



## **BUREAU OF INDIAN STANDARDS**

### **CONFORMITY ASSESSMENT SCHEME FOR MILK AND MILK PRODUCTS**

#### **Foreword**

The Conformity Assessment Scheme for Milk and Milk Products [Scheme-IX of BIS (Conformity Assessment) (Sixth Amendment) Regulations, 2021] focuses on the certification of milk and milk products along with certification of process requirements and Food Safety Management System (FSMS) implemented by the dairy unit in order to improve safety and quality. BIS has developed this novel and first of its kind certification scheme for milk and milk products considering the perishable nature and short shelf-life of milk and milk products, as well as the extensive cold-chain involved in the production and supply of milk and milk products.

During the development of this scheme, assistance has been taken from the 'Quality Mark' certification scheme of National Dairy Development Board (NDDB) for milk and milk products.

Clause No.	Title
1.	<p><b>Scope</b></p> <p>This scheme covers requirements of conformity assessment of milk and milk products for grant of BIS licence in accordance with <i>Scheme-IX of BIS (Conformity Assessment) (Sixth Amendment) Regulations, 2021 for Grant of licence to use or apply Standard Mark for goods and articles conforming to Indian Standard(s) combined with conformity of management system to Indian Standard and conformity of process requirements</i> to be read in conjunction with the of BIS (Conformity Assessment) Regulations, 2018 operated under the provisions of Bureau of Indian Standards Act 2016.</p> <p>Under this scheme, licence(s) may be granted by the Bureau to a dairy unit/ organization–</p> <ol style="list-style-type: none"> <li>a) When compliance of Food Safety Management System implemented by a dairy unit/ organization to the requirements given in IS/ISO 22000 is demonstrated*,</li> <li>b) When conformity of milk and milk products to the corresponding Indian Standards is established, and</li> <li>c) When compliance of process parameters as prescribed in this scheme is demonstrated.</li> </ol> <p><b>Note-1:</b> Activities, processes, products or services that can have an influence on the food safety of the end products shall not be excluded from the scope of Food Safety Management Systems certification in accordance with Clause 9.1.1 of ISO/TS 22003.</p> <p><b>*Note-2:</b> In case a dairy unit/ organization applying for certification under this scheme is holding a valid Food Safety Management System certification as per IS/ISO 22000 issued by an NABCB accredited certification body may be accepted as demonstration of compliance. Provided that:</p> <ol style="list-style-type: none"> <li>1. The applicant shall submit proof of satisfactory performance of certification annually, and</li> <li>2. Undertake to apply for re-certification to BIS.</li> <li>3. Scope of FSMS certification includes all milk and milk products for which the application is made.</li> </ol> <p><b>Note-3: For Dairy units who have been awarded NDDB's quality mark-</b> Since these dairy units have demonstrated compliance to the requirements as prescribed in the Guidelines for award of Quality Mark and have also demonstrated compliance to process requirements, the licence can be granted under this scheme if:</p> <ol style="list-style-type: none"> <li>i) conformity of products to the relevant Indian Standards is established either through in-house test reports or test reports from BIS recognized/ empaneled third party laboratories;</li> <li>ii) Verification of manufacturing facility, testing facility and competence of QC personnel.</li> <li>iii) Wherever the dairy unit is not holding FSMS certification, assessment and audit of FSMS also.</li> </ol>
2.	<b>Processes of the scheme</b>
2.1	<p><b>Application-</b></p> <p>The dairy units/ organizations desirous of certification may submit application to respective Regional Office in the prescribed application form along with relevant documents and fees.</p> <p>Pre-requisites for a dairy unit to be eligible for applying for certification:</p>

	<ol style="list-style-type: none"> <li>1. The unit shall hold valid Licence from Food Safety and Standards Authority of India (FSSAI) as required under the Food Safety and Standards Act, 2006 and Regulations there under.</li> <li>2. The unit has established an inspection and testing plan for each product to be covered under the scope of this certification scheme. Wherever Scheme of Inspection and Testing plan has been developed by the Bureau, it is recommended that the same shall be adopted by the manufacturer.</li> <li>3. The unit has implemented a Food Safety Management System in accordance with IS/ISO 22000.</li> <li>4. The unit has established process requirements as specified in Annex-II of this scheme.</li> <li>5. The milk and milk products are conforming to the relevant Indian Standards. The conformity may be established through testing in a BIS recognized/ empaneled laboratory or testing in manufacturer's laboratory or a combination of both.</li> <li>6. Water being used as an ingredient shall comply with IS 10500 (Drinking Water- Specification).</li> <li>7. Process water being used for general operations such as washing, flushing, boiler feed, indirect cooling, etc shall comply with IS 4251 (Quality tolerances for water for processed food industry)</li> </ol> <p>Note- Testing of various milk and milk products for demonstrating conformity to relevant Indian Standards shall be in accordance with the sampling/ grouping guidelines as given in respective product manuals.</p>
<p><b>2.2</b></p>	<p><b>Application Review</b></p> <p>The application is reviewed by the Management Systems Certification Officer in the Regional Office (MSCOR). The Bureau may call for required documents and/or any supplementary information and/or any documentary evidence from the applicant in support of or to substantiate any statement made in the application, within such time as may be directed by the Bureau and non-compliance with such direction may result in the application being summarily rejected by the Bureau. If the documents and/or information and/or evidence furnished by the applicant are found to be satisfactory, the application may be recorded and processed for grant of licence.</p> <p>Following the review of application, decision to accept or decline an application shall be taken and documented. Provided that, before rejecting any such application, the applicant shall be given an opportunity to remove, within twenty-one days of the date of receipt of relevant communication from the Bureau, such objections as may be indicated by the Bureau. Decision shall also to be communicated to client.</p>
<p><b>2.3</b></p>	<p><b>Audit Programme</b></p> <p>An audit programme for the full certification cycle is developed to clearly identify the audit activities required to demonstrate compliance to requirements prescribed herein. The audit programme for certification cycle covers Stage 1, Stage 2 audit and surveillance audit for the first and second years following the certification decision, and a re-certification audit in the third year prior to expiration of certification.</p> <p>The first certification cycle begins with certification decision after satisfactory Stage I and Stage II audits. Subsequent cycle begins with re-certification decision.</p>

<p><b>2.4</b></p>	<p><b>Determining the Audit Time</b>  Audit time is calculated based on the following</p> <ul style="list-style-type: none"> <li>a) Time taken for auditing Food Safety Management System (applicable only for units applying for FSMS also. For units already holding valid and accredited FSMS certification, audit time does not include time taken for auditing FSMS. However, when the organization shifts their FSMS to BIS, the audit duration for recertification audit is taken);</li> <li>b) Time taken for verification of manufacturing machinery, testing equipment and inspection &amp; testing plan;</li> <li>c) Time taken for visit to collection center/ chilling center, etc as applicable for establishing compliance to process parameters; and/ or</li> <li>d) Any additional time required for testing of milk and milk products in the manufacturer's laboratory.</li> </ul>
<p><b>2.5</b></p>	<p><b>Planning of Audits</b></p>
<p><b>2.5.1</b></p>	<p><b>Determining Audit Objectives, Scope and Criteria</b>  The audit scope includes the extent and boundaries (including sites) of the audit, activities and processes to be audited. Accordingly, the Criteria shall be based on the scheme requirements of product standards, process requirements and the Food Safety Management System.</p>
<p><b>2.5.2</b></p>	<p><b>Audit Team Selection and Assignments</b>  The auditors for this scheme shall possess competence as laid down in the Guidelines. The audit team shall have at least one auditor/ expert having expertise for the dairy sector. If expertise is required for testing of product, manpower may be identified and included in the audit team.</p> <p>The audit team for initial, re-certification and surveillance audits shall have at least one auditor of National Dairy Development Board (NDDB) empaneled with BIS.</p> <p>The integrity and impartiality of the audit team while executing the audit shall be ensured at all times both through the documented procedure and guidelines as well as any supervision placed on the team. The appropriate working documents which comprise of audit reports, format, etc are provided to the audit team.</p>

**2.6****Stage 1 Audit**

Stage 1 audit is carried out to determine expertise required for specific scope sectors for the initial/certification audit, scope of the audit, clients' site details, processes and equipment, levels of control established, applicable statutory and regulatory requirements and allocation of resource requirements for Stage 2. The Stage 1 audit provides a focus for planning Stage 2 by gaining sufficient understanding of client's management system standard or other normative documents.

Stage 1 audit may be carried out for at least 2 mandays. Stage I audit shall include verification of:

1. Availability of manufacturing machinery,
2. Availability of inspection and testing plan for each product,
3. Availability of test facility whether in-house or testing arrangement with BIS recognized laboratories,
4. Verification of hygienic conditions,
5. Competence of the Quality Control Personnel; and
6. Evidence of product conformity to relevant Indian Standards as established through in-house testing records or through test reports from BIS recognized / empaneled Laboratory.
7. Readiness of the organization in terms of implementation of process requirements and FSMS requirements.

Refer Checklist for Stage I audit given at Annex-V, the findings of the stage 1 audit shall be documented and communicated to the applicant, including identification of any areas of concern that could be classified as nonconformity during the stage 2 audit. In case, significant changes occur between Stage 1 and Stage 2 audit which could impact the management system, stage 1 audit may be repeated. In such a case, the client shall be informed that the results of stage 1 may lead to postponement or cancellation of stage 2 audit.

Stage 1 audit may be 1 manday for dairies already holding FSMS certification from other CBs.

**2.7****Stage 2 Audit**

During Stage 2 audit, information and evidence are collected to ensure conformity to all requirements of food safety management system standard, conformity of product to relevant Indian Standard and process controls.

Stage 2 audit shall include following assessment, but not limited to:

1. Compliance to the inspection and testing plan either through in-house testing records or results from BIS recognized/ empaneled Laboratory, wherever acceptable;
2. Level of compliance to process requirements shall be as per Table below (refer Checklist for Stage-2 audit, given at Annex-VI)

Sr. No.	Parameters	% Compliance
1.	Critical	100 %
2.	Major	Minimum 85 %
3.	Minor	Minimum 70 %

3. Visit to collection centers/ chilling centers;
4. Factory testing of milk and milk products on sampling basis\*;
5. Verification of records;
6. Internal auditing and management review;
7. Performance monitoring, measuring;
8. Performance objectives and targets;
9. Ability to meet statutory/regulatory and contractual requirement;
10. Any other requirement as prescribed by the Bureau.

Any non-conformity found is recorded, and the organization is required to undertake root cause analysis and describe the specific corrections and corrective actions, taken or planned to be taken, to eliminate the detected nonconformities as well as the causes for these non-conformities, within a defined time frame.

\*Note- If the applicant has submitted complete test reports of products from BIS recognized Laboratories; factory testing may be limited to verification of competence of QC personnel, verification of capability of Testing equipment.

**3.****Grant of Licence**

After satisfactory evaluation of the audit findings, BIS will process for grant of licence for the scope of as recommended by the audit team.

**3.1****Scope of Licence-**

The scope of licence shall include:

- i) Name of product(s) conforming to relevant Indian Standards,
- ii) Type(s),
- iii) Material of packaging and pack size,
- iv) Conformity of Food Safety Management System implemented by the dairy unit/ organization to the requirements of IS/ISO 22000,
- v) Conformity of process requirements as prescribed in this scheme,

The scope of licence should be identified and defined by the applicant considering the products, process, services or activities that the organization is able to provide.

It may happen that the dairy unit/ organization decides not to cover its entire product range under this scheme but decides to include only a part of its product range. In that case, the audit shall be restricted to the products included within the defined scope.

3.2	<p><b>Validity of Licence</b> The licence shall be valid for three years. The validity period may be extended or reduced, as decided by the Bureau. During the validity of licence, the Licensee shall be subject to regular surveillance and renewal audits for compliance to the requirements of the Licence.</p>
4	<p><b>Surveillance</b> The surveillance audit shall be carried out at least once a year, except in recertification years.</p> <p>Surveillance shall include review of compliance to inspection and testing plan, conformity of products to the relevant Indian Standards, Internal audits, Management review, review of actions taken on non-conformities identified during the previous audit, complaints handling, effectiveness of system with regard to objectives, progress of planned objectives and continual improvement, continuing process controls, factory testing for possible tests, review of any changes and usage of certification marks.</p> <p>Bureau may also draw product samples for testing in BIS recognized/ empaneled laboratories to verify conformity of products as per relevant Indian Standards.</p>
5.	<p><b>Re-certification</b> Renewal (or recertification) audits are planned and conducted in due time to enable renewal before the expiry date. Renewal audit is conducted to evaluate and confirm the continued conformity and effectiveness of the system as a whole, and its continued relevance and applicability for the scope of certification. The procedures and guidelines are consistent with those for initial audit. Re certification audit activities may need to have stage 1 audit in situations where there are significant changes to management system, the organization, or the context in which management system is operating.</p> <p>When recertification activities are successfully completed prior to the expiry date of the existing certification, the expiry date of the new certification can be based on the expiry date of the existing certification. The issue date on a new certificate is required to be on or after the recertification decision. When recertification audit has not been completed or in a situation where it is not possible to verify the implementation of corrections and corrective actions for any major non-conformity prior to the expiry of date of the certification, then recertification shall not be recommended and the validity of the certification shall not be extended. The client is required to be informed and the consequences explained. Following the expiration of certification, within 6 months the certification can be restored provided the outstanding recertification activities are completed, otherwise at least a stage 2 audit shall be conducted. The effective date of on the certificate shall be on or after the recertification decision and the expiry date shall be based on prior certification cycle.</p>
6.	<p><b>Special audits</b> In addition to the above mentioned audits, BIS may decide to conduct special audits due to change in scope, reduction, suspension, withdrawal, cancellation, etc. Unannounced audits (Short-notice audits) may be conducted to investigate the complaints or in response to changes or follow up on suspended clients.</p>

7.	<p><b>Use of Standard mark</b></p> <p>The Standard Mark in relation to Conformity Assessment Scheme for milk and milk products shall be specified by the Bureau and shall be used in a manner specified by the Bureau.</p> <p>The design of standard mark in relation to conformity assessment for milk and milk products is given in Annex- III.</p> <p>The photographic reduction and enlargement of the Standard Mark as specified in Annex-III is also permitted.</p>
8.	<p><b>Suspension of Licence</b></p> <p>If, at any time, Bureau has sufficient evidence that the dairy unit/ organization may not be conforming to any requirements as laid down in this scheme, the Bureau may suspend for all products or partially suspend use of standard mark for a specified product, as the case may be. The evidence may include one or more of the following, but not limited to:</p> <ul style="list-style-type: none"> <li>a) Test result indicating non-conformity of the product to the relevant Indian Standard</li> <li>b) Using Standard Mark in a manner not permitted by the Bureau;</li> <li>c) Discontinuance of operation for more than six months;</li> <li>d) Corrective actions are not taken within the time frame specified by the Bureau;</li> <li>e) Relocation of premises, without prior intimation to the Bureau;</li> <li>f) False declaration in relation to the licence or indulged in falsification of records or unfair trade practices;</li> <li>g) Failure to cooperate with the Bureau or its authorized representative for any such audit(s) as may be required during the operation of the licence.</li> </ul>
9.	<p><b>Cancellation of Licence</b></p> <p>The Bureau may cancel or refuse re-certification of a licence, if-</p> <ul style="list-style-type: none"> <li>a) Suspension of licence exceeds more than one year;</li> <li>b) The holder of licence has relocated the premises and has resumed operation of the licence at the new premises without approval of the Bureau;</li> <li>c) The holder of licence has violated any conditions of licence.</li> </ul>
10.	<p><b>Extension and reduction of scope</b></p> <p>The scope of licence can be expanded after conformity of product to the relevant Indian Standard is established by:</p> <ul style="list-style-type: none"> <li>a) Testing of products either in factory or</li> <li>b) Independent testing in third party laboratory ensuring conformity to the specified requirements.</li> </ul> <p>Extension or reduction of scope may be considered during any planned surveillance/ re-certification audit or through a special audit.</p>
11.	<p><b>Surrender of Licence</b></p> <p>A dairy unit/ organization holding conformity assessment licence under this scheme, may surrender the licence at any time. The licence shall be processed for cancellation upon receipt of written intent of dairy unit/organization to surrender. The dairy unit shall not use mark or claim conformity to this scheme after the date of the letter expressing their intent to surrender the licence.</p> <p>The fee shall not be refunded for any part of remaining validity of licence.</p>
12.	<p><b>Complaints and Appeals</b></p> <p>Complaints and Appeals are dealt as per the BIS Rules &amp; Regulations.</p>



<p><b>13.</b></p>	<p><b>Records</b></p> <p>All dairy units shall maintain records of process controls, monitoring, test results, etc as required by the Food Safety Management system as well as process requirements and inspection and testing plan for product conformity shall be maintained legibly and reproduced during the audits of BIS. These include following basic records:</p> <ul style="list-style-type: none"> <li>i) Traceability records pertaining to the raw milk, other food ingredients, additives, preservatives etc.</li> <li>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.</li> <li>iii) Milk production monitoring records, including records of trainings imparted to producers and audit of primary milk production holdings.</li> <li>iv) Raw material receiving (including records for milk being received from Milk Collection Centres, BMCs, Chilling Centres) and evaluation records.</li> <li>v) Temperature records of chill room (s)/ storage tanks (when in operation), pasteurizer, chillers, driers etc.</li> <li>vi) Quality Control / Lab test reports records.</li> <li>vii) Consolidated daily production records</li> <li>viii) Microbiological / /chemical test reports pertaining to milk and milk products, water, other food ingredients, additives etc.</li> <li>ix) Packing/packaging material records</li> <li>x) CCP monitoring records</li> <li>xi) Corrective action and verification records</li> <li>xii) Cleaning, plant hygiene and sanitation records</li> <li>xiii) Pest Control records</li> <li>xiv) Calibration records</li> <li>xv) Infrastructure and equipment maintenance records</li> <li>xvi) Training records</li> <li>xvii) Health record of the employees (involved in milk handling operations)</li> <li>xviii) Any other records as required by IS/ISO 22000</li> <li>xix) Product certification records as specified in the corresponding inspection and testing plan for individual products.</li> </ul>
<p><b>14.</b></p> <p><b>Annex I</b></p> <p><b>Annex II</b></p> <p><b>Annex III</b></p> <p><b>Annex IV</b></p> <p><b>Annex V</b></p> <p><b>Annex VI</b></p>	<p><b>Annexures</b></p> <p>List of Indian Standards on milk and milk products</p> <p>Process Requirements</p> <p>Standard mark</p> <p>Fee structure</p> <p>Checklist for Stage 1 audit</p> <p>Checklist for Stage 2 audit</p>

**Annex-I**  
**List of Indian Standards on milk and milk products**

Sl. No.	IS NO	TITLE	Product Manuals
1	IS 1000: 2021	Edible Lactose – Specification ( <i>second revision</i> )	<a href="https://www.bis.gov.in/wp-content/uploads/2019/05/PM-IS-10001.pdf">https://www.bis.gov.in/wp-content/uploads/2019/05/PM-IS-10001.pdf</a>
2	IS 1165: 2002	Milk Powder – Specification ( <i>fifth revision</i> )	<a href="https://www.bis.gov.in/wp-content/uploads/2020/09/PM-IS-1165.pdf">https://www.bis.gov.in/wp-content/uploads/2020/09/PM-IS-1165.pdf</a>
3	IS 1166: 1986	Specification for Condensed Milk, Partly Skimmed and Skimmed Condensed Milk ( <i>second revision</i> )	<a href="https://www.bis.gov.in/wp-content/uploads/2019/11/PM_IS_1166.pdf">https://www.bis.gov.in/wp-content/uploads/2019/11/PM_IS_1166.pdf</a>
4	IS 1167: 1965	Edible Casein Products – Specification ( <i>second revision</i> )	Product Manual under preparation
5	IS 1656: 2007	Milk-Cereal Based Complementary foods – Specification ( <i>fourth revision</i> )	<a href="https://www.bis.gov.in/wp-content/uploads/2020/05/PM-1656-CMD-2.pdf">https://www.bis.gov.in/wp-content/uploads/2020/05/PM-1656-CMD-2.pdf</a>
6	IS 1806: 2018	Malted Milk Foods – Specification ( <i>second revision</i> )	<a href="https://www.bis.gov.in/wp-content/uploads/2020/05/PM-1806-1.pdf">https://www.bis.gov.in/wp-content/uploads/2020/05/PM-1806-1.pdf</a>
7	IS 2785: 1979	Specification for Natural Cheese (Hard Variety), Processed Cheese, Processed Cheese Spread and Soft Cheese ( <i>first revision</i> )	<a href="https://www.bis.gov.in/wp-content/uploads/2020/06/PM-IS-2785.pdf">https://www.bis.gov.in/wp-content/uploads/2020/06/PM-IS-2785.pdf</a>
8	IS 2802: 1964	Specification for Ice-cream	<a href="https://www.bis.gov.in/wp-content/uploads/2019/05/ICE-CREAM.pdf">https://www.bis.gov.in/wp-content/uploads/2019/05/ICE-CREAM.pdf</a>
9	IS 4079: 1967	Specification for Canned <i>Rasogolla</i>	Product Manual under preparation
10	IS 4238: 2020	Sterilized and Ultra High temperature Sterilized Milk – Specification ( <i>first revision</i> )	Product Manual under preparation
11	IS 4709: 2021	Flavoured Milk – Specification ( <i>first revision</i> )	Product Manual under preparation
12	IS 4883: 1980	Specification for <i>Khoa</i> ( <i>first revision</i> )	Product Manual under preparation
13	IS 4884: 2021	Sterilized/ UHT Sterilized Cream – Specification ( <i>first revision</i> )	Product Manual under preparation
14	IS 5162: 2021	<i>Chhana</i> – Specification ( <i>second revision</i> )	Product Manual under preparation
15	IS 5550: 1970	Specification for <i>Burfi</i>	Product Manual under preparation
16	IS 7839: 1975	Specification for Dried Ice-cream Mix	Product Manual under preparation
17	IS 9532: 1980	Specification for <i>Chakka</i> and <i>Shrikhand</i>	<a href="https://www.bis.gov.in/wp-content/uploads/2020/06/PM-IS-9532.pdf">https://www.bis.gov.in/wp-content/uploads/2020/06/PM-IS-9532.pdf</a>
18	IS 9584: 1980	Specification for Cheese Powder	Product Manual under preparation

19	IS 9617: 1980	Specification for <i>Dahi</i>	Product Manual under preparation
20	IS 10484 : 2021	<i>Paneer</i> – Specification ( <i>first revision</i> )	Product Manual under preparation
21	IS 10501 : 1983	Specification for <i>Kulfi</i>	<a href="https://www.bis.gov.in/wp-content/uploads/2020/04/PM-IS-11501-1-April-2020.pdf">https://www.bis.gov.in/wp-content/uploads/2020/04/PM-IS-11501-1-April-2020.pdf</a>
22	IS 11602 : 1986	Specification for Packed <i>Gulab Jamuns</i>	Product Manual under preparation
23	IS 12176 : 1987	Specification for Sweetened Ultra High Temperature (UHT) Treated Condensed Milk	Product Manual under preparation
24	IS 12299 : 2021	Dairy Whitener – Specification ( <i>second revision</i> )	<a href="https://www.bis.gov.in/wp-content/uploads/2021/07/PM IS 12299 July 2021.pdf">https://www.bis.gov.in/wp-content/uploads/2021/07/PM IS 12299 July 2021.pdf</a>
25	IS 12898 : 1989	Dairy Products – Yoghurt– Specification	Product Manual under preparation
26	IS 13334 : Part 1 : 2014	Skimmed Milk Powder – Specification Part 1 Standard Grade ( <i>second revision</i> )	<a href="https://www.bis.gov.in/wp-content/uploads/2020/09/PM-for-IS-13334-Part-1.pdf">https://www.bis.gov.in/wp-content/uploads/2020/09/PM-for-IS-13334-Part-1.pdf</a>
27	IS 13334 : Part 2 : 2014	Skimmed Milk Powder – Specification Part 2 Extra Grade ( <i>first revision</i> )	<a href="https://www.bis.gov.in/wp-content/uploads/2020/05/PM-13334-Pt-2.pdf">https://www.bis.gov.in/wp-content/uploads/2020/05/PM-13334-Pt-2.pdf</a>
28	IS 13688 : 2020	Packaged Pasteurized Milk – Specification ( <i>second revision</i> )	<a href="https://www.bis.gov.in/wp-content/uploads/2020/12/PM IS 13688 01012021.pdf">https://www.bis.gov.in/wp-content/uploads/2020/12/PM IS 13688 01012021.pdf</a>
29	IS 13689 : 2021	Butter Oil and Anhydrous Butter Oil – Specification ( <i>first revision</i> )	Product Manual under preparation
30	IS 13690 : 2021	Butter – Specification ( <i>first revision</i> )	Product Manual under preparation
31	IS 14433 : 2007	Infant Milk Substitutes – Specification ( <i>first revision</i> )	<a href="https://www.bis.gov.in/wp-content/uploads/2020/06/Revised-PM-for-IS-14433.pdf">https://www.bis.gov.in/wp-content/uploads/2020/06/Revised-PM-for-IS-14433.pdf</a>
32	IS 14542 : 1998	Partly Skimmed Milk Powder – Specification	<a href="https://www.bis.gov.in/wp-content/uploads/2019/06/Product-Manual-IS-14542.pdf">https://www.bis.gov.in/wp-content/uploads/2019/06/Product-Manual-IS-14542.pdf</a>
33	IS 15757 : 2007	Follow-up Formula - Complementary Foods – Specification	<a href="https://www.bis.gov.in/wp-content/uploads/2020/06/Revised-PM-IS-15757.pdf">https://www.bis.gov.in/wp-content/uploads/2020/06/Revised-PM-IS-15757.pdf</a>
34	IS 16326 : 2015	Ghee – Specification	Product Manual under preparation

Note: All efforts have been made to incorporate details as per the latest version of the standard. However, as the standards are dynamic and subject to amendments and revisions, users are encouraged to check the latest versions of the standards subsequent to issuance of this scheme, before using the information contained therein.

Other Indian Standards referred in the scheme:

IS 2491	Food Hygiene- General Principles- Code of Practice
IS 4251	Quality tolerances for water for processed food industry)
IS 7005	Code for hygienic conditions for Production, Processing, Transportation and Distribution of milk.
IS 10500	Drinking Water- Specifications
IS/ISO 22000	Food Safety Management Systems- Requirements for organizations in the food chain

## ANNEX- II

### PROCESS REQUIREMENTS

#### **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 for Good Manufacturing Practices (GMP), Good Hygienic Practices (GHP) 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**

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 – 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 of 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**

- i. The establishment shall be so located that neighboring 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.
- ii. 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.
- iii. 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.
- iv. There shall not be any stagnant water or signs of any rodent harbourage inside the premises.

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

- i. 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.
- ii. The design and layout shall be such as to preclude contamination.
- iii. 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.
- iv. There shall be adequate lighting and ventilation and light fixtures shall be protected with proper covering.
- v. The layout shall ensure sufficient space in different sections for machinery, equipment, personnel etc. without congestion.
- vi. The building shall provide sufficient protection against the entry and harbourage of rodent, insects, milch animals, other animals etc.
- vii. All the entry points shall have suitable air curtains or other suitable arrangements to prevent the entry of flies.
- viii. 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**

- i. 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.

- ii. The outside of the platform should be provided with sufficient protection to avoid vehicles hitting the platform and damaging.
- iii. The raw milk receiving section shall be sufficiently separated from processing area to prevent contamination.
- iv. Signboards directing the employees to wash and sanitise hands before entering and after each absence shall be installed.
- v. 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. There shall be proper arrangement for tanker cleaning. Tanker bay with CIP facility is required.
- 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**

- i. 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.
- ii. The wall to floor and wall-to-wall junctions shall be rounded off to facilitate easy cleaning.
- iii. 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.
- iv. 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.
- v. The walls and pillars should be suitably protected (by SS ring/cladding) to prevent damage by equipment hitting these.
- vi. The ceiling shall be free from cracks and open joints and shall be smooth and easy to clean.
- vii. 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, Stars, Platforms and Stands**

- i. All the doors shall be tight fitting and the windows and ventilators shall have fly proofing nets to prevent the entry of flies.
- ii. 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.
- iii. The doors shall be of self-closing type.
- iv. Open windows are not permitted in areas where food is exposed, processed or packed.
- v. Mechanical ventilation/ exhaust fans shall be provided in areas where stagnation

of air, condensation of fluid etc. are present.

- vi. The opening of ventilation/ exhaust fan shall be provided with suitable fly proofing system.
- vii. 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**

- i. There shall be adequate drainage facility and slope of the drainage shall be opposite to the flow of work/material.
- ii. The open end of the drainage shall be protected against the entry of rodents.
- iii. The drains shall be of adequate size having sufficient slope for easy cleaning.
- iv. 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.
- v. Floor drains shall not be connected to drains from toilets.
- vi. 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**

- i. 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.
- ii. All food contact surfaces shall be free from rust and paints.
- iii. Suitable arrangements shall be made to drain the water from the tables directly into the drainage without falling on the floor.
- iv. 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.
- v. Pasteurizers of suitable capacity having capability to maintain required temperatures and time shall be provided with automatic calibrated temperature devices.
- vi. Milk products store rooms shall be clean having smooth floor, walls and roof and shall have suitable mechanism to control the temperature, if required.
- vii. Spray drying facility shall be equipped with approved air filters.

## **12. Chill Rooms, Cold Storages, Tunnel and Deep freezers**

- i. 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.



- ii. The cold storage/tunnel and Deep freezers shall have suitable refrigeration system to maintain the required product
- iii. temperature.
- iv. The floor, ceiling and walls of the cold storage and other storage rooms shall be smooth and easy to clean and disinfect.
- v. Proper steps shall be taken to avoid contamination of the materials stored.
- vi. There shall be adequate lighting with protective covers.

**13. Change Rooms and Toilets**

- i. Adequate number of change rooms for workers shall be provided for high risk and low risk areas.
- ii. The change rooms shall be of adequate size having smooth washable walls and floors.
- iii. There shall be flush lavatory and the lavatories shall not open directly to the working area.
- iv. 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.
- v. There shall be lockable cupboards and facility for keeping gumboots, shoes and chapels inside the change room.
- vi. Suitable arrangements shall be made by the establishment to launder the working clothes of the workers.
- vii. The toilets shall have self-closing doors and proper fly proofing system.
- viii. 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: No. of

<u>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 excess of 100 persons)	1 (additional bowl) (in

- ix. In male toilets, urinals can substitute for toilet bowls for up to 1/3rd of the total toilets required.
- x. Entrance to toilets from processing areas shall be either through an intervening change room or an airlock that is vented to external air.
- xi. Doors for toilet cubicles where they are not in a separate toilet room must be self-closing and tight fitting.

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

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

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

- i. There shall be separate stores for wet and dry items and the chemicals/ disinfectants should be properly labelled.
- ii. Packing material store shall be of adequate size with proper fly and dust proofing system.
- iii. 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.
- iv. Pest and rodent control measures shall also extend to the storerooms.

#### **16. Water**

- i. Water used in the factory shall be of potable nature and shall meet statutory requirements as applicable (IS: 4251 and/or IS: 10500).
- ii. Potable water shall be used also for cleaning utensils, machinery, tables etc.
- iii. 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.
- iv. Water store tank, both ground level and overhead, should be well protected and cleaned regularly.
- v. The taps having hose connections shall be fitted with non- return valves.
- vi. The water tanks shall be cleaned regularly as per SOP as per pre-decided frequency.
- vii. If water is brought from external source i.e. mobile water tankers, it should be cleaned and disinfected periodically.

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

- i. The establishment shall have a well-equipped in-house laboratory for testing microbiological and other chemical parameters.
- ii. The testing shall be done by qualified and trained lab persons/veterinarian/ technologist (s) (Refer Annexure- 3 for Assessment of Manpower).

#### **18. Transportation facilities**

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

- ii. 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.
- iii. Vehicles shall be maintained properly and records maintained thereof.

**19. 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**

- i. 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.
- ii. Repairs shall be carried out as soon as possible without interference to handling and processing.
- iii. 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.
- iv. There shall be a documented procedure for maintenance of all sections, equipment, machineries etc.
- v. The machineries/ equipment's shall be marked with suitable identification numbers.
- vi. The building should be whitewashed regularly as per the schedule.

**21. Cleaning and Sanitizing**

- i. All chemical compounds used as cleaners, sanitizers, soaps, detergents, shall be of standard make.
- ii. 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.
- iii. To prevent the contamination of food equipments, utensils and food contact surfaces shall be cleaned as frequently as necessary as per the documented procedures.
- iv. These should be sanitized when there is a risk of contamination but not less than daily.
- v. Food contact surface must be adequately rinsed after the use of any detergents prior to handling of the food.
- vi. Adequate precautions shall be taken to prevent food from being contaminated during cleaning or sanitizing of rooms, equipment or utensils.
- vii. Detergents and sanitizers shall be suitable for use in food handling areas and not impart any flavours, odours or leave toxic residues.
- viii. Detergent and sanitizers shall be diluted for use according to the manufacturer's instructions.
- ix. Cleaning personnel shall be trained in handling and use of cleaning without cross-contaminating the products and or food contact surfaces.

- x. Staff change room, shower room, toilets and cafeteria, shall be kept clean at all times.

## **22. Hygiene Control Program**

- i. A documented predetermined cleaning and sanitation program shall be in place at each facility.
- ii. All cleaning personnel shall be suitably trained in cleaning and sanitizing techniques.
- iii. All cleaning operations shall be carried out under the adequate supervision of designated personnel.
- iv. All cleaning and sanitation procedures shall be monitored, verified and records maintained.
- v. 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**

- i. 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.
- ii. A person shall be made responsible for maintenance of personal hygiene and health status of the workers.
- iii. The employees engaged in processing activities shall be free from communicable diseases, open sores and wounds.
- iv. 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.
- v. Smoking should be strictly prohibited in the entire premises including office area.
- vi. All personnel shall wash and sanitize their hands:
  - a) prior to entering the processing areas
  - b) immediately after using toilet
  - c) after handling dirty or contaminated materials
  - d) after undertaking cleaning procedures – involving handling of sanitizers and similar cleaning chemicals
  - e) after handling food, ingredients and items used in food handling immediately after handling any material that may be capable of transmitting contaminants.
- vii. Prophylactic injections shall be administered to the employees and record maintained thereof.
- viii. Communicable diseases in their homes shall also to be notified and the employee shall be medically examined after each absence due to illness.

- ix. All workers shall be provided with sufficient sets of clean work dress and headgears.

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

- i. Inedible by products shall:
  - a) be stored so as to avoid contaminating food for human consumption
  - b) be removed from the food preparation area as often as necessary to avoid cross contamination
- ii. 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.
- iii. Cleaning and sanitizing of utilities and equipment for in- edible materials shall be carried out in a physically separate area.

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

- i. Provision shall be made for the storage of waste and inedible material prior to the removal of waste from the factory.
- ii. Waste storage facilities shall be:
  - a) away from the processing area
  - b) designed to prevent access to waste by pests
  - c) designed to avoid contamination of food, potable water and equipment's.
- iii. Waste shall be removed from food handling areas and other facilities either at the end of the shift or when the containers are full.
- iv. 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 sanitized.
- v. The waste storage area shall be kept clean.
- vi. All waste disposal bins shall be foot operated with tight-fitting lids.
- vii. The storage and handling of waste shall be as per Pollution Control Board (PCB) norms.

#### **26. Pest Control**

- i. There shall be a documented pest control and monitoring programme concentrating more on the prevention rather than eradication.
- ii. There shall be an effective and continuous schedule for the prevention, detection control and eradication of pests.
- iii. Pest control shall not constitute a hazard to human health and product safety.
- iv. 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.

- v. Accurate and legible records of the location and frequency of pest control measures shall be kept and made available to the Team for verification.
- vi. A bait map shall be kept and made available on request for verification.
- vii. 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
- viii. / 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 minimized and the hazard due to pest chemicals are under control.

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

- i. 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.
- ii. Hazardous substances shall be stored in rooms or cabinets used only for that purpose and handled only by authorized and properly trained persons.
- iii. Wet and dry chemicals shall be stored separately to avoid accidental mixing due to leakage or spillage.
- iv. 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.
- v. 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.

Note – Also see

IS 7005            Code for hygienic conditions for Production, Processing,  
Transportation and Distribution of milk.

IS 2491            Food Hygiene- General Principles- Code of Practice

This is for information only

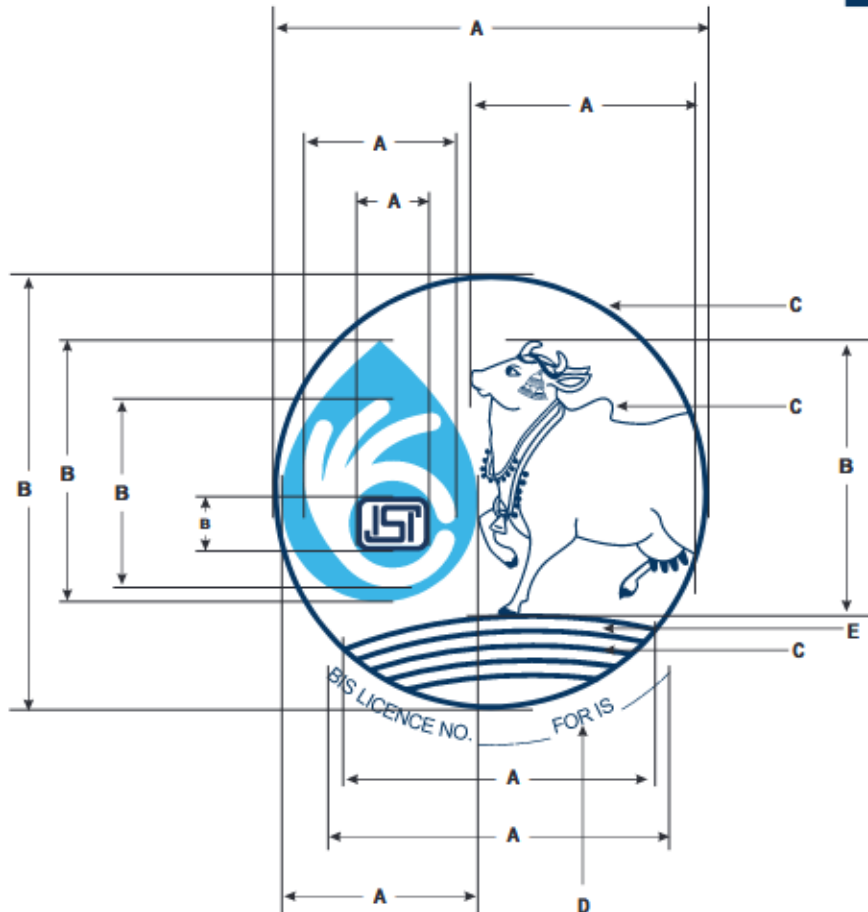
### Annexure III

## STANDARD MARK FOR CERTIFICATION OF MILK AND MILK PRODUCTS

Colour Combination

■ C:70 M:15 Y:00 K:00

■ C:98 M:68 Y:10 K:45



	<b>A</b> (Width)	<b>B</b> (Height)	<b>C</b> (Thickness)	<b>D</b> (Font & Size)	<b>E</b> (Gap between lines)
<b>Main Circle</b>	<b>60mm</b>	<b>60mm</b>	<b>0.75mm</b>	-	-
<b>Blue drop</b>	<b>27mm</b>	<b>36mm</b>	-	-	-
<b>White hand</b>	<b>21mm</b>	<b>26mm</b>	-	-	-
<b>ISI Logo</b>	<b>10mm</b>	<b>7.5mm</b>	-	-	-
<b>Cow</b>	<b>31mm</b>	<b>38mm</b>	<b>0.3mm</b>	-	-
<b>Lines (bottom of cow)</b>	<b>43mm</b>	-	<b>0.75mm</b>	-	<b>1.3mm</b>
<b>Letters (bottom of circle)</b>	<b>47mm</b>	-	-	<b>Arial (Normal) 8 pts.</b>	

## **Annex-IV**

### **FEE STRUCTURE FOR CERTIFICATION SCHEME FOR MILK AND MILK PRODUCTS**

**1. Application fee** ₹ 1,000/-

**2. Audit Fee: (for initial, re-certification and special audit)**

**(a) For units located within India:**

(i) Large Industrial Enterprises- ₹. 12,000/- per manday

(ii) Micro, Small and Medium Industrial Enterprises- ₹. 9,000/- per manday

Travel limited to a distance of 250 km from the location of the unit and stay of auditors on actual basis shall be borne by the manufacturer.

**Relaxation in audit fee:** If the Actual Travel Cost incurred during an audit is less, the DDGR's may grant relaxation upto ₹ 4,000/- per manday spent in travelling for Large Industrial Enterprises and ₹3,000/- per manday spent in travelling for MSME enterprises.

**(b) For units located outside India:**

(i) ₹ 12,000/-per manday shall be chargeable.

(ii) The manufacturer shall bear all expenses on actual basis, including but not limited to cost to the Bureau for the man-days spent by auditor(s) in connection with the audit, resultant travel etc.

**3. Certification Fee**

The yearly certification fee shall as specified in Table-A of this Annexure.



Table-A

Sr. No.	Product category	Unit rate (in ₹)	Minimum certification fee large scale, per annum (in ₹)	Minimum certification fee Small and Medium Enterprises, per annum (in ₹)	Minimum certification fee Micro Enterprises, per annum (in ₹)
1.	Milk and milk products	3 per 1,000 litre for first 4,00,000 kilo-litres and 2 per 1,000 litres thereafter. (Liquid milk sold in case of liquid milk and Raw milk consumed in case of milk based products.	1,00,000	80,000	60,000

Note 1: – Classification of enterprises will be based on “The Micro, Small and Medium enterprises Development (MSMED) Act, 2006 (27 of 2006).”

Note 2: All the fees mentioned herein are exclusive of any taxes

## ANNEX-V: CHECKLIST FOR STAGE 1 AUDIT

**Name of Dairy Unit/ Organization:**

**Address:**

**Date of Visit:**

Sl. No.	Requirements	Observations (Satisfactory/ Needs improvement)	Remarks (briefly describe how requirement is met or not)
<b>1</b>	<b>Raw Milk Procurement System</b>		
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.	Above 50% = 3 30-50% = 2 Less Than 30% = 1	
1.2	MBRT of incoming raw milk	more than 90 min = 3 60 – 90 min = 2 less than 60 min = 1	
<b>2</b>	<b>Processing Infrastructure and its Management</b>		
2.1	Does the unit have proper infrastructure / manufacturing machinery	<b>Satisfactory-3</b> <b>Needs Improvement-1</b>	
2.2	Are there adequate number of qualified and trained personnel	<b>As given below</b>	
2.3	Verification of hygienic condition	<b>Satisfactory-3</b> <b>Needs Improvement-1</b>	
<b>3</b>	<b>Laboratory Infrastructure and its Management</b>		
3.1	Does the unit have laboratory setup/ arrangement for testing milk and milk products as per relevant Indian Standards under the scope of this certification	<b>Satisfactory-3</b> <b>Needs Improvement-1</b>	
3.2	Adequate number of trained and qualified manpower employed for the laboratory operation	<b>As given below</b>	
3.3	Whether liquid milk is being distributed/sold through insulated vehicles	<b>Satisfactory-3</b> <b>Needs Improvement-1</b>	
3.4	Failure of products samples of the unit tested by food regulator in last one Year	<b>Nil Failure- 3</b> <b>1 or more failure- 0</b>	
<b>4</b>	<b>Conformity to relevant Indian Standards</b>		
4.1	Availability of Inspection and testing plan for each product*	<b>Satisfactory-3</b> <b>Unsatisfactory-0</b>	
4.2	Evidence of conformity of milk and milk products to relevant Indian Standards*	<b>Satisfactory-3</b> <b>Unsatisfactory-0</b>	
<b>5</b>	<b>Conformity to Food Safety Management</b>	<b>Satisfactory-3</b>	<b>Attach Stage I</b>

	<b>Systems</b>	<b>Needs Improvement-1</b>	<b>audit report</b>
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### Assessment of Manpower

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

S. No.	Designation	Qualification	Marks
1	Plant manager and next in the line below (top two/three levels)	<p>A. Minimum B Sc/ B Tech. (Dairy Technology) with minimum 8 years' experience in dairy Plant/ IDD with 15 years of experience in dairy Plant.</p> <p>B. Minimum M Sc/ M Tech in Dairy Technology/ Dairy Chemistry/ Dairy Microbiology ; or M Tech / ME in Food Technology with at least five years of experience in Dairy Units.</p> <p>C. Minimum B Sc/ B Tech (Dairy Technology) with minimum 4 years' experience in dairy Plant.</p> <p>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.</p>	<p>If A and B = 3</p> <p>If C and D = 2</p>
2	Laboratory In- charge and next level (two top levels). The Number of manpower shall depend upon level of automation etc. details to be provided.	<p>A. M. Sc/ M tech in Dairy /Food Technology, Dairy / Food Chemistry Dairy / Food Microbiology with minimum 3 years' experience in dairy sector.</p> <p>B. B Tech in Dairy / Food Technology or M Sc Microbiology / Chemistry / Biotechnology with minimum 5 years' experience in dairy sector/ IDD with 15 years of experience in dairy.</p> <p>C. B Sc (Microbiology /Biotech/Chemistry / Biology) and with 7 years' experience in dairy sector and with proper training at a reputed organization in field of dairy lab training Tech in Dairy / food Technology</p>	<p>If A and B = 3</p> <p>If C = 2</p>

## Selection criteria for Stage 2 audit

The application will be processed for Stage 2 audit in case it conforms to the following guidelines:

<b>Sr No.</b>	<b>Assessment Score</b>	<b>Whether cleared Stage 1 and recommended for Stage 2 audit</b>
1	Unit scores min. 70 % marks in Checklist for Stage 1 audit; and Milk and milk products conform to relevant Indian Standards; and No non-conformities raised in FSMS	Yes
2	Unit scores 60 to 70 % marks in Checklist for Stage 1 audit; and Milk and milk products conform to relevant Indian Standards; and Major/ Minor non-conformities raised in FSMS	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 Process requirements for Stage 1 audit; and/or Product not conforming to the relevant Indian Standards.	No

Note-1: 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 shall not be considered for calculation of percentage of marks.

## ANNEX-VI: CHECKLIST FOR STAGE 2 AUDIT

### ANNEX-VIA: FORMAT FOR MILK COLLECTION CENTRES/ COOPERATIVE SOCIETY

**Name of the Centre/ Society:**

**Address/ Location:**

**Date of Visit:**

FSSAI registration no. & Year of inception

Present milk procurement per day

Avg. Milk Fat and SNF

Milk Collection timing: Morning & Evening

Sl. No.	Requirement	Category	Satisfactory/ Unsatisfactory)	Remarks (briefly describe how requirement is met or not)
1.0	<b>Location &amp; Surroundings</b>			
1.1	Are surroundings clean, free from waste, water logging etc.	Major		
2.0	<b>Infrastructure and facility</b>			
2.1	Is the facility having pucca building and maintained in good condition	Major		
2.2	Is housekeeping and cleaning satisfactory	Major		
2.3	Is floor maintained neat and clean	Major		
2.4	Are adequate milk accessories available?	Minor		
2.5	Is sufficient washing facility available for cans, utensils, sampling & testing accessories	Major		
2.6	Is there adequate natural and/ or artificial lighting, covered and at appropriate location	Major		
3.0	<b>Practices</b>			
3.1	Is milk collection timing displayed	Minor		
3.2	Are producers bringing milk in Stainless steel	Major		
3.3	Are milk vessels bringing by producers properly covered	Major		
3.4	Is any foreign matter (flies, straw, dung etc.) present in raw milk coming to the DCS	Critical		
3.5	Is milk filtered properly through strainer	Critical		
3.6	Is milk tested for presence of any adulterants	Critical		
3.7	Does the DCS maintain fat and SNF records	Minor		
3.8	Are personal Hygiene practices followed at DCS	Major		
3.9	Are the milk handlers free from cuts/wounds on their hands	Major		
3.10	Is the tester is trained on analysis	Major		
3.11	Are the CMP and GMP activities undertaken by the DCS to farmers	Major		
3.12	Are cattle feed being stored in separate rooms	Minor		

<b>Sl No</b>	<b>Parameter</b>	<b>Total Points</b>	<b>Compliance</b>	<b>% Compliance</b>	<b>Remark</b>
<b>1</b>	Critical	<b>3</b>			
<b>2</b>	Major	<b>12</b>			
<b>3</b>	Minor	<b>4</b>			
		<b>19</b>			

## ANNEX-VI: CHECKLIST FOR STAGE 2 AUDIT

### ANNEX-VI B: FORMAT FOR BULK MILK COOLING CENTRE (BMC)

**Name of BMC:**

BMC's Location / Address:

**DATE**                      **OF**                      **VISIT:**

\_\_\_\_\_

S. No.	General Information	
1	BMC FSSAI registration/ License no.	
2	Unit ISO Certification, if applicable	
3	Number and Capacity of BMC	
4	Single village-based BMC or cluster BMC	
5	If Cluster, how many DCS attached	
6	Present milk procurement per day	
7	Average Milk Fat and SNF	

S. No	Requirement	Category	Observations (Satisfactory/ Unsatisfactory)	Remarks (briefly describe how requirement is met or not)
<b>1.0</b>	<b>Infrastructure &amp; facilities</b>			
1.1	Is BMC unit located away from environmental contaminants (e.g. smoke, objectionable odor etc.)	Major		
1.2	Are the premises of the unit neat, clean and free / away from garbage or waste	Critical		
1.3	Is BMC center have pucca building, maintained in a sound condition and free from cobwebs, seepage	Major		
1.4	Are windows/ other opening properly covered with wire mesh of appropriate size	Major		
1.5	Are floors pucca and maintained in a sound condition, without damages, pot holes with accumulated water or water milk mix	Major		
1.6	Is there adequate space inside BMC room for performing routine operation and maintenance	Major		
1.7	Does the unit have adequate quantity of hot water for cleaning	Major		
1.8	Whether soak-pit for discharge of waste water available with the unit.	Major		
1.9	Is adequate source of water available.	Major		
1.10	Do the Centre has adequate natural and/ or artificial lighting, covered and at appropriate location	Major		
<b>2.0</b>	<b>Operation/ Practice</b>			
2.1	Is milk collection timing displayed and followed	Minor		

2.2	Is milk collection completed within 2 hrs at BMC and within 3hrs for cluster BMC	Major		
2.3	Are producers bringing milk in Stainless steel	Major		
2.4	Are milk vessels bringing by producers properly covered	Major		
2.5	Is any foreign matter (flies, straw, dung etc.) present in raw milk coming to the centre	Critical		
2.6	Is milk filtered before loading to BMC tank	Critical		
2.7	Is milk chilled at desired temperature (4 °C), If yes whether maintained records for temperature	Critical		
2.8	Is appropriate remedial action taken when informed of problems identified during internal monitoring visit	Major		
2.9	Is standard operating procedure for cleaning of BMC tank available	Major		
2.10	Is BMC tank properly clean (outside and inside surface of the tank)	Critical		
2.11	Are proper cleaning agents available and effectively used	Major		
2.12	Is hosepipe and other milk pipelines are properly cleaned (to be physically verified)	Critical		
2.13	Are other milk collection accessories (weighing scale, sampling bottles, plunger etc.) properly cleaned	Major		
2.14	Are milk cans properly cleaned	Major		
2.15	Are cattle feed being stored in separate rooms	Minor		
2.16	Are pipelines dismantled and cleaned at specified frequencies (minimum twice in a week)	Major		
2.17	Does the unit display signboard with the following declaration? Such as No Smoking & No spitting	Minor		
<b>3.0</b>	<b>Testing</b>			
3.1	Are non-absorbent platform available for testing	Major		
3.2	Are adulteration tests being carried out and recorded	Critical		
3.3	Does the BMC Centre maintain fat and SNF records	Minor		
3.4	Is testing chemicals identified and labelled properly	Minor		
<b>4.0</b>	<b>Manpower, training and personal hygiene</b>			
4.1	Is the tester is trained on analysis	Major		
4.2	Are the CMP and GMP activities undertaken by the DCS to farmers	Major		
4.3	Are personal Hygiene practices followed at DCS	Major		
4.4	Are the milk handlers free from	Major		



	cuts/wounds on their hands			
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<b>Sl No</b>	<b>Parameter</b>	<b>Total Points</b>	<b>Compliance</b>	<b>% Compliance</b>	<b>Remark</b>
<b>1</b>	Critical	<b>7</b>			
<b>2</b>	Major	<b>23</b>			
<b>3</b>	Minor	<b>5</b>			
		<b>35</b>			

## ANNEX-VI: CHECKLIST FOR STAGE 2 AUDIT

### ANNEX-VI C: FORMAT FOR MILK CHILLING CENTRE (MCC)

**Name of Milk Union/ Unit:**

**Name of MCC:**

Address of the MCC:

Date of Inspection /Assessment:

S. No.	General Information	Remarks
1	Year of Inception	
2	MCC FSSAI registration/ License no.	
3	Unit ISO Certification, if applicable	
4	Capacity of MCC	
5	DCS/MPP attached	
6	Present milk procurement per day	
7	Average Milk Fat and SNF	

Sl. No.	Requirement	Category	Observations (Satisfactory/ Unsatisfactory)	Remarks (briefly describe how requirement is met or not)
<b>1.0</b>	<b>General Information about technical personnel</b>	Major		
1.1	Are adequate number of staffs available in the Milk Chilling Centre One DT/IDD, Lab. Assistant, Maintenance etc.	Major		
<b>2.0</b>	<b>Primary Production holding and raw milk collection</b>			
2.1	Are the surfaces of milk contact vessels/utensils used by farmer/producer to bring milk to MCC washable and non-toxic (preferably SS – AISI 304)	Major		
2.2	Are the samples of water drawn for testing /analysis to ascertain safety to human health and records maintained.	Major		
2.3	Is there adequate protection from contamination from pests /insects /animals /environment at MCC	Major		
2.4	Do persons performing / handling of raw milk wear suitable, clean clothes and maintain high degree of personal hygiene	Major		
2.5	Are there suitable facilities for cleaning/ washing of hands and collection equipment	Major		
<b>3.0</b>	<b>Premises of MCC</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	Are 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 refuge collecting containers of self-closing type and located at strategic locations	Major		
<b>4.0</b>	<b>Layout, design, construction, location and size of MCC:</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		
<b>5.0</b>	<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 the sanitary conveniences /toilets have adequate natural or mechanical ventilation			
<b>6</b>	<b>Washing facilities</b>			
6.1	Are there an adequate number of washbasins available, suitably located and designated for cleaning hands at entry points	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		
<b>7</b>	<b>Ventilation and lighting</b>			
7.1	Is there suitable and sufficient means of natural or mechanical ventilation (sufficient exhaust fans)	Minor		
7.2	Are the ventilation systems so constructed as to enable filters and other parts requiring cleaning or replacement, readily accessible	Minor		
7.3	Do the premises have adequate natural and/or artificial lighting	Minor		
7.4	Are the lights sufficiently protected/covered	Minor		
<b>8</b>	<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>Building -General design and layout etc</b>			
9.1	Does design and layout permit good food hygiene practices, including protection against contamination between and during operation	Major		
9.2	Is the general working environment in MCC suitable for hygienic and healthy operations - proper temperature, free of suffocation, without congestion/ cramping	Major		
10.0	<b>Floors</b>	Major		
10.1	Is material of construction proper – maintained in chilling area, CI tiles in reception etc	Major		
10.2	Are the floors maintained in a sound condition, without damages, pot holes with accumulated water/water milk mix	Major		
10.3	Is there water /water- milk mix accumulated on the floor due to slope/ poor cleaning	Major		
11	<b>Walls</b>			
11.1	Are the surfaces maintained in a sound condition, free from cobwebs, seepage	Critical		
11.2	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	<b>Ceilings</b>			
12.1	Is pucca ceiling provided in the entire milk chilling area	Major		
12.2	Is the height of ceiling proper to allow hygienic operations and non-suffocating operations	Major		
12.3	Are the surfaces maintained in a sound condition, free from cobwebs, seepage, mould growth	Critical		
13	<b>Windows /doors and other openings</b>			
13.1	Are they constructed to prevent the accumulation of dirt	Major		
13.2	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		
13.3	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	<b>Surfaces (including surfaces of</b>			

	<b>equipment)</b>			
14.1	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		
14.2	Are these smooth, washable corrosion-resistant and non-toxic materials or appropriate preferably SS (AISI 304) to prevent contamination	Major		
15	<b>Cleaning / Sanitization facilities</b>			
15.1	Are adequate facilities provided, where necessary, for the cleaning, disinfecting of working utensils and equipment	Critical		
15.2	Are these facilities have an adequate supply of hot and cold water	Critical		
15.3	Are the cleaning agents and disinfectants stored separately under lock and key	Major		
15.4	Is the effectiveness of cleansing (absence of residual chemical) verified periodically through laboratory tests	Major		
16	<b>Raw Milk Reception</b>			
16.1	Is RMRD raised with sides and top sufficiently protected to prevent contamination while unloading of raw milk	Major		
16.2	Are air curtain / fly proof mesh provided to prevent entry of flies	Major		
16.3	Are in-line filters for raw milk available	Major		
16.4	Is the ceiling height (min 5.5 M) to prevent accumulation/condensation of moisture	Major		
16.5	Is there proper ventilation to prevent suffocation in the raw milk reception area (can washer)	Major		
16.6	Are can washing operations proper (If cans scrubber is used- are the cans cleaned properly and if can washer is used- are the cans cleaned properly and coming out dry)	Major		
17	<b>Chilling Section</b>			
17.1	Is milk being chilled and stored below 4 °C and record kept	Critical		
18	<b>Equipment</b>			
18.1	Is the material of construction proper for milk handling/processing (preferably SS 304/316)	Critical		
18.2	Are the equipment kept in clean state and properly sanitized.	Critical		
18.3	Are these provided with proper	Critical		

	recording instruments (temp /pressure/ flow rate)			
18.4	Are the process control equipment calibrated properly- proper records kept	Critical		
19	<b>Water</b>			
19.1	Is proper record of quality of Water used for the processing kept	Major		
19.2	If water obtained from external sources is tested/analysed and documented for its potability	Major		
19.3	Is water stored in over head storage tanks protected from outside contamination	Major		
19.4	Are such over head tanks easily accessible for cleaning; disinfection	Major		
19.5	Is there Cleaning schedule for water storage tanks/facilities available and followed properly (by records)			
20	<b>Effluent treatment systems</b>			
20.1	Does the MCC have a working ETP	Observation on Effluent Treatment System must be recorded		
20.2	Is capacity of ETP sufficient to take care of total load.			
20.3	Does the discharged effluent comply with the statutory requirements in force (BOD, COD, etc)			
20.1	Is smell observed near the ETP			
21	<b>Maintenance/Calibration schedules</b>			
21.1	Is there a documented procedure for the maintenance of different sections of the dairy/ equipment/ plant and machinery/ laboratory items	Major		
21.2	Is there a documented procedure for the calibration of instruments/gauges/ in different sections i.e. Engineering, Processing and laboratory	Major		
22	<b>Quality Assurance systems and Laboratory Procedures</b>			
22.1	Are the certified QA systems of ISO and HACCP/FSMS (ISO-HACCP - IS 15000/ ISO 22000/FSSC 22000) in place	Minor		
22.2	Are the breakdowns /malfunctions/ Product failure recorded and proper traceability system in place	Major		
22.3	Is there proper arrangement for pest & vermin control and documented procedure is maintained (either by self or through outside agency)?	Critical		
22.4	Is laboratory in good condition, having shelf / working table with acid resistant tiles in acid handling	Major		

	area			
22.5	Are proper facilities there for chemical and MBRT analysis	Major		
22.6	Are personnel responsible for conducting microbiological and chemical analysis properly qualified/trained	Major		
22.7	Is proper testing done on as per the SOP	Major		
23	<b>Personnel health and hygiene</b>			
23.1	Are the persons in milk process plant follow hygienic practices (as per the observation of team)	Major		
23.2	Is there daily hygiene checks and record maintained	Major		
23.3	Whether there are arrangements for change of footwear / foot dip / foot cover provided	Major		

SI No	Parameter	Total Points	Compliance	% Compliance	Remark
1	Critical	14			
2	Major	52			
3	Minor	5			
		71			

## ANNEX-VI: CHECKLIST FOR STAGE 2 AUDIT

### ANNEX-VI D: CHECKLIST FOR DAIRY UNIT

**Name of Processing Establishment:**

Address of the processing establishment:

Date of Inspection /Assessment:

S. No.	General Information			
1	Year of Inception			
2	Milk union/ unit FSSAI License details			
3	Unit ISO Certification details			
4	Capacity of Milk Plant			
5	Present milk procurement/ handled per day			
6	Average Fat and SNF in incoming milk			
S. No.	Requirement	Category	Observations (Satisfactory/ Unsatisfactory)	Remarks (briefly describe how requirement is met or not)
<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 organized by union/unit / through external agency for producers for CMP etc at regular interval - supported by records/ documents	Critical		



2.3	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		
2.4	Are the samples (feed, water) drawn for testing/analysis to ascertain safety to human health and records maintained.	Major		
2.5	Is appropriate remedial action taken when informed of problems identified during audits/checks/routine monitoring - supported by records	Major		
2.6	Are there suitable facilities for cleaning/ washing of hands and collection equipment	Major		
<b>3</b>	<b>Premises of Unit</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 refuge collecting containers of self-closing type and located at strategic locations	Major		
<b>4</b>	<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		
<b>5</b>	<b>Lavatories/Toilets</b>			
5.1	Are there adequate number of flush lavatories	Major		
5.2	available and connected to an effective drainage system?	Critical		
5.3	Do Exhaust and door of lavatories open directly into rooms in which food is handled?	Major		

5.4	Do the sanitary conveniences /toilets have adequate natural or mechanical ventilation .	Major		
5.5	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		
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		
<b>10</b>	<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		
<b>11</b>	<b>Floors</b>			
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		
<b>12</b>	<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 equipment 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 cobwebs, seepage, mould growth	Critical		
14	<b>Windows /doors and other openings</b>			
14.1	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		
14.2	Are, where open windows would result in contamination, kept closed during production?	Major		
14.3	Are the doors easy to clean and, where necessary, to disinfect and have smooth and non-absorbent surfaces or appropriate to prevent contamination?	Major		
14.4	Are doors provided with automatic door closures	Major		
14.5	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		
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/centralized CIP</b>			
16.1	Are adequate facilities provided for cleaning and disinfecting of working utensils and equipment, (Pipelines, Silo etc.)?	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	Is Centralized CIP System available? If Yes, whether of suitable capacity	Major		
16.5	Are the auto-controls working (timers, temperature controllers, valves)?	Major		
16.6	Is the effectiveness of cleansing (absence of residual chemical and swab/rinse test) verified periodically?	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 area (can washer)	Major		
18.6	Are can washing operations proper (If cans scrubber is used- are the cans cleaned properly and if can washer is used- are the cans cleaned properly and coming out dry)	Major		
18.7	Are proper arrangements in place for cleaning, sanitization 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 Pasteurization Temperature and holding time of milk. (ideally 72°C for 15 seconds for HTST) properly maintained			
19.3	Is FDV provided and whether working properly Are the facilities so designed to stop falling of	Critical		
19.4	Water/water- milk mix (from equipment/working tables) directly on the floor (e.g., being drained through pipe).	Major		
<b>20</b>	<b>Equipment</b>			
20.1	Is the material of construction proper for milk handling/processing (preferably SS 304/316)	Critical		
20.2	Are the equipment 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 faraway 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 department 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/analyzed 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	Major		
22.5	Is water stored in overhead storage tanks protected from outside contamination?	Major		
22.6	Are such overhead 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 quality water (IS 4251) availability sufficient in relation to maximum daily production?	Major		
<b>23</b>	<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/m <sup>2</sup> )	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		
<b>24</b>	<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		
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 tube lights of packing machines working	Major		
24.15	Is there proper system for traceability in place	Critical		
24.16	Is there facility to store day stock packaging materials in safe and hygienic manner	Critical		
24.17	Is there proper facility to store primary / secondary / tertiary packaging materials in hygienic and dust free environment	Major		
<b>25</b>	<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 a 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		
<b>26</b>	<b>Maintenance/Calibration schedules</b>			



26.1	Is there a documented procedure for the maintenance of different sections of the dairy/ equipment/ 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		
<b>27</b>	<b>Quality Assurance systems and Laboratory Procedures</b>			
27.1	Are the certified QA systems of ISO and HACCP/FSMS (ISO-HACCP - IS 15000/ ISO22000/FSSC 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 and documented procedure is maintained” (either by self or through outside agency)?	Critical		
27.4	Is there a separate laboratory (away from main building) for pathogen testing or alternatively, pathogen testing is 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		
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 raw materials (microbial contaminants, chemical contaminants and residues) / Raw milk (Somatic Cell Counts, Chemical contaminants and residues) and records maintained?	Major		
27.12	Is proper testing done in process materials and records maintained?	Major		

27.13	Is proper testing done on finished goods and records maintained?	Major		
<b>28</b>	<b>Personnel health and hygiene</b>			
28.1	Is the health of person 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 person 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		
<b>29</b>	<b>Transport vehicles for distribution</b>			
29.1	Is the vehicle kept in a clean condition	Critical		
29.2	Are all the vehicles used for distant places (say more than 30 km) insulated and covered	Major		
29.3	Are Vehicles used within city or up to 30kms insulated or properly	Major		
<b>30</b>	<b>Retails Outlets/ Points</b>			
30.1	Is the establishment owned) Both 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		

30.7	Is the behavior of retailers with costumers courteous and respectful	Minor		
<b>31</b>	<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 conditionality's through web site link, responsive telephone no)	Critical		

Sl No	Parameter	Total Points	Compliance	% Compliance	Remark
<b>1</b>	Critical	<b>45</b>			
<b>2</b>	Major	<b>96</b>			
<b>3</b>	Minor	<b>10</b>			
		<b>157</b>			