall be enough space for a person to walk around.



15.4 Pest and rodent control measures shall also extend to the storerooms.

## **16. Water**

16.1 Water used in the factory shall be of potable nature and shall meet statutory requirements as applicable (IS: 4251).

16.2 Potable water shall be used also for cleaning utensils, machinery, tables etc.

16.3 A suitable water management system shall be followed and this shall include use of plumbing diagrams showing the entire reticulation of the water, identifying each tap with consecutive numbers.

16.4 Water store tank, both ground level and overhead, should be well protected and cleaned regularly.

16.5 The taps having hose connections shall be fitted with non- return valves.

16.6 The water tanks shall be cleaned regularly as per SOP as per pre-decided frequency.

16.7 If water is brought from external source i.e. mobile water tankers, it should be cleaned and disinfected periodically.

## **17. In-house laboratory**

17.1 The establishment shall have a well-equipped in house laboratory for testing microbiological and other chemical parameters.

17.2 The testing shall be done by qualified and trained lab persons/veterinarian/ technologist (s).

## **18. Transportation facilities**

18.1 The establishment shall have suitable and adequate facilities for the transportation of raw material, finished products etc.

18.2 The food contact surfaces of the vehicles shall be made of non-corrosive material (Stainless Steel - as per AISI 304); it shall be smooth, and easy to clean and disinfect.

18.3 Vehicles shall be maintained properly and records maintained thereof.

## **19. Self-owned retail outlets**

The area around self-owned/operated retail outlets shall be clean and free from filth, dust etc. (as per Section 1 above)



## **20. General Maintenance of Facilities**

- 20.1 Buildings vessels, equipment, utensils, refrigeration and all other facilities of a processing including drains shall be kept in good repair in a clean and orderly condition.
- 20.2 Repairs shall be carried out as soon as possible without interference to handling and processing.
- 20.3 In case of major repairs and or maintenance, which may affect the safety or contaminate the product, production shall be stopped so as carry out the repairs and or maintenance.
- 20.4 There shall be a documented procedure for maintenance of all sections, equipment, machineries etc.
- 20.5 The machineries/ equipment's shall be marked with suitable identification numbers.
- 20.6 The building should be whitewashed regularly as per the schedule.

## **21. Cleaning and Sanitizing**

- 21.1 All chemical compounds used as cleaners, sanitizers, soaps, detergents, shall be of standard make.
- 21.2 Cleaning should be carried out immediately after the end of work for the day or at such times as may be appropriate/ documented to maintain hygienic conditions, floors including drains and additional structures, processing equipments and wall of food handling areas must be thoroughly cleaned.
- 21.3 To prevent the contamination of food equipments, utensils and food contact surfaces shall be cleaned as frequently as necessary as per the documented procedures.
- 21.4 These should be sanitised when there is a risk of contamination but not less than daily.
- 21.5 Food contact surface must be adequately rinsed after the use of any detergents prior to handling of the food.
- 21.6 Adequate precautions shall be taken to prevent food from being contaminated during cleaning or sanitising of rooms, equipment or utensils.
- 21.7 Detergents and sanitizers shall be suitable for use in food handling areas and not impart any flavours, odours or leave toxic residues.
- 21.8 Detergent and sanitizers shall be diluted for use according to the manufacturer's instructions.



- 21.9 Cleaning personnel shall be trained in handling and use of cleaning without cross-contaminating the products and or food contact surfaces.
- 21.10 Staff change room, shower room, toilets and cafeteria, shall be kept clean at all times.

## **22. Hygiene Control Program**

- 22.1 A documented predetermined cleaning and sanitation program shall be in place at each facility.
- 22.2 All cleaning personnel shall be suitably trained in cleaning and sanitising techniques.
- 22.3 All cleaning operations shall be carried out under the adequate supervision of designated personnel.
- 22.4 All cleaning and sanitation procedures shall be monitored, verified and records maintained.
- 22.5 Monitoring effectiveness: Cleaning and Sanitation system should be monitored daily/as per schedule for effectiveness, periodically verified by means such as audit, preparation inspections or where appropriate microbiological testing of environment and food contact surfaces and regularly reviewed and adapted to reflect change circumstances

## **23. Personal Hygiene**

- 23.1 Unhygienic behaviour that can result in the contamination of food products such as chewing, eating, spitting, scratching of body parts with hands, putting fingers in nostrils, ears etc. shall be avoided inside the facility, specifically in processing/product manufacturing and handling area.
- 23.2 A person shall be made responsible for maintenance of personal hygiene and health status of the workers.
- 23.3 The employees engaged in processing activities shall be free from communicable diseases, open sores and wounds.
- 23.4 They shall be medically examined periodically and unit shall maintain individual health cards issued by an approved medical officer showing that they are fit to handle food products and suitable to work in milk processing plant.
- 23.5 Smoking should be strictly prohibited in the entire premises including office area.
- 23.6 All personnel shall wash and sanitise their hands:



- prior to entering the processing areas
  - immediately after using toilet
  - after handling dirty or contaminated materials
  - after undertaking cleaning procedures – involving handling of sanitizers and similar cleaning chemicals
  - after handling food, ingredients and items used in food handling immediately after handling any material that may be capable of transmitting contaminants.
- 23.7 Prophylactic injections shall be administered to the employees and record maintained thereof.
- 23.8 Communicable diseases in their homes shall also to be notified and the employee shall be medically examined after each absence due to illness.
- 23.9 All workers shall be provided with sufficient sets of clean work dress and headgears.

#### **24. Inedible By-products and Materials**

- 24.1 Inedible by products shall:
- be stored so as to avoid contaminating food for human consumption
  - be removed from the food preparation area as often as necessary to avoid cross contamination
- 24.2 All equipment used for the disposal, storage and treatment of wastes or inedible material shall be clearly identified, stored separately and not used for edible material.
- 24.3 Cleaning and sanitising of utilities and equipment for in-edible materials shall be carried out in a physically separate area.

#### **25. Storage and Disposal of Waste**

- 25.1 Provision shall be made for the storage of waste and inedible material prior to the removal of waste from the factory.
- 25.2 Waste storage facilities shall be:
- away from the processing area
  - designed to prevent access to waste by pests
  - designed to avoid contamination of food, potable water and equipments



- 25.3 Waste shall be removed from food handling areas and other facilities either at the end of the shift or when the containers are full.
- 25.4 Immediately after the disposal of waste, receptacles used for the storage and any equipment which has come into contact with the waste shall be cleaned and sanitised.
- 25.5 The waste storage area shall be kept clean.
- 25.6 All waste disposal bins shall be foot operated with tight-fitting lids.

## **26. Pest Control**

- 26.1 There shall be a documented pest control and monitoring programme concentrating more on the prevention rather than eradication.
- 26.2 There shall be an effective and continuous schedule for the prevention, detection control and eradication of pests.
- 26.3 Pest control shall not constitute a hazard to human health and product safety.
- 26.4 Control measures involving treatment with chemicals shall only be undertaken by trained and competent personnel. Trained and competent personnel should have complete understanding of the health hazards these chemicals may pose to the product and human.
- 26.5 Accurate and legible records of the location and frequency of pest control measures shall be kept and made available to the Team for verification.
- 26.6 A bait map shall be kept and made available on request for verification.
- 26.7 Where pest control is entrusted with an outside professional agency or contractor, the effectiveness of the pest control program shall be monitored by responsible personnel in the facility and records shall be maintained for corrective action / preventive action in case of failures. The details of the inventory of the pest control chemicals used by the pest control personnel shall be available for verification of their suitability and minimised and the hazard due to pest chemicals are under control.

## **27. Storage of Hazardous Substances**

- 27.1 Pesticides, cleaning agents or other substances which could represent a hazard to health and food shall be suitably labelled with a warning about their toxicity and use and care be taken to avoid the chemicals contaminating food, food contact surfaces and ingredients.
- 27.2 Hazardous substances shall be stored in rooms or cabinets used only





for that purpose and handled only by authorised and properly trained persons.

- 27.3 Wet and dry chemicals shall be stored separately to avoid accidental mixing due to leakage or spillage.
- 27.4 No substances which could contaminate food may be used or stored in food handling areas or be stored with any product, ingredients or product packaging materials.
- 27.5 The detergent/disinfectant in use inside the processing facility shall be located at a designated place and labelled legibly. The same shall not be stored in any food containers.

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## Draft of agreement for Quality Mark

### AGREEMENT

This agreement is made at Anand this ..... day of ..... between National Dairy Development Board a body corporate constituted by an Act of Parliament called the National Dairy Development Board Act, 1987 (37 of 1987) having its registered office at NDDB Campus, Anand 388001, Gujarat (hereinafter to as the NDDB), which expression shall, wherever the context so admits, include its executors, administrators, successors and assigns of the part.

AND

M/s. =====Federation a Cooperative Society registered under the ===== Societies Act, 1969 having registered office at =====(hereinafter referred to as FEDERATION) , which expression shall, wherever the context so admits, include its executors, administrators, successors and assigns of the part.

AND

M/s. ===== Milk Producers UNION Ltd, under ===== Cooperative Societies Act, 1969 having registered office at =====(referred to as UNION) , which expression shall, wherever the context so admits, include its executors, administrators, successors and assigns of the part.

WHEREAS the NDDB is the owner of a trademark known as Quality Mark applied for registration before the Trade Mark Registry at Ahmedabad, ..... Vide application No...2955732 under class No. 29 for milk and milk products (hereinafter referred to as “Quality Mark”).

WHEREAS the UNION is carrying on business of manufacturing and marketing of milk and milk products desires to use the said “QUALITY MARK” for sale of the milk and milk products manufactured/ marketed by the UNION.

WHEREAS the FEDERATION is apex body of the above UNION and also desires said UNION to use the said “QUALITY MARK” for sale of the milk and milk products manufactured/ marketed by the UNION.

WHEREAS the NDDB permits the UNION to use “QUALITY MARK “on the milk and milk products pack, retail outlet design retail sign ages, press advertisement etc., under non-exclusive license basis.

NOW IT IS AGREED BY AND BETWEEN PARTIES HERETO AS FOLLOWS



1. The NDDB hereby permits the UNION to use the said “QUALITY MARK” for sale of milk and milk products now being wholly manufactured/ marketed by the UNION at a consideration ( user fees) of Re. 2 .00 / 10,000 lts of liquid milk or raw milk in case of milk products. This consideration amount shall be paid on quarterly basis i.e., in months of April, July, October and January of the year. The mode of payment shall be demand draft/ at par cheque/ electronic money transfer in favour of National Dairy Development Board, Anand.
2. The UNION will sell the milk and milk products in their own brand name and in their own pack design with the logo of Quality Mark as agreed among the Federation, UNION and NDDB.
3. Henceforth, the ‘Trade Mark ’ , which is applied for registration by of the NDDB under the Trade Mark Act can be incorporated /propagated as the “QUALITY MARK” by the UNION/Federation for all generic advertisement campaign and promotions for milk and milk products for which Quality Mark has been awarded , including in retail outlet designs etc .
4. The Federation and UNION shall not assign or cause to assign the said “QUALITY MARK” or allow it to be used by any other party or for any other product for which Quality Mark has not been awarded. The Federation and UNION will ensure and take all care and caution whereby the reputation of the “QUALITY MARK” is not jeopardised. If any person/party is found to infringe the said “QUALITY MARK” the Federation and /or UNION shall initiate infringement proceeding against the defaulter under intimation to the NDDB.
5. The Federation and Union shall be responsible for compliance of all the provisions of quality norms as per the prevailing Acts related to Food Safety and Standards in India and also other statutory compliance under any other applicable law as per the State and/ or Central Governments. The User shall be wholly & solely responsible for maintaining quality of the products as per standards of Food Safety and Standards Act, 2006 & (Food Standards and Food Additives) Regulations 2011 as amended from time to time. The User shall be responsible for taking necessary licenses, permissions, approvals etc., from the concerned authorities of Central/State Government departments including appointment and filing of nomination and obtaining license under the Food Safety and Standards Act, 2006 & Rules/Regulations, 2011 & The Legal Metrology Act, 2009 & Rules, 2011 and as per other applicable laws for the Dairy Industry in India



The Federation and Union shall indemnify NDDB against any losses costs etc., in case of any action being initiated against NDDB by any other person/authorities on account of failure to comply with quality and quantity norms as per the prevailing Act and rules made by the Government from time to time.

6. The unit shall use suitable food grade packaging material fit for maintaining the integrity, hygiene & sanitation and quality features of the packed products during storage, transportation and distribution up till retail point.
7. The Federation and UNION shall ensure that the product delivered to the consumer complies with all the requirements as per prevailing Food Regulations in the country. The federation and UNION shall ensure that the following are also complied within one year after signing this agreement.
  - i. To sell all liquid milk from shops /booths/institutions/organised home delivery system which ensures delivery of milk and milk products to consumers in a manner ensuring no deterioration in food safety and quality aspects.
  - ii. To use insulated/refrigerated vehicles and ensure cold chain required for specific milk and milk products from the despatch dock till the end consumer

The Federation and UNION shall furnish to NDDB proper time schedule so as to reach standards laid down herein above (7.i and 7.ii)

8. Quality auditors / technical experts of NDDB from time to time at its discretion shall visit and inspect the units awarded with Quality Mark. The Federation and UNION shall allow free ingress and egress to the quality auditors and technical experts of the NDDB to its plant/offices at all times and make all records available for inspections. In case of non-compliance of the quality parameters in terms of this agreement by the UNION; the NDDB official would recommend corrective actions to be implemented by the Federation and UNION with in the stipulated time period. In case the unit/union fails to take required corrective action within stipulated time period ; the NDDB shall be free to initiate suitable action including withdrawal of the Quality Mark.
9. The retail outlets /hoarding/glow signs/wall painting shall be painted and kept neat and clean to create a positive image of the Federation and UNION and the symbol/logo of Quality Mark.



10. The NDDB would bear the cost of Management of the Quality Mark Logo such as registration expenses , press ads, generic advertisement film production and its telecast etc as may be decided by the NDDB .
11. Any of party to this agreement would have the right to terminate this agreement by giving at least one month notice to the other without assigning any reason.
12. In case of noncompliance to the terms specified herein, NDDB shall exercise the right to withdraw the use of the Quality Mark /Trade Mark. On receiving such written intimation the Federation/UNION shall immediately stop and cause stoppage of the use of the said “QUALITY MARK” on pack design on the Federation/UNION’s milk packs, retail outlet, distribution vans all advertisements at Federation and UNION’s cost.
13. In the event of any dispute and differences in interpretation or operation of any clause of this agreement, it would be settled by mutual negotiations, failing which the matter would be referred to Managing Director, NDDB or the nominee appointed by the Managing Director for arbitration and final decision. The decision of the Managing Director, NDDB or nominee, under the provisions of The Arbitration and Conciliation Act, 1996 or any amendments thereof from time to time, shall be final and binding on the parties. The venue of the arbitration shall be at Anand and the courts at Anand shall have exclusive jurisdiction to entertain any disputes arising out of this agreement. The arbitration proceedings shall be in English.
14. Jurisdiction for this agreement would vest with the Courts situated at Anand, State of Gujarat only.

IN WITNESS WHEREOF THE PARTIES hereto have put their respective hand the day and year first hereinabove written.

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