DAIRY FARMER ◄ -- ► FRIENDLY ◄ -- ► CONSUMER

DAIRY BUSINESS MANAGEMENT SYSTEMS

QUALITY SYSTEM DOCUMENTATION
(ISO –9001: 2000)

MODULE-II

PRODUCTION MANUAL

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" WHITE REVOLUTION THROUGH QUIET EVOLUTION"

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Prepared by **H O D**	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMMRP - 01]

2. LIST OF REVISIONS

SR. NO.	DCN NO.	Nature of Change	Affected Clause	Page No	Revision No.

Prepared by **H O D**	Approved by **CEO**
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMMRP - 01]

3. SCOPE

The procedures of the Production Department cover the complete manufacturing activity of dairy products meeting IBI, National and International Quality Standards.

4. OBJECTIVES

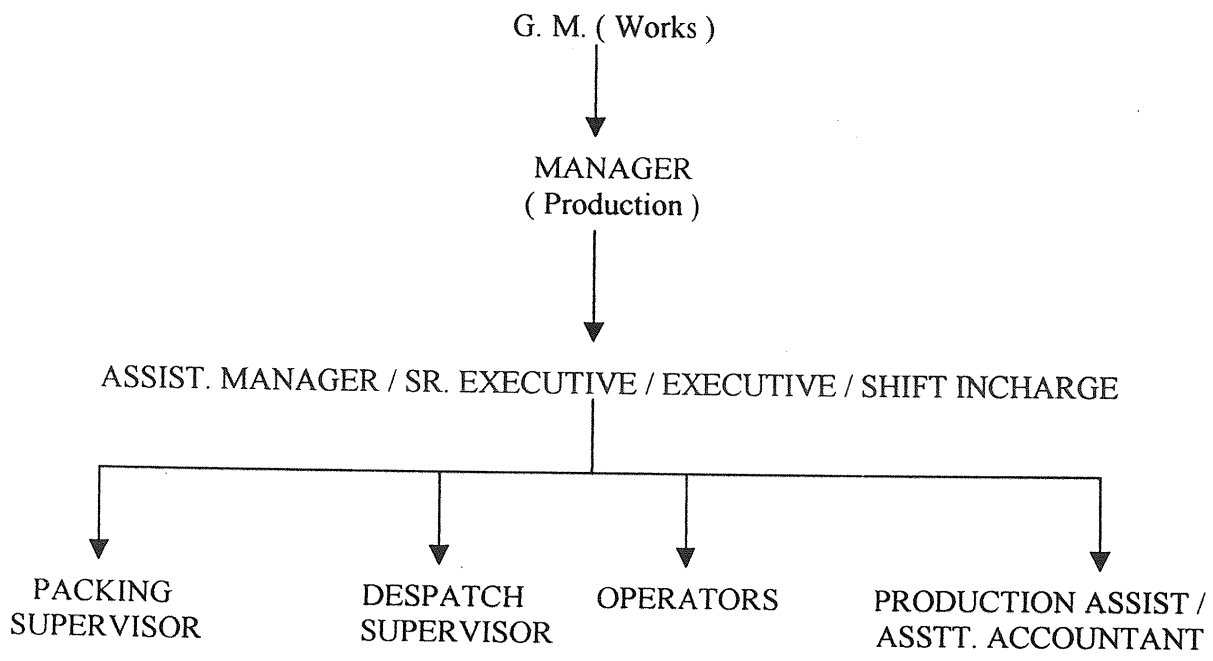
4.1 To manufacture dairy Products which conform to legal / IBI Quality Standards as applicable.

4.2 Maintain proper hygienic conditions in the Production department.

4.3 Improve productivity through efficient use of resources and process control.

4.4 To bring continuous improvement in the prime performance parameters pertaining to production department.

5. DEPARTMENTAL STRUCTURE



6.1 DUTIES & RESPONSIBILITIES OF MANAGER PRODUCTION

6.1.1 To supervise and co-ordinate the working of Production department for smooth working and optimum Production.

6.1.2 To minimize the production losses so as to achieve specified norms of recovery by proper production planning and process scheduling of the plant.

6.1.3 To take timely action to minimize the loss of man hours and production in case of any breakdown or problem in the factory.

6.1.4 To ensure that all the records are properly maintained as required under the accounting procedures.

6.1.5 To ensure that stocks are physically correct as per the book balance and supervisory staff hand over / take over milk in process properly at the time of shift change.

6.1.6 To improve productivity by ensuring efficient use of material inputs i.e. chemicals, detergents & sugar etc.

6.1.7 To ensure optimum utilization of fuel, electricity & water as per IBI norms.

6.1.8 To ensure maximum production and optimum handling of milk.

6.1.9 To implement action plan for improving working results concerning all prime performance parameters.

6.1.10 To monitor all Hazardous critical control points of manufacturing process by strict resolution / controls.

6.1.11 To ensure that stocks of milk crates physically tally as per ledger on daily & monthly basis.

6.1.12 To ensure that all ledgers of production department are maintained as per specified procedures.

6.1.13 To ensure proper cleanliness and personal hygiene of staff engaged in production.

6.1.14 Ensure proper utilization of manpower on day to day basis.

6.1.15 Ensure that all staff and workers must wear proper uniforms.

6.1.16 To ensure that products manufactured / packed, strictly conform to the standards of prevention of Food & Adulteration Act (PFA), Bureau of Indian Standard (BSI) or AGMARK (Agricultural Grading & Marketing) and IBI as applicable. The products packed for sale must bear proper marking as per statutory regulations and Weights & Measures Acts as applicable from time to time.

6.1.17 To ensure that wastage of packaging materials must not be more than specified norms.

6.1.18 To monitor that cleaning schedules are strictly implemented as per specified frequencies.

6.1.19 To impart training to juniors as per specified schedules.

6.1.20 Any other duty assigned by the management from time to time.

6.2 DUTIES AND RESPONSIBILITIES OF ASSISTANT MANAGER / SR.EXECUTIVES / EXECUTIVE / SHIFT I.

6.2.1 To ensure proper take over of charge at the start of each shift and hand over the charge to his counterpart at the close of the shift without any deviation.

6.2.2 To maintain prescribed records of his shift, as specified under accounting procedure as per ISO-9001: 2000: 2000: 2000 and ensure that stocks physically tally with the shift proformae.

6.2.3 To ensure that products manufactured / packed, strictly conform to the standards of Prevention of Food & Adulteration Act (PFA), Bureau of Indian Standard of AGMARK (Agriculture Grading & Marketing) and IBI as applicable. The products packed for sale must bear proper marking as per statutory regulations and Weights & Measures Acts as applicable from time to time.

6.2.4 To maintain proper discipline among employees working under him. To record attendance of the employees of his section on shift wise basis and allot duties to them so as to utilize their services as per man-hours norms specified for various products.

6.2.5 To ensure optimum utilization of steam, electricity & refrigeration by the help of implementation tasks.

6.2.6 To ensure that weighing balances and Thermographs are functioning accurately in their shifts.

6.2.7 To raise issue slip for withdrawal of materials from the store as per requirements.

6.2.8 To exercise check on pilferage and wastage.

6.2.9 To keep the plant neat and clean throughout the shift.

6.2.10 To supervise production / packing operations as per specified work instructions.

6.2.11 To keep the management informed regarding any deviations affecting production or other losses like spillage and manpower operational problems.

6.2.12 To ensure that cleaning schedules are strictly followed as per specified procedures.

6.2.13 To ensure that products are manufactured under specified processing parameters as applicable.

6.2.14 To ensure that all staff members must wear neat & clean uniform.

6.2.15 To ensure random checking of weights of milk & milk products and maintain record in specified registers.

6.2.16 To take preventive measures so as to avoid spillage of milk and milk products.

6.2.17 To ensure proper disposal of garbage at specified place during the specified time.

6.2.18 Ensure that wastage of packaging material is not more than specified norms.

6.2.19 To ensure that stocks of liquid milk and indigenous products are physically handed over / taken over by dispatcher.

6.2.20 To ensure that Ghee residue is properly treated before draining the Ghee residue water.

6.2.21 Ensure proper CIP of milk tankers.

6.2.22 Any other duty assigned by the Management from time to time.

6.3 DUTIES AND RESPONSIBILITIES OF PACKING SUPERVISOR (GHEE SECTION)

6.3.1 To prepare production schedule one day in advance in consultation with seniors.

6.3.2 To get the packing materials issued from stores one day in advance and to keep record of the packing materials on daily basis.

6.3.3 To arrange manpower in consultation with seniors.

6.3.4 To ensure that Weighing – Balances are accurate.

6.3.5 To ensure that packing materials are arranged in advance and kept at suitable place.

6.3.6 To ensure that packing materials are embossed / printed clearly with batch No., / Melt No., / date of Manufacture / MRP for meeting the statutory requirements.

6.3.7 To ensure that packed materials are properly cleaned and the AGMARK stickers are properly affixed on the packs before packing in outer cartons.

6.3.8 To keep accounts of the finished products and hand over to store.

6.3.9 To keep the detailed record of damaged packing materials and return the same to stores against acknowledgment.

6.3.10 To plan the withdrawal of all consumables on daily basis from store in consultation with Manager (Production) and Shift Incharge.

6.3.11 To ensure that empty containers are properly cleaned from inside with compressed air before filling.

6.3.12 Finished products must be handed over to stores only after receiving quality clearance certificate from Q.A department.

6.3.13 Rejected finished products if any must be stored separately with clear rejection card and maintain proper record of finished products.

6.3.14 To periodically check weights of finished products and maintain proper record of such checking.

6.3.15 Each container after filling must be cleaned with duster to remove any extraneous matter before putting in the outer cartons.

6.3.16 Ensure that each carton of Ghee is weighed and gross weight is mentioned on each carton before handing over to store. In case of variation in gross weight, individual packs must be weighed. Under / over filled packs must be segregated.

6.3.17 Ghee filling storage tanks must be got released from Q.A. department before starting filling and maintaining its record.

6.3.18 To ensure that Ghee must be packed below 40 degree C and finished product is stacked properly in Ghee granulation Cold store. Temperature of Ghee granulation must be between 18 – 22 degree C.

6.3.19 To ensure that wastage of packaging materials remains below specified norms (0.05%).

6.3.20 Ensure that products are packed under hygienic conditions.

6.3.21 Ensure that all workers working in the section are wearing neat and clean uniform, cap & mask.

6.3.22 Ensure proper cleaning of granulation room & Ghee filling section.

6.3.23 Ensure proper manpower utilization.

6.3.24 Ensure that physical stock must tally with ledgers on daily basis and to inform to seniors in case of pilferage.

6.3.25 Any other duty assigned by the Management from time to time.

6.4 DUTIES AND RESPONSIBILITIES OF PLANT OPERATOR (PROCESSING)

6.4.1 Ensure proper checking of plant machinery viz., Cream Separator, Pasteurizers and Milk Pumps before starting operation.

6.4.2 To ensure that all machinery is properly cleaned according to CIP schedules mentioned in the log sheet.

6.4.3 To ensure that after processing operations, plant is handed over to the next operator in proper condition.

6.4.4 To ensure efficient operation of machinery during processing to avoid any damage and losses.

6.4.5 In case of any problem or abnormality to inform the shift incharge and technician for attending to the fault immediately.

6.4.6 To ensure that there is no leakage or spillage of milk due to wrong operation or leakage of valves.

6.4.7 Ensure that there is no idle running of machinery causing wastage of fuel and electricity.

6.4.8 Ensure that proper cleaning schedules are followed strictly.

6.4.9 Ensure that the products are manufactured strictly as per specified operational instructions / specified parameters and as per IBI specifications.

6.4.10 To ensure that the services of the employees working with him are utilized properly so as to get optimum production.

6.4.11 To keep the section as well as all machinery neat and clean.

6.4.12 To ensure adoption of safety measures for himself and his co-workers.

6.4.13 Any other duty assigned by management from time to time.

6.5 DUTIES AND RESPONSIBILITIES OF PRODUCTION ASSISTANT / ACCOUNTANT

6.5.1 To check all production shift proforma for accurate entries & calculations on daily basis.

6.5.2 To prepare production reports on daily basis.

6.5.3 To prepare dock milk receipt chart & get it verified from account section on daily basis.

6.5.4 To prepare the attendance sheet of workers of different shifts and hand over to PNL & HRD department on daily basis.

6.5.5 To prepare Fat and SNF recovery on daily and monthly basis.

6.5.6 To ensure updating of all the finished products and packaging materials ledgers on daily basis.

6.5.7 To prepare & compile monthly statement for finished products, packaging materials and recovery of Fat and SNF.

6.5.8 To ensure proper filling of all relevant documents like Thermographs, milk reception & utilization statements and other proformae as applicable.

6.5.9 To maintain proper record of empty crates on daily & monthly basis.

6.5.10 To carry out liquid milk dispatches and receipt of empty crates during general shift.

6.5.11 Any other duty assigned by the management from time to time.

6.6 DUTIES AND RESPONSIBILITIES OF DESPATCH SUPERVISOR

6.6.1 To hold charge of all the incoming empty crates of milk, empty bottles and milk cans and acknowledge the receipt in (QMPR – 24) after thoroughly inspecting and counting the crates.

6.6.2 To hand over / take over charge of liquid milk and indigenous products of cold store from Shift Incharge / Assistant Manager and to ensure that there is no pilferage / shortage of stock at the time of handing over charge.

6.6.3 To issue gate passes / O.G.P. for all outgoing items after verifying that party has deposited the requisite amount. O.G.P. must bear receipt No. and cash paid stamp.

6.6.4 To ensure proper stacking of milk crates in the cold store and supervise the sorting of leaky milk pouches in crates.

6.6.5 To keep records of all the transactions of receipt and issue including that from stores and other sections.

6.6.6 To reconcile daily receipts and dispatches of milk crates with the security / concerned sections in QMPR – 18.

6.6.7 To ensure proper cleaning of dispatch docks after all the dispatches are completed.

6.6.8 To ensure that quantity being issued on O.G.P. must bear quantity in words.

6.6.9 To ensure that broken or other brand milk crates are not to be accepted and to maintain proper accounts of milk crates on daily basis.

6.6.10 To ensure that dispatches are carried out on time.

6.6.11 Any other duty assigned by the management from time to time.

6.7 DUTIES AND RESPONSIBILITES OF PLANT OPERATOR (POWDER PLANT)

6.7.1 Ensure proper checking of plant before starting of operation.

6.7.2 To ensure lubrication of machinery (where necessary) before operating the machine.

6.7.3 To ensure that machinery is properly cleaned as per specified schedule and fit for operation before running the machine and hand over the charge properly to the next Shift Operator.

6.7.4 To ensure that the services of the employees working with him are properly utilized so as to ensure optimum production.

6.7.5 To ensure adoption of safety measures for himself and fellow workmen.

6.7.6 To ensure efficient operation of machinery and its minimum wear tear & avoid losses.

6.7. 7 To maintain proper discipline among the co-workers.

6.7. 8 To maintain proper record of running of the plant and to fill the specified log books.

6.7. 9 In case of any problem, abnormality or fault with the plant, he must immediately inform the section incharge as well as the concerned technician for attending to the fault for immediate repairs.

6.7. 10 Ensure that proper cleaning schedules are strictly followed.

6.7. 11 To keep the section neat and clean.

6.7. 12 Ensure that products are manufactured strictly as per specified operational instructions / specified parameters and conforming to IBI specifications.

6.7.13 Ensure that there must not be spillage of milk & milk products due to leakage from valves / lines & wrong operation.

6.7.14 Ensure that there must not be idle running of machines, wastage of electricity, fuel & water.

6.7.15 Ensure that powder is collected from stack loss room twice a week.

6.7.16 Ensure proper stacking of K.P. bags in Goodman.

6.7.17 Random checking of weights of filled K.P. bags periodically.

6.7.18 Ensure that rejected products (if any) are segregated and kept separately in godown with clear label of rejection.

6.7.19 Silo storage tank must be got released from Q.A department before starting powder plant & maintaining its record.

6.7.20 Any other duty assigned by the management from time to time.

6.8 DUTIES AND RESPONSIBILITIES OF PACKING SUPERVISOR (POWDER PLANT)

6.8.1 To prepare packing schedule one day in advance in consultation with seniors.

6.8.2 To get the packing materials issued from stores one day in advance and to keep the record of packing material on daily basis.

6.8.3 To arrange manpower in consultation with seniors.

6.8.4 To ensure that Weighing – Balances are accurate.

6.8.5 To ensure that packing materials are arranged in advance and kept at suitable place.

6.8.6 To ensure that packing materials are embossed / printed clearly with batch No., / date of manufacturing / MRP for meeting the statutory requirements.

6.8.7 To keep account of the finished products and hand over to store on daily basis.

6.8.8 To keep the detailed record of damaged packing materials and return the same to stores against acknowledgment.

6.8.9 To plan the withdrawal of all consumables on daily basis from stores in consultation with Manager (Production) and Shift Incharge.

6.8.10 Finished products must be handed over to stores only after receiving quality clearance certificate from Q.A department.

6.8.11 Rejected finished products if any must be stored separately with clear rejection card and maintain proper record of finished products.

6.8.12 To check periodically weights of finished products and maintain proper record of such checking.

6.8.13 Each container after filling must be cleaned with duster to remove any extraneous matter / before putting in the outer cartons.

6.8.14 Ensure that each bag / carton is weighed and gross weight is mentioned on each carton before handing over to store. In case of variation in gross weight, individual packs must be weighed. Under / overfilled packs must be segregated.

6.8.15 Silo storage tanks must be got released from Q.A department before starting Powder Plant and maintaining its record.

6.8.16 To ensure that wastage of packaging materials remains below specified norms (0.05%).

6.8.17 Ensure that products are packed under hygienic conditions.

6.8.18 Ensure that all workers working in the section are wearing neat and clean uniform, cap & mask.

6.8.19	Ensure optimum manpower utilization.
6.8.20	Ensure that physical stock must tally with ledgers on daily basis.
6.8.21	Ensure proper stacking of powder bags in godown. Powder bags must be kept at least 15 CMS away from the walls.
6.8.22	Ensure proper cleaning of packing room. Workers must wear mask while carrying out packing.
6.8.23	Ensure proper maintaining of packaging material account on daily basis.
6.8.24	Ensure that stacks of K.P. bags in godown must bear labels indicating batch No. / No. Of bags for their identification.
6.8.25	To ensure that knotting on polyliners is done properly and followed by proper stitching of KP bags.
6.8.26	Any other duty assigned by the Management from time to time.
6.9	**DUTIES AND RESPONSIBILITIES OF OPERATOR (GHEE SECTION)**
6.9.1	Ensure proper checking of butter churn before starting of operation.
6.9.2	To ensure lubrication of machinery (where necessary) before operating the machine.
6.9.3	Ensure that cleaning schedules are strictly followed.
6.9.4	To ensure adoption of safety measures for himself and fellow workmen.
6.9.5	To ensure efficient operation of machinery and its minimum wear and tear.
6.9.6	Ensure proper filling of logbooks on shift wise basis.
6.9.7	To keep the section neat and clean.

6.9.8 Ensure that ghee is manufactured strictly as per specified instructions. (Final temp. of Ghee 107 degree C and conforms to IBI specifications.)

6.9.9 Ensure that there must not be spillage of Ghee due to leakage of valves / lines & wrong operation.

6.9.10 Ensure that there must not be idle running of machines.

6.9.11 Ensure Ghee clarifier must be cleaned once in a shift.

6.9.12 Ensure that filter / cotton pads at various stages are installed so that Ghee must be free from residue.

6.9.13 Any other duty assigned by the Management from time to time.

6.10 DUTIES AND RESPONSIBILITIES OF SUPERVISOR (INDIGENIOUS & ICECREAM SECTION)

6.10.1 To prepare production schedule in advance in consultation with seniors.

6.10.2 To get the packing materials issued from stores one day in advance and to keep record of packing materials on daily basis.

6.10.3 To arrange manpower for products manufacturing in consultation with seniors.

6.10.4 To ensure that weighing balances are accurate.

6.10.5 To ensure that packing materials are arranged in advance and kept at suitable place.

6.10.6 To ensure that packing materials are printed clearly with Batch No. / Date of manufacture / MRP for meeting statutory requirements.

6.10.7 To keep account of the finished products and hand over to store with proper acknowledgement.

6.10.8 To keep the detailed record of damaged packing material and return the same to stores under acknowledgement.

6.10.9 To ensure that finished products are handed over to store only after receiving quality clearance certificate from Q.A department.

6.10.10 Rejected finished products if any must be stored separately with clear rejection card.

6.10.11 To check periodically weights of finished products and maintain proper record of such checking.

6.10.12 To ensure that all containers e.g. bottles, cups to be properly cleaned before filling.

6.10.13 Ensure that each carton is weighed and gross weight mentioned on each carton before handing over to store.

6.10.14 To ensure that proper parameters for manufacture of indigenous products like Dahi, Paneer, sterilized milk, Lassi, Milk Cake & Pinni are followed strictly.

6.10.15 To ensure that wastage of packing materials remains below the specified norms (0.05 %).

6.10.16 Ensure that products are packed under hygienic conditions.

6.10.17 Ensure that all workers working in the section are wearing neat and clean uniform, cap and masks.

6.10.18 Ensure proper manpower utilization.

6.10.19 Ensure that physical stock must tally with ledgers on daily basis.

6.10.20 Any other duty assigned by Management from time to time.

6.11 DUTIES AND RESPONSIBILITIES OF OPERATOR (SFM)

6.11.1 Ensure proper checking of sterilize and bottle filling machinery before starting operations.

6.11.2 To ensure that proper cleaning and sanitation of filling machine and batch tank is carried out.

6.11.3 To ensure adoption of safety measures while using the sterilizer.

6.11.4 To ensure proper utilization of manpower provided to him.

6.11.5 To ensure proper operation of sterilizer and bottle filling machine to avoid losses and break down.

6.11.6 To inform the Shift Incharge / section incharge immediately in case of breakdown.

6.11.7 To ensure that products are manufactured strictly as per specified operational instructions and specified IBI parameters.

6.11.8 To keep proper record of running of sterilizer and fill the specified log books.

6.11.9 To ensure that there is no idle running of machinery or wastage of electricity, fuel & water.

6.11.10 To keep the section neat and clean at all times.

6.11.11 To ensure that there is no spillage of milk and milk products or any pilferage by workers.

6.11.12 Any other duty assigned by management from time to time.

7. DEPARTMENTAL PROCEDURES

The procedures of the department are covered under the following heads :-

7.1 Milk reception, Pasteurization, Standardization and Packing of pasteurized milk.

7.2 Pasteurized table butter / white butter.

7.3 Ghee manufacturing and Ghee packing.

7.4 Skimmed Milk Powder / Whole Milk Powder / Dairy Whitener / Baker – 555.

7.5 Sweetened (Sterilized) flavoured milk.

7.6 Lassi

7.7 Milk Cake

7.8 Paneer

7.9 Curd

7.10 Pinni

7.11 Ice cream

7.12 Empty / filled trays accounts W.R. Liquid Milk Supply.

7.13 Coding of products.

7.14 Departmental M.I.S and Production Accounts.

7.1 MILK RECEPTION, PASTEURIZATION, STANDARDISATION AND PACKING OF PASTEURIZED MILK.

7.1.1 Dip stick, dump tank, milk storage tank, chiller and connecting pipe lines are cleaned by operator as per WI – 1 & 2 [Work instructions 1 & 2] before work is taken up.

[Supervised by Shift I / c / Executive (Tech)]

7.1.2 Milk after clearance from quality assurance department is unloaded from tankers / route vehicles using nylon filters. Milk is chilled below 7 degree C. Milk is stored grade wise for further processing in the raw milk storage tanks. Milk tankers after unloading are flushed with water to remove all remaining milk residue Tanker unloading records are maintained in QMPR – 01. (Milk Reception & Product Traceability).

[Supervised by Shift I / c / Executive (Tech)]

7.1.3 Milk receipt records are maintained on the prescribed format [QMPR – 1] (Milk Reception & Product Traceability).

[Supervised by Shift I / c / Executive (Tech)]

7.1.4 Tankers and cans after receipt are cleaned and sanitized as per WI (2) & WI (4).

[Supervised by Shift I / c / Executive (Tech)]

7.1.5 Equipment coming in contact with milk, after reception is over, is cleaned as per WI. (1) & W (2).

[Supervised by Shift I / c / Executive (Tech)]

7.1.6 Norms for temperature of Pasteurized milk temperature in different products.

a) Liquid Milk - 79 + / - 2 degree C
b) Skimmed Milk for Extra Grade - 78 + / - 2 degree C
c) Skimmed Milk for G grade - 75 + / - 2 degree C

Flow diversion valve is kept in working order to avoid mixing of unpasteurized milk.

[Supervised by Shift I / c / Executive (Tech)]

7.1.7 After emptying out each milk storage tanks, these are cleaned and sanitized as per WI. (1) And recorded in QMPR – 17 (C.I.P Log Sheet).

[Supervised by Shift I / c / Executive (Tech)]

7.1.8 After completion of processing, Cleaning in Place (CIP), of pipelines, pasteurizers & chillers are carried out as per WI.2/3 and recorded in QMPR-20 (CIP Schedule of Processing & Butter Section.

[Supervised by Shift I / c / Executive (Tech)]

7.1.9 Specifications for the liquid milk are followed as under:-

Category of Milk	Fat %	SNF %
a) Standardized Milk	4.55 – 4.60	8.70 – 8.80
b) Toned Milk	3.05 – 3.10	8.65 – 8.70
c) Double toned Milk	1.55 – 1.60	9.10 – 9.20
d) Skimmed Milk	0.1 – (Max.)	8.80 – 8.90

[Supervised by Shift I / c / Executive (Tech)]

7.1.10 The desired Methylene Blue Reduction Test (MBR) Time of pasteurized milk is 6.00 hrs. In case MBR time is less than 5.00 hrs, the matter is referred to technical committee for final decision.

[Supervised by Shift I / c / Executive (Tech)]

7.1.11 After getting clearance from Quality Assurance department for city supply milk, the filling machines along with connecting lines, bowls and filling tubes are checked for its cleanliness and sanitation.

[Supervised by Shift I / c / Executive (Tech)]

7.1.12 Polyethylene film roll is fixed and 300 litters (appx.) of milk from each machine is flushed out from pipelines and bowls / tubes to ensure that traces of water do not get mixed with milk. The flushed out milk is recycled by mixing with raw milk.

[Supervised by Shift I / c / Executive (Tech)]

7.1.13 First pouch of each variety of milk is checked from quality assurance department prior to filling.

[Supervised by Shift I / c / Executive (Tech)]

7.1.14 During process of filling, pouches are checked for drop test and its weight as per statutory requirements after every 01 hours and records are maintained by shift incharge in register No. QMPR – 02 (Weighment of liquid milk pouches).

[Supervised by Shift I / c / Executive (Tech)]

7.1.15 Milk crates are stacked in cold store in such a manner that there is proper air circulation and no intermixing of different varieties of milk.

[Supervised by Shift I / c / Executive (Tech)]

7.1.16 After completion of the filling, the machine is cleaned as per WI.(2)

[Supervised by Shift I / c / Executive (Tech)]

7.2 PASTEURIZED TABLE BUTTER / WHITE BUTTER

7.2.1 Cleaning in place of cream pasteurizer, cream tanks, pipelines connecting cream tank to pasteurizer balance tank to dump tank and manual cleaning of valves are done as per WI. (1) & WI. (2) and recorded in QMPR-20. (C.I.P. Schedule of processing & butter).

[Supervised by Operator / Shift Incharge]

7.2.2 Butter churn is cleaned and sterilized as per WI (21).

7.2.3 Pasteurized water below 7 degree C is filled in one of the cream tanks.

[Supervised by Operator / Executive (Tech)]

7.2.4 Cream after pasteurization at 85 – 90 degree C and cooling to approximately 10 degree C is directly loaded into butter churn to the desired level. Cream line is flushed with pasteurized chilled water. Under loading / over loading of the churn is avoided.

[Supervised by Shift I / C / Executive (Tech)]

7.2.5 Pasteurized Annato Butter Colour @ 0.5 ml to 0.6 ml / kg of fat is added to the cream in the churn.

[Supervised by Operator / Executive (Tech)]

7.2.6 After initially rotating the churn for 5 – 10 minutes in second gear, the liberated gas is removed once or twice by opening the churn vent. Then the cream sample is drawn for chemical analysis.

[Supervised by Operator / Executive (Tech)]

7.2.7 The churn is run at fast speed (4th gear). During churning operation, there is rise in temperature by 1-3 degree C. Churning is accompanied by foaming and then comes the breaking stage. During churning, the temperature is maintained at approximately 10 degree C by spraying chilled water if required.

[Supervised by Shift I / C / Executive (Tech)]

7.2.8 After continuous running for 20-30 minutes or earlier when the churn starts taking load, stop the churn and start again at medium speed (3rd gear) till breaking stage is achieved as visible from the glass sight. After the breaking stage, the churning is continued until the butter grains are of the desired size (Pea- Size).

[Supervised by Operator / Executive (Tech)]

7.2.9 Butter churn is then stopped into a position to remove buttermilk. Butter Milk is taken out and after chilling, it is mixed into the raw milk after getting the quality clearance. Pasteurized chilled water is added to the butter grains in the churn equal to the volume of butter. Wash water is further drained by running the churn at medium speed through opened outlet valve for five minutes. At this stage, sample of butter is drawn for first moisture analysis.

[Supervised by Shift I / C / Operator)]

7.2.10 Required quantity of edible salt @ 2.5 percent of butterfat is dissolved in pasteurized water and heated to 85 degree C and then cooled to 10 degree C prior to adding into the butter to get the desired composition in the final product.

[Supervised by Shift I / C / Operator]

7.2.11 All the parameters maintained during the manufacturing are recorded in QMPR – 13A. (Butter manufacturing Proformae)

7.2.12 Butter churn is run for 30-45 minutes at 3rd gear (medium speed) for proper working of butter and sample drawn to see that final product is free from visible free moisture, uniform mixing of salt and uniform colour throughout the mass.

[Supervised by Shift I / C / Operator]

7.2.13 Butter is taken out in a clean, sterilized trolley and immediately covered with clean sanitized muslin cloth. Butter trolley is transferred into the butter cold store for hardening of butter.

[Supervised by Shift I / C / Operator]

7.2.14 Butter is packed in small packaging as per required sizes after cleaning the butter-packing machine as per WI. -(1). Small size packed butter is stored in butter cold store till dispatch.

[Supervised by Shift I / C / Executive]

7.2.15 Butter packing is carried out hygienically as per WI.09.

[Supervised by Shift I / C / Executive (Tech)]

7.2.16 Butter packing room is fumigated / sprayed with 10 % formaline solution at regular frequency as per WI.8.

[Supervised by Shift I / C / Operator]

- In case of white butter steps No.7.2.5 and 7.2.10 are omitted.

7.3 GHEE MANUFACTURING AND GHEE PACKING

7.3.1 Cream tanks, butter churn and ghee making equipment are cleaned as per WI.1 & 21.

[Supervised by Operator / Executive (Tech.)]

7.3.2 Pasteurized cream is stored at approximately 10 degree C for 3-4 hours for proper crystallization of fat and improved flavor prior to loading in the butter churn.

[Supervised by Operator / Operator]

7.3.3 The churn is run at gear no.4 (fast speeds). During churning operation, there is rise in temperature by 1 degree C to 3 degree C, Churning is accompanied by foaming and them comes the breaking stage.

[Supervised by Operator / Operator]

7.3.4 See through the sight glass for ensuring the completion of butter formation. Remove the buttermilk through drain plug. Buttermilk taken out is chilled and mixed with raw milk. The quality of each lot of buttermilk is got checked from Q.A department.

[Supervised by Operator / Operator]

7.3.5 After draining the buttermilk, butter is taken out in trolley and transferred to butter melting vat where it is heated to approximately 70 degree C.

[Supervised by Shift I / C / Operator]

7.3.6 Melted butter is transferred to ghee boiler. Open the steam valve slightly. Condensate is drained out and then steam pressure is raised upto 3 kg. Per sq. cm slowly to have rapid boiling and evaporation. Continue steaming for about 1 hour with constant stirring. The parameters maintained are recorded in QMPR-13B (Ghee manufacturing Proforma).

[Supervised by Operator / Executive (Tech.)]

7.3.7 When clear ghee is obtained and colour of the residue becomes brown, then stop further heating and stop the steam valve. Steaming of ghee is done at temperature not more than 105 – 107 degrees C.

[Supervised by Shift I / C / Operator]

7.3.8 Allow the contents to settle for some time preferably 10 – 20 minutes. Transfer ghee from the outlet valve of ghee boiler into settling tank through filter cloth.

[Supervised by Shift I / C / Operator]

7.3.9 Allow ghee to settle in settling tank for 2 – 4 hrs. so that ghee residue settle down.

[Supervised by Shift I / C / Operator]

7.3.10 Pump out ghee from settling tank to filling tank through ghee clarifier and also use cotton pad in balance tank. Ghee is cooled down naturally overnight for good granulation.

[Supervised by Shift I / C / Operator]

7.3.11 Ghee packing is carried out at below 40 degree C.

[Supervised by Shift I / C / Supervisor]

7.3.12 Random checking of weight of tins / pouches is carried out and recorded in the specified register QMPR-8 Weighment Register (Ghee Section / Powder Plant).

[Supervised by Shift I / C / Supervisor]

7.3.13 Ghee tins are properly cleaned from inside with high-pressure air before filling ghee into tins.

[Supervised by Shift I / C / Supervisor]

7.3.14 Printing / embossing of batch no, date of Mfg. and Maximum Retail Price (MRP) etc. is done as per statutory requirements on each pack of ghee packet / tins / jars.

[Supervised by Shift I / C / Supervisor]

7.3.15 Temperature of granulation storage room is kept at 18 degree to 22 degree C.

[Supervised by Shift I / C / Supervisor]

7.3.16 When complete granulation is achieved within 24 – 48 hours, proper cleaning of tins with duster is done from outside before putting them into the corrugated boxes properly.

[Supervised by Shift I / C / Supervisor]

7.3.17 Each corrugated box is weighed and gross weight is indicated on it, ghee packed in containers is transferred to ghee storage godown. Finished product is transferred to Ghee store after Quality Clearance Certificate. Now ghee is ready for marketing / dispatch.

[Supervised by Shift I / C / Supervisor]

7.3.18 All the packing material damaged during filling is recorded in QMPR-22 (packing material of ghee section and returned to store).

7.3.19 Ghee pouches are filled in FFS machine in which the relevant polythlene roll is loaded before starting.

7.4 SKIMMED MILK POWDER / DAIRY / WHITENER / BAKER – 555 / WHOLE MILK POWDER.

7.4.1 Skimmed milk of the silo to be run is got released from the Q.A department. (QMPR NO. 7) (Silo Release Report).

[Supervised by Shift I / C / Operator]

7.4.2 The cleanliness of the Evaporator and Drier is checked as per WI.10 and WI.11.

[Supervised by Shift I / C / Operator]

7.4.3 Evaporator is started as per WI.13 and ensure all the plant parameters are constant as per WI.15. The temperature for different products are maintained as mentioned in WI.15.

[Supervised by Shift I / C / Operator]

7.4.4 Feed in take of the Evaporator is started as per WI.13 and wait till the desired concentrate is attained. Till then, flushing / concentrate is flushed into dump tank of reception, which in turn is recycled in raw milk for processing.

[Supervised by Shift I / C / Operator]

7.4.5 When desired concentration is attained, concentrate is taken in concentrate vats after ensuring cleanliness and sterilization of the vats as per WI.12.

[Supervised by Shift I / C / Operator]

7.4.6 During operation of the plant, the log sheet of the evaporator (QMPR-5) (Evaporator & drier logbook) is filled up by the operator.

[Supervised by Shift I / C / Operator]

7.4.7 When the concentrate has started reaching concentrate vats, start the Drier as per WI.14.

[Supervised by Shift I / C / Operator]

7.4.8 Start feed intake into the drier after ensuring that all the working parameters are constant as per WI.16. The temperature parameters on drier for different products are maintained as mentioned in WI.16.

[Supervised by Shift I / C / Operator]

7.4.9 Watch the finished product coming out of the drier and start packing of the same as per packing WI.20.

[Supervised by Shift I / C / Operator]

7.4.10 Ensure inspection and testing of the product through Q.A department at interval of every 30 minutes.

[Supervised by Shift I / C / Operator]

7.4.11 Constant monitoring of the quantity of milk in silo is done to ensure smooth switching over to next silo without starving the evaporator.

[Supervised by Shift I / C / Operator]

7.4.12 Stop the Evaporator as per WI.17 and switch over to C.I.P. as per WI.11.

[Supervised by Shift I / C / Operator]

7.4.13 Stop the drier as per WI.18 and switch over to CIP of the same as per WI.19 / 11.

[Supervised by Shift I / C / Operator]

7.4.14 For Baker-555 powder, different ingredients are blended in blender as per work instructions – 22.

7.5 SWEETENED (STERILIZED) FLAVOURED MILK (SFM)

7.5.1 Milk tank, bottle filling tank and all pipelines and valves are cleaned and sterilized properly as per WI.1.

[Supervised by Shift I / C / Operator]

7.5.2 The milk is standardized to desired level of FAT / SNF (2.0 / 9.8) and homogenize the same at 70 degree C. at 2000 – 2200 PSI.

[Supervised by Shift I / C / Executive (Tech.)]

7.5.3 Sugar is added to the milk as per specified quantity.

[Supervised by Shift I / C / Executive (Tech.)]

7.5.4 Empty bottles are cleaned as per WI (5).

[Supervised by Shift I / C / Executive (Tech.)]

7.5.5 It is ensured that temperature of the milk remain between 6 – 8 degree C. to preserve the quality of milk throughout the filling.
[Supervised by Shift I / C / Executive (Tech.)]

7.5.6 The sample is analyzed by the quality assurance department for FAT / SNF / acidity / alcohol test etc.
[Supervised by Shift I / C / Executive (Tech.)]

7.5.7 Required quantity of flavor & color is added in the milk.
[Supervised by Shift I / C / Executive (Tech.)]

7.5.8 About 15 – 20 litter of milk is taken out from machines before filling bottles with proper corking of the bottles with crown cork.
[Supervised by Shift I / C / Executive (Tech.)]

7.5.9 Correct filling of bottles upto level 200 ml $\pm$ 5ml) is done.
[Supervised by Shift I / C / Executive (Tech.)]

7.5.10 Milk bottle crates are loaded in the sterilizer immediately when one lot of bottles becomes ready and sterilized as per WI.23 and recorded in QMPR-15. (SFM manufacturing Logbook).
[Supervised by Shift I / C / Executive (Tech.)]

7.5.11 Each and every bottle is checked for sediment / extraneous matter / loose corking and rejected bottles are segregated for re-processing.
[Supervised by Shift I / C / Executive (Tech.)]

7.5.12 When the temperature comes down to room temperature, each bottle is cleaned to remove dirt and extraneous matter from outside. Affix labels on each bottle as per statutory requirement.
[Supervised by Shift I / C / Executive (Tech.)]

7.5.13 The SFM cartons are shifted to godown after putting batch No. on each cartons.
[Supervised by Shift I / C / Executive (Tech.)]

7.5.14 Bottles are cartoned after labeling and recorded in QMPR-12. (Shift Performa indigenous products)

7.6 LASSI

7.6.1 Cleanliness of the equipment and utensils is checked as per WI. (1).
[Supervised by Shift I / C / Operator (Tech.)]

7.6.2 Village Level Collection (VDC) milk chilled below 7 degree C, filtered through clean sterilized muslin cloth is taken and standardized to 5.0 FAT and 10.5 % SNF.
[Supervised by Shift I / C / Operator (Tech.)]

7.6.3 Standardized milk is heated in 80 degree C. and cooled to 37 degree C.
[Supervised by Shift I / C / Operator (Tech.)]

7.6.4 Standardized milk is inoculated with 0.5 $\pm$ 01 % active culture and incubated at 35 – 37 degree C. till acidity reaches 0.7 to 0.8 % lactic Acid.
[Supervised by Shift I / C / Operator (Tech.)]

7.6.5 The curd so formed is broken gently by clean sterilized Plunger or mild churning and heated to 80 degree C, homogenized at 1000 PSI & chilled below 7 degree C. Sugar previously pasteurized in water and chilled below 7 degree C is added. Chilled pasteurized water is added so that final product has specified composition as per IBI specifications.
[Supervised by Shift I / C / Operator (Tech.)]

7.6.6 Lassi is packed in pouches taking all hygienic precautions and transferred to cold store at 7 degree C till dispatch.
[Supervised by Shift I / C / Operator (Tech.)]

7.6.7 While packing lassi WI – (9) is followed strictly.
[Supervised by Shift I / C / Operator (Tech.)]

7.7 MILK CAKE

7.7.1 Cleanliness of the equipment and utensils are cleaned as per WI. (1).
[Supervised by Shift I / C / Operator (Tech.)]

7.7.2 VCL milk chilled below 7 degree C., filtered through clean sterilized muslin cloth is taken and standardized to 4.6 % FAT and 8.8 % SNF.
[Supervised by Shift I / C / Operator (Tech.)]

7.7.3 Standardized milk is allowed to boil at slow rate with constant stirring to avoid burning of milk solids on the wall of the kettle.
[Supervised by Shift I / C / Operator (Tech.)]

7.7.4 Add 50 mgs of critic acid per 20 kg milk during boiling of milk at stage when the volume is reduced to 1/3rd. This is done to improve the texture of Khoa.
[Supervised by Shift I / C / Operator (Tech.)]

7.7.5 Sugar is added @ 25 % of Khoa quantity slowly with constant stirring. Finally cardamom flavor @ 20 ml 100 kg is added.
[Supervised by Shift I / C / Operator (Tech.)]

7.7.6 Heating is stopped when typical brown color appears. The contents are transferred in trays and spread uniformly.
[Supervised by Shift I / C / Operator (Tech.)]

7.7.7 The contents are cooled and packed in required sizes. Milk cake is stored at room temperature.
[Supervised by Shift I / C / Operator (Tech.)]

7.7.8 While packing Milk Cake WI- (9) is followed strictly.
[Supervised by Shift I / C / Operator (Tech.)]

7.8 PANEER

7.8.1 Cleaning of the equipment and utensils is done as per WI.I.

[Supervised by Shift I / C / Operator]

7.8.2 VLC milk chilled below 7 degree C, or milk directly from pasteurizer is filtered through clean-sterilized muslin cloth is taken and standardized to FAT: SNF ratio of 1:1.85 – 1.90 and heated upto 85-90 degree C and cooled down to 70°C for coagulation.

[Supervised by Shift I / C / Operator]

7.8.3 0.1 % acetic acid solution is added to the milk heated at 80 degree C slowly with gentle agitation till greenish whey appears with pH approximate 5.3 to 5.4.

[Supervised by Shift I / C / Executive (Tech.)]

7.8.4 Whey is allowed to drain through muslin cloth, coagulum collected in muslin cloth is transferred to wooden / s.s mould and pressed with 20 kg pressure for 20 minutes.

[Supervised by Shift I / C / Operator]

7.8.5 Paneer blocks are kept in luke warm water for 10-15 mts. and thereafter paneer blocks are kept in pasteurized chilled water for 2 hours for curing of paneer. There after Paneer is cut into desired pieces of shape / weight and packed in pouches and the quantity is mentioned in QMPR-12.

[Supervised by Shift I / C / Operator]

7.8.6 The packed pouches are stored in cold store at below 7 degree C.

[Supervised by Shift I / C / Operator]

7.8.7 While packing Paneer WI.10 is followed strictly.

[Supervised by Shift I / C / Operator]

7.9 CURD

7.9.1 Milk is Standardized for curd preparation as per norms. Milk is heated to 95-100 degree C / for 15 minutes and cooled down to 37 degree C.

7.9.2 All the utensils to be used are properly cleaned & sterilized with steam.

7.9.3 0.5 to 1.0 active culture is added in the milk and thoroughly mixed, milk is transferred to kettle / vat for filling.

7.9.4 MRP, date of manufacturing is stamped on each cup before filling.

7.9.5 Milk is filled in cups & lids are heat-sealed. Each lid is checked for leakage, if any.

7.9.6 Cups are transferred to incubator lotwise maintained at 37 degree C.

7.9.7 Cups and firm kept in incubator for 3-5 hrs. till acidity level of 0.50-0.55 % is attained and smooth and firm body texture is formed.

7.9.8 Cups are immediately transferred to cold store.

7.9.9 Cups are transferred into cartons after 03 hrs of storage and quantity recorded in QMPR-12.

7.10 PINNI

7.10.1 Take specified quantity of Suji & besan and fry the ingredients by addition of desi ghee in a kettle till it achieve brownish color.

7.10.2 Dal pithi is added and mixed well and fried again.

7.10.3 Specified quantity of khoya is added in it and mixed well.

7.10.4 The above contents are transferred into tray – (A).

7.10.5 Water (4kg. Appx) is taken in kettle and 10 kegs sugar is added. Thick syrup is made.

7.10.6 "A" is added in sugar syrup and mixed well.

7.10.7 The contents are transferred into trays and allowed to cool down to room temperature.

7.10.8 Proper balls of pinni are made and placed in pastry "Katori" and further in ½ kg & 1 kg sweet box as per requirement and its quantity is recorded in QMPR-12.

7.11 ICE CREAM

7.11.1 PROCEDURE FOR ICE CREAM MIX PREPARATION

1. Batch pasteurizer Vat is properly cleaned.
2. Specified quantity of fresh milk is taken in it & temperature is raised to 40 degree C.
3. Add to it slowly specified quantities of GMP, White Butter / Cream, stabilizer & emulsifier.
4. The milk is heated to 80 degree C / 5 minutes.
5. The Ice Cream mix is homogenized 2500-3000 PSI pressure.
6. The Ice Cream mix is chilled through chiller & transferred to Aging Vat. It is held there for minimum 8 hours before preparation of Ice Cream.

7.11.2 PROCEDURE FOR PREPARATION OF ICE CANDY WATER

1. Approximately 35 litres of potable water is taken in steam jacketed Vat.
2. Specified quantity of sugar, color, flavor & citric acid is added
3. Volume is made to 40 litres
4. It is pasteurized to 80 degree C & chilled to 10 degree C.
5. Proper cleaning of moulds is done.
6. Ice candy water is added to the moulds upto brink.
7. Moulds are transferred to brine water maintained at – 20 degree C.
8. Wooden sticks are put into each pocket of moulds when Ice candy water is half frozen.
9. The moulds are allowed to remain in the brine tanks for 30 – 40 minutes till Ice candies are properly frozen.
10. Candies are taken out from moulds and put in the poly liner pouches and transferred to ice cream cold store till dispatches.

7.11.3 PROCEDURE FOR CRUNCH PREPARATION

1. Take 4 kg of sugar in karahi.
2. Slowly heat the sugar with constant stirring.
3. Add kaju in it when sugar is fully caramelized & then stop heating.
4. The contents are transferred into trays & allow it to harden.
5. The crunch is broken into small pieces before putting in ice cream.

7.11.4 PROCEDURE FOR CHOCOBAR PREPARATION

1. RBD coconut oil is taken in a kettle and heated to 75 degree C
2. Transfer the coconut oil into bowl and add to it chocolate paste and mix well.
3. Bring it to room temperature.

7.11.5 PROCEDURE FOR ICE CREAM PREPARATION

1. Proper cleaning and sterilization of continuous freezer is done.
2. Color of flavor is added in the Ice cream mix as per variety of ice cream.
3. Run the ice cream pump and agitator of chilling chamber of machine.
4. Proper stamping of Batch No., M.R.P and date of manufacturing of cups / bricks / gallon is done.
5. The ice cream is filled in cup / brick / gallon by keeping it under the machine. Maintain over run 90 – 100 %.
6. The cups are transferred into outer carton and affix BOPP tape.

7.11.6 PROCEDURE FOR TOFFEE PREPARATION

1. Pour 5 ltr of milk in a kettle and boil it with constant mixing.
2. To this, 1 kg. Sugar and 40 gm of TSP with constant stirring is added.
3. The milk is boiled till rabri like texture & body is achieved and color turns brownish.
4. Slowly add 100 gm liquid glucose with slow stirring.
5. The contents are transferred into trays and allowed to cool down to room temperature. It will become hard mass.

6. Toffee (5 gm) is made with the help of cutter and wrapping in Aluminum foil.

7. The cartons are transferred to ice cream cold store for hardening.

7.12 RECEIPT OF EMPTY CRATES AND DESPATCHES

7.12.1 All empty crates are received from the different parties and recorded in QMPR – 06. (Daily empty Plastic crate stock position).

7.12.2 The receipt / acknowledgment of empty crates received is issued with QMPR-24. (Empty receipt).

7.12.3 The counting of the material is supervised by dispatch Supervisor.

7.12.4 The dispatches of the liquid milk crates are also done by dispatch Supervisor.

7.12.5 The QMPR-18 (Statement of liquid milk dispatches) in morning and evening is prepared as per QMPR-25. (Gate outward challan liquid milk dispatches)

7.13 TRACIABILITY OF MILK AND MILK PRODUCTS

7.13.1 Raw Milk after grading is segregated, chilled and stored in separate raw milk storage tanks as per grade. Record of each tank is maintained for quality Fat, SNF %, acidity, contents etc.

7.13.2 Raw Milk is processed grade wise and stored in separate tanks and records of each tank is maintained for quantity, Fat %, SNF %, Acidity, content etc.

7.13.3 Pasteurized milk sent for city supply, cream used for white butter / Table butter / ghee manufactured and skimmed milk used for skimmed milk powder manufacture is recorded in each shift giving details of grade of milk utilized.

7.13.4 The product manufacture log sheets have details of batch No., date of manufacture and quantity from each tank separately.

7.13.5 This way the milk utilized can be traced back.

7.14 CODING OF PRODUCTS

CODING - Different products have different style of coding.

7.14.1 Milk Powder for bulk coding is done as under :-

First letter stands for grade of Milk Powder.

H - Premium / International grade / extragrade
G - General grade
W - Whole Milk Powder
D – Dairy Whitener

Second letter stands for the date of manufacture indicated in alphabetical order e.g.

A – 1	Z – 26
B – 2	Z1 – 27
C – 3	Z2 – 28
Y – 24	Z3 – 29
Z – 26	Z4 – 30

Third letter stands for month of manufacture indicated in alphabetical order e.g.

A - January
B - February
K - November
L - December

Fourth letter stands for the silo from which milk was taken for manufacture of the milk powder.

S1 - Silo No. 1
S2 - Silo No. 2
S3 - Silo No. 3

7.14.2 Skimmed milk powder for consumer's packing, coding is done as follow :-

First letter stands for grade of powder used for packing as indicated in the bulk packing.

Second letter stands for the date of packing in alphabetic order as in case of bulk packing.

Third letter stands for the month of packing in alphabetical order as in case of bulk packing. Fourth letter stands for the data of manufacture of powder used for packing in alphabetical as in case of bulk packing.

7.14.3 Ghee coding is done as follows:-
MRP –
MELT NO –
PACKED –

7.14.4 Sterilized flavoured milk coding is done as follows:-
MRP –
Batch No. –
Packed. –

Under the head of batch No., data of manufacturing is indicated as under:-

1st	January	---	1
31st	January	---	31
1st	February	---	32
10th	February	---	41

Date of labeling is stamped under the head of packed.

7.14.5 Curd, Lassi, Paneer and Milk Cake are coded as follows:-

First letter stands for date of manufacture in alphabetical order as in case of Milk powder.

Second letter stands for the month of manufacture in alphabetical order in alphabetical order as in case of Milk powder.

7.14.6 Milk pouches for city supply are coded by stamping date of filling as under:-

On 11.02.2003 date of production, 12.02.2001 is stamped i.e. one day advance date is stamped on pouches.

7.14.7 Table Butter / White Butter coding is done as follows

MRP –
Batch No. –
DT of MFG –

7.15

7.15.1 Departmental Management Information System (MIS) is generated in the form of reports viz. QMPR – 26.

7.15.2 Daily dock receipts chart QMPR – 21 shows total quantity of milk received in the department with total FAT kg and SNF kg during the day.

7.15.3 Daily attendance sheet (QMPR – 19) of casual labor utilized during day and night shift shows the manpower put on different manual jobs as per specified norms.

7.15.4 The recovery of FAT / SNF received during the day is calculated in the format (QMPR-16), showing the output in the form of different products manufactured.

7.15.5 The production of liquid milk, ghee, SMP / DW / WMP and indigenous products is recorded on daily basis in respective ledgers. The products liquid milk, table butter and indigenous products are dispatched by the Production Section and other products by Store Section.

7.15.6 Physical stock as per ledgers is conducted jointly by production and Audit department on monthly basis.

8. WORK INSTRUCTION (1) :-

8.1.1 Teepol for manual cleaning must be prepared with following composition.

(i)	Water	300 kg
(ii)	Acid Slurry	10 kg
(iii)	Tri Sodium Phosphate	2 kg
(iv)	Caustic soda	2 kg

8.1.2 The equipment, to be cleaned is to be flushed with ordinary water.

8.1.3 The equipment / appliances shall be manually cleaned with Teepol using scrubber brushes etc and flushed with hot water at 80 degree C for 5mts to remove the chemicals used.

8.1.4 Steam sterilization for 5mts is to be done. When steam sterilization is not possible, then rising with 200-ppm chlorine solution is to be done.

8.2 WORK INSTRUCTION (2) :-

Cleaning in place of Pipe Line / Storage Tanks / Pasteurizer

All the storage tanks, pipelines are cleaned as per specified frequency mentioned in QMPR – 20. (CIP Schedule for processing & butter)

8.2.1 Flush with ordinary water for 5 for 10 minutes to remove milk solids.

8.2.2 Flush with hot water at 75 – 80 degrees C for 5 minutes.

8.2.3 1-1.5 % caustic soda solution is circulated for 30 minutes at 80 – 85 degrees C.

8.2.4 Caustic solution is flushed with not water at 75 – 80 degrees C for 10 to 15 Mts. till flushing water is free from caustic.

8.2.5 Finally sanitizer (200-250 PPM chlorine) solution is circulated for 10 Mts. and the plant is stopped until next operation.

8.2.6 Lines are flushed with water at 80 degree C to remove residual chlorine.

8.2.7 All the parameters attained during CIP are to be recorded in QMPR – 17. (C.I.P Log Book)

8.3 WORK INSTRUCTION (3) :-
Caustic Acid Cleaning Of Pipe Lines,
Storage Tanks Pasteurizer.

8.3.1 Caustic Acid Cleaning (CAC) is to be followed as per specified schedule. This is done after caustic flushing with water at 80 degree C using 1.0 % Nitric acid solution and circulating for 30 Mts. at 80 degree C.

8.3.2 Acid is flushed out with hot water at 70 degree C for 10 Mts.

8.3.3 0.3% caustic solution at 70 degree C is circulated for 5 Mts.

8.3.4 Finally flush with hot water at 80 degree C for 10 Mts.

8.4 WORK INSTRUCTIONS (4) :-
WASHING OF MILK CANS

8.4.1 Milk cans are flushed with ordinary water to remove milk solids.

8.4.2 The cans are scrubbed in can scrubber filled with 0.5 % cleaning solution at 40 degree C.

8.4.3 Milk cans are flushed with hot water.

8.4.4 Milk cans are sterilized with steam for 1 minute.

8.4.5 Milk can-lids are manually cleaned with 2% cleaning solution and flushed with hot water at 80 degree C.

8.5 WORK INSTRUCTIONS (5) :-
WASHING OF SFM BOTTLES

8.5.1 The dairy bottles are kept soaked in Teepol water (0.5%) for at least 60 Mts. To remove milk solids and external dirt.

8.5.2 The bottles are brushed externally and internally and transferred to a tank having 0.5 % cleaning solution at 40 degree C for 5 minutes.

8.5.3 The bottles are brushed with motorized brush.

8.5.4 The bottles are then flushed with water jet and sterilized with 50-PPM chlorine solution & then transferred to packing place in wooden crates keeping those in inverted position.

8.6 WORK INSTRUCTIONS (6) :-
WASHING OF MILK CRATES

8.6.1 Milk crates are flushed with water set pressure externally to remove extraneous matter. Milk crates are also manually rubbed from outside to remove extraneous matter in case dirt is not removed with water set pressure.

8.6.2 Milk crates are then passed through milk crate washer wherein crates are washed with hot Water, Caustic solution & hot water to remove internal & external dirt.

8.6.3 Milk crates are examined for cleanliness; dirty crates are segregated for manual cleaning.

8.7 **WORK INSTRUCTIONS (7) :-**
MILK PASTEURIZATION

		Heating temp.	**Cooling temp.**
8.7.1	Fluid milk for city supply	79 degree C ± 2 C	below 7 degree C
8.7.2	Cream pasteurization	85-90 degree C	below 10 degree C
8.7.3	For H-grade SMP	80 degree C ± 2 C	below 7 degree C
8.7.4	For general grade SMP	75 degree C ± 2 C	below 7 degree C
8.7.5	For milk powder	75 degree C ± 2 C	below 7 degree C
8.7.6	For low bulk density	75 degree C ± 2 C	below 7 degree C
8.7.7	For premium grade low BD SMP	75 degree C ± 2 C	below 7 degree C

8.8 WORK INSTRUCTIONS (8) :-
FUMIGATION OF PACKING ROOM (FOR 1000 CU.FT.SPACE)

8.8.1 Empty out the room to be fumigated.

8.8.2 Wash and clean the shelves / walls / floor and ceiling by brushing with detergent solution.

8.8.3 Add 250-ml formaldehyde solution in plastic tray and to it add 250-ml water.

8.8.4 250 GMS. Of potassium permanganate (KmNo.4) crystals tied in markin cloth carefully slided in the tray and leave the room immediately.

8.8.5 Seal the room tightly and board stating warning, "Room is under fumigation" be displayed.

8.8.6 Vent the room after 12 hours by starting exhaust fan.

8.8.7 The employees shall be permitted to go inside the room after ensuring that room is totally free from fumigating gas.

8.8.8 In case, the load of milk intake is more, the sifter room is be sprayed with 10 % formaline solution.

8.9 WORK INSTRUCTIONS (9) :-
EMPLOYEE'S HYGIENE

8.9.1 Employees handling production are to be in cleaned uniform with caps and masks.

8.9.2 Employees having clean habits only be permitted to handle the products.

8.9.3 Employees shall wash their hands with detergent & then sanitizer solution and dry hand before touching the product.

8.9.4 The packing room shall be perfectly clean and dry and free from files.

8.9.5 The product shall always to kept covered with clean, sterilized muslin cloth.

8.9.6 Packing and sealing of products shall go on as per specified sequence.

8.9.7 Employees shall not be permitted to come and go out frequently from the packing room.

8.9.8 Hygienic handling of the products and packing operation shall be given utmost priority.

8.10 WORK INSTRUCTIONS (10) :-
CLEANING IN PLACE OF EVAPORATING PLANT

8.10.1 Start running water into balance tank as soon as the Milk is finished.

8.10.2 Take the flushings into separate dump tank after the concentrate falls below 30 % Total Solids (TS), collect it for further reconstitution, till it becomes clear water.

8.10.3 Add 50 kgs. NaoH (caustic Soda fakes) of commercial grade along with 4 kgs of sodium hexameta phosphate / Sodium silicate / Tri sodium phosphate into balance tank.

8.10.4 When the flushing becomes slimy, it is taken in.to re-circulation.

8.10.5 Caustic circulation is carried out for 1.0 hour at 85 to 90 degrees C. It is then flushed with plain water so as to remove all traces of caustic.

8.10.6 Nitric Acid 80 L is poured into the balance tank and re-circulation continues upto 45 minutes at 90 to 95 degrees C.

8.10.7 After through flushing of nitric Acid, again caustic soda flakes 15 kgs are added into the balance tank for final flushings and removal of all the acid traces from the plant, it is continued for 30 Mts.

8.10.8 After thorough flushing of with water, the bends, S.S. valves, pipelines are dismantled for manual cleaning as per W.I.No. (1).

8.11 WORK INSTRUCTION (11)
CLEANING IN PLACE OF SPRAY DRIER

8.11.1 Clean manually all the powder by dry sweeping from the chamber and cyclones.

8.11.2 Clean atomizer disc manually and again fit that in place.

8.11.3 All the rotary star valves are taken out and cleaned manually, place the lids of all the valves without the star valves itself.

8.11.4 Open all the duct lines and close the chamber's door and cyclone's manholes.

8.11.5 90-degree temperature water is sprayed through the atomizer into the chamber, followed by caustic solution of 1.5 % for 60 Mts. Finally again cold water is sprayed into the chamber in order to wash the caustic residue.

8.11.6 Cyclones are manually cleaned with water spray nozzle and brushes along with exhaust duct.

8.11.7 Rotary star valves, duct lines and atomizer disc are manually cleaned with detergent solution and chlorine solution (200 PPM).

8.11.8 All the duct lines are assembled and it is followed by drying up operation of chamber and plant by circulating hot air therein.

8.11.9 When the chamber and cyclones are completely dry, all the rotary star valves are fitted.

8.12 WORK INSTRUCTIONS (12) :-
CLEANING AND STERILIZATION OF CONCENTRATE VATS

8.12.1 When the concentrate vat is emptied, the vat is immediately flushed with water and rinsing is collected for reprocessing.

8.12.2 The vat is manually cleaned with detergent of specified strength.

8.12.3 S.S valves at the top and bottom of the vat alongwith pipelines is dismantled for manual cleaning with the same detergent.

8.12.4 After thorough cleaning and inspection by the operator, all the S.S. valves, and pipelines are dipped into sanitizer solution.

8.12.5 The S.S. valves bends and fittings are then assembled before starting. The steaming of concentrate vat is done for 10 – 15 Mts.

8.13 WORK INSTRUCTIONS (13) :-
STARTING UP OPERATION OF EVAPORATING PLANT.

8.13.1 Check that all the valves, pipelines are properly fitted.

8.13.2 Check that the spray pond is filled with adequate water and ensure that nozzles are not choked.

8.13.3 Ensure that air supply for the operation of automatic steam controller is available.

8.13.4 Check availability of seal water for pumps and vacuum pumps.

8.13.5 Fill the balance tank with water.

8.13.6 Start the vacuum pump to create vacuum of 710 mm.Hg. in the 4th calandria.

8.13.7 Drain out all the condensate from the main steam line to the T.V.R (Thermo vapour Recommpressor)

8.13.8 When the desired vacuum is achieved in the 4th calandaria, switch on all the pumps successively with water as mentioned below :-

i. Condenstate pump No. I & II.
ii. Feed pump (From balance tank to booster pump)
iii. Booster pump.
iv. D.S.I. Pump.
v. 1st Calandria pump.
vi. 2nd Calandria pump.
vii. 3rd Calandria pump.
viii. 4th Calandria pump.
ix. Finisher Pump.

8.13.9 Open the steam valve through automatic steam controller and keep steam pressure at 3.0 kg/cm.

8.13.10 Repeat opening of steam valves, through automatic steam controller of NTP and DSI and set the pressure to desired set point.

8.13.11 When the temperature and vacuum is established in all effects as per W.I. No.16, the sterilizing chemical of 0.1 % strength is circulated for 30 mts followed by flushing with water.

8.13.12 Switch over to milk silo, which is already released by Q.A department.

8.13.13 Flushing will continue till milky white discharge comes out, which is diverted to processing section till the concentration reaches to 30 %. T.S. (Total solids).

8.13.14 Increase the steam gradually till the concentrate reaches upto desired T.S, which are checked with the help of hydrometer or refractometer.

8.13.15 Set the automatic steam controller at the set point with auto mode.

8.13.16 Take the concentrate into the concentrate vats, which is previously sterilized as per WI.13.

8.14 WORK INSTRUCTIONS (14) :-
STARTING UP OPERATION OF SPRAY DRIER.

8.14.1 Ensure that plant has been cleaned as per WI.12

8.14.2 Atomizer properly placed, connected with feed pipes.

8.14.3 Doors of main chamber, cyclones are properly closed.

8.14.4 Air supply filters are clean and properly fitted.

8.14.5 Rotary valves of main chamber, cyclones are properly fitted.

8.14.6 Indicator on controller for feed pump is at (zero) and water connected to feed pump.

8.14.7 Air supply for the instrument is available.

8.14.8 Set the point of the controller for outlet temperature to 100 degree C.

8.14.9 The motors are started in the following succession :-

i. Exhaust fan.
ii. Delivery fan.
iii. Neck cooling fan.
iv. Dehumidifier pump.
v. Rotary valves.
vi. Powder conveying fans.
vii. Atomizer
viii. Feed pump.
ix. Sifter.

8.14.10 Setting up of operation parameters.

i. Open the condensate drain valve for condensate drain before opening of main steam valve.

ii. Inlet and outlet temperature will increase evenly.

iii. When outlet temperature reaches 100 degree C, start the feed pump to the dryer at manual mode.

iv. Control the outlet temperature at 100-degree C while inlet at 105 degree C.

v. When the inlet temperature stops increasing at the required set point and temperature, the plant is to be switched over to the product.

vi. The outlet temperature to be adjusted with the final product moisture content (3.4 – 3.6 %) at 90 degree C.

vii. Once the plant is set at manual mode then switch over to auto mode.

viii. In order to keep the desired outlet temperature with the product, the no. of revolution of the high pressure pump will increase automatically, thus outlet temperature will remain constant.

ix. Dehumidifier attached to conveying duct is so operated that the temp. of the finished product is maintained below 32 deg to 37 deg. C.

8.15 WORK INSTRUCTIONS (15) :-
WORKING PARAMETERS OF EVAPORATING PLANT

	EXPORT Grade Product	G grade Product / Premium	Channa Spl product	DW	WMP.
NTP Temp.	85 – 90 deg.C	75 – 80 deg.C	75 – 80 deg.C	85 deg.C	85 deg.C
DSI Temp.	102 – 105 deg C	---	----	----	----

8.16 WORK INSTRUCTIONS (16) WORKING PARAMETERS OF SPRAY DRIER

	S M P			DW	WMP
	Export Grade	G grade Bulk	Channa Spl Premium		
INLET TEMP.	180 -- 185deg C	180 – 185 deg C	180 – 185 deg C	155 – 160 deg C	180 – 185 deg C
OUTLET TEMP.	90 – 95 deg C	90 – 95 deg C	90 – 95 deg C	95 – 97 deg C	92 – 95 deg C
	0.50 – 0.55	0.50 – 0.55	0.42 – 0.48	0.55 – 0.62	0.55 – 0.62

8.17 WORK INSTRUCTIONS (17) STOPPING OF EVAPORATING PLANT

8.17.1 When milk feed is stopped, water is taken into the feed balance tank for flushing of the plant and continues till milk flushings disappear.

8.17.2 Plant is immediately switched over to C.I.P. cleaning as per WI. (11).

8.17.3 After the completion of C.I.P., main steam at T.V.R., N.T.P. and DSI is closed and all pumps are stopped in the following sequence.

i. Vacuum pump.
ii. Cooling water / spray pond pumps.
iii. Feed pump.
iv. Booster pump.
v. DSI pump.
vi. Pumps of all effect one by one.

8.17.4 All valves, bands fittings are dismantled for manual cleaning as per WI.1.

8.18 WORK INSTRUCTIONS (18)
STOPPING OF SPRAY DRIER.

8.18.1 When the concentrate is atomized completely, change to water and at the same time the set point of the controller for outlet temp. Is set to 100 degree C.

8.18.2 Stop steam and take the plant in manual mode all the time to keep the outlet temp. at 100 degree C while the inlet temp. drops.

8.18.3 When the revolution of the high-pressure pumps have been reduced to zero the drying chamber door is opened and the pressure is released.

8.18.4 Switch over to dry cleaning / C.I.P. of the chamber as per W.I. 12.

8.19 WORK INSTRUCTIONS (19)
DAILY (ROUTINE) CLEANING OF SPRAY DRYER

8.19.1 Powder deposits inside the drying chamber are removed by air sweeping after keeping chamber door of the plant slightly opened.

8.19.2 Open the Rotary valves of chamber, cyclones and manual cleaning with brushes is carried out.

8.19.3 Cleaning of the feed pipelines as per WI 1.

8.19.4 Shifter is opened and manual cleaning of the sieve is done.

8.20 WORK INSTRUCTIONS (20)
PACKING INSTRUCTIONS OF SKIMMED MILK POWDER / DAIRY WHITENER / WHOLE MILK POWDER

8.20.1 Ensure that packing room is neat, clean and dry.

8.20.2 Ensure that all packaging machines are clean and sterilized.

8.20.3 All employees working in the packing room must wear caps and cover their mouth with mask.

8.20.4 All workers have to wear neat and clean uniforms and observe instructions regarding personal hygiene.

8.20.5 Everybody going in side the packing room has to wash the hands with sanitizer and get the hands dried.

8.20.6 Aerial flora of the packaging room shall be checked and fumigation of the room shall be carried out as per WI. (8) On weekly basis and recorded in QMPR – 05.

8.20.7 Ensure that the temperature of product being packed is maintained between 32 to 37 deg C.

8.20.8 Weights of different type of packs of powder is to be checked at random every 30 minutes and recorded in the register. QMPR-08

8.20.9 After completion of the packing, tables and other small equipment is to be thoroughly dry – cleaned.

8.20.10 The packed SMP /WMP / DW bags are to be stacked properly in neat and clean godown with proper stacking 6" away from walls for air circulation at ambient temperature.

8.20.11 All the packing material damaged during filling is returned to store and recorded on QMPR – 23.

8.21 WORK INSTRUCTIONS (21)
CLEANING OF BUTTER CHURN

8.21.1 When the cream is churned, take out all residual butter which is sticking inside manually and thereafter rinse the churn with hot water.

8.21.2 Carry out C.I.P cleaning of churn buy running in 1st gear for about 10/15 minutes with 1% caustic solution at 80 degree C.

8.21.3 Drain out complete solution and rinse the churn thoroughly with tap water.

8.21.4 All cream lines/ bends valves should also be dismantled.

8.21.5 Cream vats should also be cleaned with teepol.

8.21.6 Carry out sterilization of churn with steam for about 15-20 minutes.

8.21.7 Put the churn to rest for re-use again the next day.

8.22 WORK INSTRUCTIONS (22)
BLENDING OF POWDER

8.22.1 Blending Room is fumigated as per W.I. No.8.

8.22.2 Ensure the blending room is always neat and clean.

8.22.3 Select the SMP batches to be added into Bleander.

8.22.4 The recipe to be following as:

SMP = 75 %
MD = 25 %

8.22.5 Rotate the blender for atleast 30 minutes and draw the sample.

8.22.6 After getting clearance from Lab., start filling the product in 1 kg. Pkts as per W.I. No.20.

8.23 WORK INSTRUCTIONS (23)
BATCH STERILIZER FOR S.F.M. BOTTLES

STARTING & STOPPING :-

8.23.1 Check the steam inlet line in the sterilizer for any blockage of the holes.

8.23.2 Also check up steam trap and remove glass pieces from inside the sterilizer.

8.23.3 Check up safety valve and door gaskets.

8.23.4 Load the sterilizer with bottles in G.I. Crates on the railing inside the sterilizer.

8.23.5 Close the door and tighten it properly with pressure to make airtight.

8.23.6 Open the steam valve slowly to allow air to exhaust from this valve of the sterilizer.

8.23.7 Close the air valve when the steam starts coming out from this valve and temperature starts increasing beyond 70 degree C.

8.23.8 Regulate the valve in such a way that pressure inside the sterilizer rises to 120 degree C in about 20 to 30 minutes.

8.23.9 Maintain pressure at 120 deg C for about 15-20 mts or any other time / temperature combination.

8.23.10 When desired temperature / time is achieved, immediately release pressure by closing the steam valve and opening the air outlet valve for steam to exhaust in air or to the 2nd sterilizer.

8.23.11 When all steam is exhausted, let loose the gate of the sterilizer to open it slightly and allow the contents to cool for about 5-7 minutes.

8.23.12 Open the gate fully and further allow it to cool for 2-3 minutes and then take out SFM crates.

8.24 WORK INSTRUCTION (24)
DEODORIZER PLANT

8.24.1 Start the spray pond and regulate the flow of water in the ejector system.

8.24.2 Open both steam valves in the ejector for raising the vacuum.

8.24.3 After the vacuum reaches 500 mm load, transfer the ghee into the system.

8.24.4 Fill the pan upto the top coil and after the loading is finished, shut off the pump and close the valve of loading line.

8.24.5 When the vacuum reaches 700 mm, open the steam in the coil.

8.24.6 After ghee has started boiling and temperature reaches 130 deg C, open steam in the boosters.

8.24.7 This will further increase the vacuum in the pan upto 750-mm.

8.24.8 As the temperature reaches 140 deg C, steam is opened in the nozzles and controlled boiling of ghee is done.

8.24.9 Boiling is to be continued upto a temperature of 180 deg C which is the maximum limit.

8.24.10 Keep on checking the ghee samples frequently till colour of ghee changes to white.

8.24.11 At this stage, shut off the steam in the nozzles and coil and drain the condensate.

8.24.12 Start running water in the coil so that the ghee is cooled down.

8.24.13 As the temperature goes below 100 deg C, close the steam in the ejectors and boosters and also stop the spray pond pump.

8.24.14 After the process is completed, pump the ghee through ghee filter into the filling tanks.

9. CONTINUAL IMPROVEMENT

9.1 Prime performance parameters for production section have been identified and norms for individual performance parameters have been laid down. The norms of prime performance parameters are given at annexure "I". On monthly basis achievement of each prime performance parameters are reviewed by CEO / GM (W) against targets and in case targets are not achieved then reasons for low performance are investigated and corrective actions are taken to improve the performance of specific activity. Further the detailed implementation tasks for improving the performance of prime parameters have been identified & list of implementation tasks is given at annexure ' II'.

9.2 **Training of Personnel**

Training needs of the individual officers, Operators & skilled workers are identified. Training to workers is imparted on the shop floor by Shift Incharge / Asst.Mgr / Manager Production on day to day basis. Special training programmes for staff members are conducted with the help of Personnel Department as per specified schedules. Please refer to the manual of Personnel department.

9.3 **Quality Improvement Circle**

To optimise the utilization of resources of the company and better participation of junior staff for the growth and development of the company, Quality Improvement Circle meetings are held after every fifteen days. The operators of different sections of Productions department, staff of Engineering department and all Technical Officers participate in the meetings. These meetings are conducted by GM (Works). Good suggestions for optimum utilization of fuel, electricity, water & better productivity are taken from staff members. Suggestions given by staff members are reviewed by committee comprising of GM (Works), Manager (Prod.) and HOD (Engg.). Good suggestions are implemented and staff members giving good suggestions are appreciated and rewarded suitably.

10. CONTROL OF QUALITY RECORDS

10.1 Quality records in the department are kept as per the common procedures issued by M R office.

10.2 List of quality records is attached.

Prepared by **H O D**	Approved by **CEO**
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

LIST OF QUALITY RECORDS

QR-PRD- 01 OF 02

DEPARTMENT : PRODUCTION

SR. NO.	PARTICULARS	FORMAT/ FILE NO	ITEM CODE NO.	LOCATION	RETENTION PERIOD
01	MILK RECEPTION AND UTILISATION STATEMENT (PRODUCT TRACIBILITY)	QMPR-01	IBI\PRD\R\TR\01	IBI\PRD\PROC\TBL-1	1 YEAR
02	WEIGHMENT OF LIQUID MILK POUCHES	QMPR-02	IBI\PRD\R\WRMP\02	IBI\PRD\PROC\TBL-1	1 YEAR
03	PACKING MATERIAL FOR SFM SECTION	QMPR-03	IBI\PRD\R\PMIS\03	IBI\PRD\INDI\TBL-4	i YEAR
04	GHEE POUCHES COUNTER LOG BOOK	QMPR-04	IBI\PRD\R\GPCLB\04	IBI\PRD\GF\TBL-5	1 YEAR
05	EVAP. AND DRIER LOG SHEET	QMPR-05	IBI\PRD\R\EDLB\05	IBI\PRD\PP\TBL-2	1 YEAR
06	DAILY EMPTY PLASTIC CRATE STOCK POSITION	QMPR-06	IBI\PRD\F\PCSR\06	IBI/PRD/TD/ALM-1	1 YEAR
07	MILK SILO RELEASE REGISTER	QMPR-07	IBI\PRD\R\MSRR\07	IBI/PRD/PP/TBL-2	1 YEAR
08	GHEE/POWDER WEIGHMENT REGISTER	QMPR-08	IBI\PRD\R\WR\08	IBI/PRD/GHEE/TBL-5	1 YEAR
09	SHIFT PROFORMA OF COLD STORE STOCK	QMPR-09	IBI\PRD\R\SPLM\09	IBI/PRD/PROC/TBL-1	1 YEAR
10	PRODUCT TRANSFER VOUCHER	QMPR-10	IBI\PRD\R\PTV\10	IBI/PRD/TO/TBL-3	1 YEAR
11	CONSUMABLE PACKING MATERIAL RETURN VOUCHER	QMPR-11	IBI\PRD\R\RVC\11	IBI/PRD/TD/TBL-03	1 YEAR
12	SHIFT PERFORMA INDIGENIOUS PRODUCTS	QMPR-12	IBI\PRD\R\SPIP\12	IBI/PRD/INDI/TBL-4	1 YEAR
13	BUTTER /GHEE MFG. PROFORMA(A+B)	QMPR-13	IBI\PRD\R\BGMP\13	IBI/PRD/GHEE/TBL-5	1 YEAR
14	SHIFT PROFORMA	QMPR-14	IBI\PRD\R\SPP\14	IBI/PRD/PROC/TBL-1	1 YEAR
15	SFM MFG. LOG BOOK	QMPR-15	IBI\PRD\R\SMLB\15	IBI/PRD/INDI/TBL-4	1 YEAR
16	DAILY BALANCE SHEET OF FAT/SNF	QMPR-16	IBI\PRD\F\DBS\16	IBI/PRD/F/TO/TBL-3	1 YEAR
17	CIP LOG SHEET	QMPR-17	IBI\PRD\R\CLS\17	IBI/PRD/PROC/TBL-1	1 YEAR
18	STATEMENT OF LIQUID MILK DESPATCHES	QMPR-18	IBI\PRD\R\SLMD\18	IBI/PRD/T0/TBL-3	1 YEAR
19	WORKERS IN/ OUT REGISTER	QMPR-19	IBI\PRD\R\WR\19	IBI/PRD/PROC/TBL-1	1 YEAR
20	CIP SCHEDULE FOR PROCESSING & BUTTER SECTION	QMPR-20	IBI\PRD\R\CIPS\20	IBI/PRD/PROC/TBL-1	1 YEAR
21	DAILY MILK RECEIPT AT DOCK(PLANT)	QMPR-21	IBI\PRD\R\DMR\21	IBI/PRD/TO/TBL-3	1 YEAR
22	PACKING MATERIAL (GHEE SECTION)	QMPR-22	IBI\PRD\R\PMG\22	IBI/PRD/GHEE/TBL-5	1 YEAR
23	PACKING MATERIAL (POWDER PLANT)	QMPR-23	IBI\PRD\R\PMP\23	IBI/PRD/PP/ALM-2	1 YEAR
24	EMPTY RECEIPT	QMPR-24	IBI\PRD\R\ER\24	IBI/PRD/TO/ALM-01	1 YEAR
25	GATE OUTWARD CHALLAN(LIQUID MILK DESPATCHES)	QMPR-25	IBI\PRD\R\GOC\25	IBI/PRD/TO/TBL-3	1 YEAR
26	PRODUCTION STOCK POSITION AS ON	QMPR-26	IBI\PRD\R\DPS\26	IBI/PRD/TO-3	1 YEAR
27	DAILY PERFORMANCE REPORT (PRODUCTION)	QMPR-27	IBI\PRD\R\DPR\27	IBI/PRD/PROC/TBL-3	1 YEAR
28	TANKS CLEANING REGISTER	QMPR-28	IBI\PRD\R\TCR\28	IBI/PRD/R/PROC/TBL-1	1 YEAR
29	BLENDER LOG BOOK	QMPR-29	IBI\PRD\R\BLB\29	IBI/PRD/PROC/TBL-1	1 YEAR
30	DAILY CERTIFICATE LIQUID MILK	F-30	IBI\PRD\F\DCLM\30	IBI/PRD/TO/ALM-01	1 YEAR

LIST OF QUALITY RECORDS QR-PRD- 02 OF 02

DEPARTMENT : PRODUCTION

SR. NO.	PARTICULARS	FORMAT/ FILE NO	ITEM CODE NO.	LOCATION	RETENTION PERIOD
31	QUALITY CERTIFICATE FOR GHEE	F-31	IBI\PRD\F\QCG\31	IBI/PRD/TO/ALM-01	1 YEAR
32	RAW MILK CLEARANCE SLIP	F-32	IBI\PRD\F\RMC\32	IBI/PRD/TO/ALM-01	1 YEAR
33	QUALITY CERTIFICATE FOR MILK POWDER	F-33	IBI\PRD\F\QCMP\33	IBI/PRD/TO/ALM-01	1 YEAR
34	POWDER TRANSFER VOUCHER	F-34	IBI\PRD\F\PTV\34	IBI/PRD/TO/ALM-01	1 YEAR
35	GHEE TRANSFER VOUCHER	F-35	IBI\PRD\F\GTV\35	IBI/PRD/TO/ALM-01	1 YEAR
36	SFM TRANSFER VOUCHER	F-36	IBI\PRD\F\STV\36	IBI/PRD/TO/ALM-01	1 YEAR
37	DETAIL OF EXTRA DUTY	F-37	IBI\PRD\F\DED\37	IBI/PRD/TO/ALM-01	1 YEAR
38	MONTHLY STOCK VERIFICATION	F-38	IBI\PRD\F\MSV\38	IBI/PRD/TO/ALM-01	1 YEAR
39	MONTHLY BALANCE SHEET	F-39	IBI\PRD\F\MBS\39	IBI/PRD/TO/ALM-01	1 YEAR
40	CRATES RECORD FILE	F-40	IBI\PRD\F\CRF\40	IBI/PRD/TO/ALM-01	1 YEAR
41	MARKETING RECORD	F-41	IBI\PRD\F\MKT\41	IBI/PRD/TO/ALM-01	1 YEAR
42	MONTHLY SAVING RECORD	F-42	IBI\PRD\F\MSR\42	IBI/PRD/TO/ALM-01	1 YEAR
43	DAILY LIQUID MILK DISPATCH RECORD	F-43	IBI\PRD\F\LMD\43	IBI/PRD/TO/ALM-01	1 YEAR
44	PRODUCT TRACIBILITY RECORD	F-44	IBI\PRD\F\PTR\44	IBI/PRD/TO/ALM-01	1 YEAR
45	PASTEURIZER GRAPH	F-45	IBI\PRD\F\PG\45	IBI/PRD/TO/ALM-01	1 YEAR
46	CIP SCHEDULE FOR PROCESSING & BUTTER SECTION	F-46	IBI\PRD\F\CIPS\46	IBI/PRD/TO/ALM-01	1 YEAR
47	POWDER PACKING MATERIAL	L-47	IBI\PRD\L\PPM\47	IBI/PRD/TO/TAB-03	1 YEAR
48	GHEE PACKING MATERIAL	L-48	IBI\PRD\L\GPM\48	IBI/PRD/TO/TAB-03	1 YEAR
49	GHEE FINISHED GOODS	L-49	IBI\PRD\L\GFS\49	IBI/PRD/TO/TAB-03	1 YEAR
50	POWDER FINISHED GOODS	L-50	IBI\PRD\L\PFG\50	IBI/PRD/TO/TAB-03	1 YEAR
51	INDIGENOUS FINISHED GOODS	L-51	IBI\PRD\L\IFG\51	IBI/PRD/TO/TAB-03	1 YEAR
52	POWDER BLENDING	L-52	IBI\PRD\L\PB\52	IBI/PRD/TO/TAB-03	1 YEAR
53	INDIGENOUS PACKING MATERIAL	L-53	IBI\PRD\L\IPM\53	IBI/PRD/TO/TAB-03	1 YEAR
54	EMPTY PLASTIC CRATES STOCK	L-54	IBI\PRD\L\EPCS\54	IBI/PRD/TO/TAB-03	1 YEAR
55	ISO FILE	F-55	IBI\PRD\F\IS\55	IBI/PRD/TO/TAB-03	1 YEAR

List of abbrivation:-

Proc - Processing Section

Ind - Indigenous Section

PP - Powder Plant

TO - Technical Office

GF - Ghee Filling

ANNEXURE 'I'

NORMS FOR PRIME PERFORMANCE PARAMETERS (PRODUCTION)

SR. NO.	PARTICULARS	WINTER (Nov – Apr.)	Summer (May – Oct)
1.	FAT / SNF recovery		
	FAT	99.5 %	99.0 %
	SNF	99.0 %	99.0 %
2.	Labour Utilization Efficiency	90.0 %	80.0 %
3.	Power Utilization Efficiency	90.0 %	80.0 %
4.	Consumable expenses per kg of Milk (Rs).	0.018	0.024
5.	Fuel Utilization Efficiency	90.0 %	80.0 %
6.	Packing Materials		
	a) Wastage of Packing Material (Max.)	0.05 %	0.05 %
	b) Bottle Breakage (Max.)	1.0 %	1.0 %
	c) Crown cork wastage (Max.)	1.0 %	1.0 %
	d) Milk Pouches per kg of film (Min.)	442	442
	e) Ghee Pouches per kg of film		
	(1 Lt.)	130	130
	(1 / 2 Lt.)	210	210
	MONTHLY EXPENSES		
7.	Printing & Stationary (Rs.)	1200	1200
8.	Staff welfare (Rs.)	300	300
9.	Business Expenses (Rs.)	1000	1000
10.	Telephone Expenses (Rs.)	1000	1000
11.	Travelling Expenses (Rs.)	1000	1000
12.	ISO Implementation	100%	100%

SPECIFICATIONS FOR PANEER

ANNEXURE - M

SR. NO	PARTICULARS	PFA	BIS	IBI (Small Packing)	BULK PACKING
I	PHYSICAL				
1.	Taste / Flavour	N.S	N.S	Good, pleasant & clean flavour	Good, pleasant & clean flavour
2.	Texture & Body	N.S	N.S	Compact, free from oozing moisture	Compact, free from oozing moisture
II	CHEMICAL				
1.	Moisture % (Max.)	70	60	58 – 62	58 – 62
2.	Fat % (on dry matter basis) (Min .50% of T.S)	50	50	50	50
3.	Acidity % (As lactic acid)	N.S	0.50	0.55	0.55
III	BACTERIOLOGICAL				
1.	SPC / gm. (MAX)	N.S	5,0000	5000	5000
2.	Y & M / gm.	N.S	250	50	50
3.	Coli / gm.	N.S	90	10	10

- **N.S. Not Specified**

Prepared by **H O D**	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

INNOVATIVE BUSINESS IMPROVEMENTSPVT. LTD.

SPECIFICATIONS FOR MILK CAKE & LASSI

Page 01 of 02

ANNEXURE – N

SR NO.	PARTICULARS	MILK CAKE	LASSI
I	PHYSICAL		
1.	Taste / Flavour	Good, sweet crisp	Pleasant sweet, Diacetyl flavour
2.	Body & Texture	Compact granular	Smooth, free from whey & Curd particles
3.	Colour	Light brown to dark brown	Light creamy
4.	Extraneous matter	Absent	Absent
II	CHEMICAL		
1.	Fat % (Min)	20	3.0 – 3.20
2.	SNF % (Min)	40	7.0 – 7.5
3.	Sugar	30.0	10 %
4.	Total milk solids	85 %	20 - 20.7
III	BACTERIOLOGICAL		
1.	SPC / gm.	5000	_____
2.	Coli / gm. (Max.)	Nil	10

ANNEXURE – N

SPECIFICATIONS FOR CURD

SR NO.	PARTICULARS	IBI
I	PHYSICAL	
1.	Taste / Flavour	Pleasant sweet, Diacetyl flavour
2.	Texture & Body	Smooth, free from whey
3.	Colour	Creamy White
4.	Extraneous matter	Absent
II	CHEMICAL	
1.	Fat % (Min)	3.0
2.	SNF % (Min)	9.50 - 9.60
3.	Total milk solids	12.5 – 12.60
III	BACTERIOLOGICAL	
1.	SPC / gm.	- -----
2.	Coli / gm. (Max.)	10

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

PERSONNEL HYGIENE

ANNEXURE – 'P'

1. ALL STAFF MEMBERS MUST ENSURE PERSONAL CLEANLINESS
2. MUST WEAR CLEAN UNIFORMS IN WORK AREAS.
3. HANDS MUST BE WASHED AND SANITIZED AFTER GOING TO TOILET AND BEFORE ENTERING THE PLANT.
4. NO ONE MUST CARRY OR CONSUME EATABLES WITHIN THE FACTORY PERMISES.
5. SMOKING, SPITTING AND CHEWING TABACOO / ZARDA IS STRICTLY PROHIBITED.
6. TOUCHING THE PRODUCTS BEING MANUFACTURED / PACKED WITH BARE – HANDS IS PROHIBITED.
7. EVERY INDIVIDUAL MUST HAVE TRIMMED NAILS WEAR A CAP/TURBAN TO COVER HIS HAIR.
8. USE OF HAND GLOVES, FACE MASKS AND CAPS IS ESSENTIAL WHEREVER SPECIFIED.
9. KEEPING ITEMS IN BREAST POCKETS, WEARING RINGS AND CHAINS IN WORKING AREAS IS NOT ALLOWED.
10. STAFF MEMBERS MUST INFORM THEIR OFFICERS INCHARGE IN CASE OF ANY CUTS, WOUNDS, SKIN INFECTIONS AND CONTAGIOUS DISEASES.

INNOVATIVE BUSINESS IMPROVEMENTS PVT.LTD.

SPECIFICATIONS FOR STERILIZED FLAVOURED MILK

Page 01 of 01

ANNEXURE – O

S.NO	PARTICULARS	DOUBLE TONED MILK
	GENERAL : CARDAMOM FLAVOUR / COFFEE/ STRAWBERRY CHOCOLATE / BUTTER SCOTCH & BADAM	
I	PHYSICAL	
	1) Appearance / colour	Homogeneous, light caramalised colour
	2) Light caramalised colour / light	- VE
	3) Extraneous matter	Nil
	4) Fat Globules	No free fat globules, Homogenous texture.
	5) Loose Croking	No
	6) Flavour	Pleasant
II	CHEMICAL	
	a) Fat % (Min)	1.8 to 2.0
	b) SNF %	9.00 to 9.20
	c) Sugar % (All varieties)	6.5
	d) Acidity % (Max)	0.165
	e) ALCOHOL TEST (70%)	- VE
	f) No curdling when in cubated at 37°C & 55°C for 3 days	- VE
III	BACTERIOLOGICAL	
	1) Spore / ml. (Max)	5
	2) SPC / ml.	Nil
	3) Coliform count / ml.	Nil

Prepared by **H O D**	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

PROCEDURE FOR FUMIGATION

ANNEXURE – Q

1. All the materials must be kept on pallets in stacks as follows :-

   I. SMP Stack of 4 pallets
   Bag height upto 12 (max.)

   These 4 pallets stack must have a clear space of 1 Ft. on all the 4 sides (i.e. to be 1 Ft. away from walls and 1 Ft. away from any other stack)

2. Before stacking, the floors and walls of the godown must be cleaned every time.

3. Celphos tablets (114 Nos for store approx. 780 cub meters must be equally distributed on all the pallets. The celphos tablets must be kept on top of the stack and in the middle of the stack. No tablets be kept on the pallets or on the floor.

4. Immediately after placing the tablets, the main door must be closed and made air tight (the exhaust fan opening be made air tight before putting tablets). Paper be affixed on the opening i.e. window, door & exhaust fan to make it air tight exit point to be closed.

5. The store must be kept under fumigation for 5 days (Min. 120 hrs.)

6. After opening the store, the remaining ash of the tablets must be removed and burnt or buried away from the premises.

7. The bags must be thoroughly checked before transportation to the factory and even if a single live weevil is found, the whole consignment must be again fumigated and stores department be intimated accordingly.

8. A fumigation chart is displayed on the door of every store indicating the date of fumigation, due date of opening, actual date of opening, material fumigated, nos. of bags (or quantity fumigated and quantity of fumigate used) These charts after removal must be kept in a file for atleast one year.

9. The records must be available in the premises of the fumigation store all the time and made available to any authorised officer desirous of seeing them.

Prepared by **H O D**	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

ANNEXURE – Q

PRECAUTIONS

1. All electrical appliances (fans, lights and tubes) must be switched off before making the store air tight.

2. Upon opening the store gate (after fumigation), no one should enter the chamber or remain in the corridor at least for half an hour.

3. All the celphos tins, vials and ash must be either burnt or burried in the ground.

4. At the time of fumigation and opening the store, there must be atleast two persons attending to the job for safety reasons.

5. The persons handling the fumigation materials must be fully trained for the job.

6. General safety measures must be followed as usual.

Frequency - Once in a month (Min.)
- Once in a month (during Rainy season)

INNOVATIVE BUSINESS OMPROVEMENTS (PVT.) LIMITED	PAGE NO, 9
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ANNEXURE - G

SPECIFICATIONS FOR RAW MILK W.E.F. 11.10.99

		G R A D E				
S.NO	PARTICULAR	Z1	Z2	Z3	Z4	Z4
1	TASTE / FLAVOUR	Good	Good	Normal	Satisfactory	Satisfactory
2	ACIDITY % at (9.0 % SNF)	0.126 TO 135	0.126 TO 135	0.126 TO 0.135	0.126 TO 0.144	0.126 TO 0.144
3	C.O.B.	- VE	- VE	- VE	- VE	- VE
4	ALCHOL TEST	- VE (0.60)	- VE (0.60)	- VE AT 55 %	- VE AT 55 %	SI +VE AT 55 %
5	ADULTRANTS & PRESERVTIVES	- VE	- VE	- VE	- VE	- VE
6	B.R. (AT 40 DEGREE C)	40 - 42.5	40 - 42.5	40 - 42.5	40 - 42.5	40 - 42.5
7	SODIUM IONS (PPM) at 10 % snf	Not more than 500	501 TO 575	576 TO 625	526 TO 700	701 TO 775
8	SNF % (MIN.)	8.00%	7.50%	7.00%	6.50%	6.50%
9	CASEIN PROTIN (Dry basis)	30%	30%	30%	30%	30%

Note 1. If milk does not confirm to Z5 specifications, it will be rejected.

2. For grading of milk only, following three parameters will be considered:-
   I) Sodium Ions II) Ash content III) SNF of milk.
3. In case milk conform to all quality parameters but fail in SNF specifications, then grade must be shifted for grading purposes.
4. Milk having protein less than 30 % will be rejected.

MGR (PROD) **GENERAL MANAGER** **CEO**

Prepared by **HOD**	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMMRP - 01]

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SPECIFICATIONS OF LIQUID MILK

ANNEXTURE -H

S.NO.	PARTICULARS	SKIMMED MILK	DTM	T.M.	S.M.
1	Taste	Pure Wholesome	Pure Wholesome	Pure Wholesome	Pure Wholesome
2	Extraneous Matter	Nil	Nil	Nil	Nil
3	Preservatives / Adultrats	- VE	- VE	- VE	- VE
4	FAT %	0,10 (Max)	1,55 to 1,6	3,05 - 3,10	4,55 - 4,60
5	SNF %	8,8 to 8,90	9,1 - 9,20	8,65 - 8,70	8,70 - 8,80
6	Acidity %	0,126 to 0,144	0,126 to 0,144	0,126 to 0,144	0,126 to 0,144
7	SPC / Ml. (max.)	10000	10000	10000	10000
8	Coli / 1 ml. (max.)	10	10	10	10
9	ALCOHAL TEST (60%)	- VE	- VE	- VE	- VE
10	Desired MBRT (min) Hrs . Sun	6,0	6,0	6,0	6,0
	Winter	7,0	7,0	7,0	7,0

Prepared by **H O D**	Approved by **CEO**
Signature Date 01,04.04	Signature Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMMRP-01]

ANNEXURE 'I'

INNOVATIVE BUSINESS IMPROVEMENTS (PVT.) LIMITED
SPECIFICATIONS FOR PASTEURIZED TABLE BUTTER

SR. NO.	PARTICULARS	PFA	B I S	AGMARK	IBI
A	**PHYSICAL**				
1	Flavour & Aroma	N.S	N.S	Clean, pleasant characterstic flavour and free from objectionable taint or rancid flavour, Uniform, distribution of salt,	Clean, pleasant characterstic flavour and free from objectionable taint or rancid flavour, Uniform, distribution of salt,
2	Body & Texture	N.S	N.S	Homogeneous, no stickness, Body should be compact, uniform surface on breaking. Free moisture absent,	Homogeneous, no stickness, Body should be compact, uniform surface on breaking. Free moisture absent,
3	Extraneous matter	N.S	N.S	Absent	Absent
4	Colour	N.S	N.S	Shall be slight yellow and uniform, shall not show any streakiness, mottling stain	Shall be slight yellow and uniform, shall not show any streakiness, mottling stain
B	**CHEMICAL**				
1	FAT % (Min,)	80	80	80	80,5 TO 81,0
2	Curd % (Max,)	1,50	1,50	1,0	0,80
3	Salt % (Max,)	3,0	3,0	3,0	2,5 TO 2,6
4	Moisture % (Max.)	N.S.	N.S.	16,0	15,8 TO 16,0
5	Diacetyl (Max.) PPM	N.S.	4	4	Nil
6	Acidity % (Max.)	0,15	N.S.	N.S.	0.02
C	**BACTERIOLOGICAL**				
1	Y & M / gm. (Max.)	N.S.	50	N.S.	25
2	Coli / gm. (Max.)	N.S.	10	N.S.	10

* **N.S. - Not Specified**

Prepared by **H O D**

Signature Date 01.04.04

Approved by **CEO**

Signature Date 01.04.04

ANNEXURE 'J'

INNOVATIVE BUSINESS IMPROVEMENTS (PVT.) LIMITED
SPECIFICATIONS FOR GHEE

SR. NO.	PARTICULARS	PFA	AGMARK	IBI
	PHYSICAL			
1	Texture	N.S	The solid phase shall be of well defined granular structure	The solid phase shall be of well defined granular structure
2	Colour	N.S	White with or without yellowish or greenish tinge, shall be uniform throughout	White with or without yellowish or greenish tinge, shall be uniform throughout
3	Flavour & Aroma	N.S	Sweet, pleasant odour, free from Rancid flavour or objectionable flavour	Sweet, pleasant odour, free from Rancid flavour or objectionable flavour
4	Addition of colouroing materials or preservatives	Nil	Nil	Nil
	CHEMICAL			
1	FFA % (as oleic Acid) [Max.]	3,0	a) Special grade - 1,4 % (Red) b) General - 2,5 % (Green) c) Standard Grade - 3,0 % (chocolate)	0,50
2	B.R. at 40 x C	40 - 43 (Punjab)	40 - 43	40 - 43
3	R.M. Valve (min)	28,0	28,0	29,0 (Min)
4	Moisture %	0,50	0,30	0,25 (Max)
5	Residue	N.S.	N.S.	Nil

* **N.S. - Not Specified**

Prepared by **H O D**	Approved byCEO
Signature Date 01.04.04	Signature Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMMRP-01]

INNOVATIVE BUSINESS IMPROVEMENTS (PVT.) LIMITED
SPECIFICATIONS FOR SKIMMED MILK POWDER

ANNEXURE 'K'

SR. NO.	PARTICULARS	PFA	BIS	BIS	IBI	
					H - GRADE	PREMIUM GRADE
A	**PHYSICAL**	N.S	STANDARD GRADE:- white or with greenesh tinge, light cream in colour, free from lump exept those that breakup readly under slight pressure	EXTRA GRADE:- white or with greenesh tinge, light cream in colour, free from lump exept those that breakup readly under slight pressure	Light cream in colour, free from lumps exept breakable	Light cream in colour, free from lumps exept breakable
1	Description	N.S				
2	Taste / Flavour	N.S	Please and clean, free from off flavour	Please and clean, free from off flavour	Good pleasant free from off flavour	Good pleasant free from off flavour
3	Bulk Density	N.S.	--	--	0.55 - 0,62	0.45 - 0,50
B	**CHEMICAL**					
1	Moisture % by mass (max.)	5.0	4.0	3.5	3,20 to 3,60	3,40 to 3,90
2	Fat % (max.) by mass (max.)	1.5	1.50	1.50	0,33 to 0,66	0,33 to 0,66
3	Total Soilds by mass (max.)	N.S.	96.00	96.00	96,6 to 96,4	96,6 to 96,4
4	Insolubility Index ml. (max.)	N.S.	1.5	1.5	0,50	0,50
5	Total Ash % (D.B.) Max.	8.20	8.20	8.20	8.20	8.20
6	Titrable Acidity % (max.)	1.5	1.5	1.5	1.1 - 1,35	1.1 - 1,35
7	Scorched Particles	N.S.	Resonably free from Scorched Particles	Resonably free from Scorched Particles	A' DISH	B' DISH
8	RA test	-VE	-VE	-VE	-VE	S1-VE
C	**BACTERIOLOGICAL**					
1	Standard Plate count / gm. (max	50000	50000	40000	10000	50000
2	Thermophiles count / gm (max.)	N.S.	N.S.	N.S.	1000	-----
3	B. Cerus / gm. (max.)	N.S.	N.S.	N.S.	300	-----
4	Coliform / 0.1 gm	Absent	Absent	Absent	Absent	Absent
5	S. aureus / 0.1 gm	N.S.	N.S.	N.S.	Absent	-----
6	Salmonella / 25 gm.	N.S.	N.S.	N.S.	Absent	-----
7	Shigella 25 / gm.	N.S.	N.S.	N.S.	Absent	-----
8	Preservatives / Adultrants	Nil	Nil	Nil	Nil	Nil
9	Sodium Level PPM (max.)	N.S.	N.S.	N.S.	575	650
10	Protein % (min.) (Dry matter ba	N.S.	N.S.	N.S.	35.0	38.0

DB : Dry Basis
*** N.S. - Not Specified**

Prepared by **H O D**	Approved by **CEO**
Signature Date 01.04.04	Signature Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD **ANNEXURE - L**

SPECIFICATIONS FOR MILK POWDER

	TYPE OF POWER	MILK POWDER		
S.NO	PARTICULAR	PFA	B I S	IBI
1	**PHYSICAL**			
i	Taste / Flavour	N.S.	Good, pure pleasant, free from off flavour	Good, pure pleasant, free from off flavour
2	**CHEMICAL**			
i	Moisture % by mass (max.)	5,0	4.0	2.8 to 3.0
ii	Fat % (max)	26,0	26.0	26.0 to 27.0
iii	Total Soilds by Maxx (Max.)	N.S.	N.S.	97.0 to 97.2
iv	Insolubility Index ml. (Max.)	N.S.	1.2	0.50
v	Total Ash % (DB) Max.	N.S.	7.30	6.0
vi	Titrable Acidity % (Max.)	1.2	1.20	1.0 to 1.10
vii	Scorched Particles	N.S.	N.S.	A disc
viii	RA test	N.S.	-VE	S1 + VE
3	**BACTERIOLOGICAL**			
i	Standard Plate count gm. (Max)	50000	40000	10000
ii	Coliform / 0,1 gm	Absent	Absent	Absent
iii	S. aureus / 0,1 gm	N.S.	Absent	Absent
iv	Salmonella / 25 gm.	N.S.	Absent	Absent
v	Shigella / 25 gm.	N.S.	Absent	Absent
vi	Preservaties / Adultrants	Nil	Nil	Nil
vii	Sodium Level PPM (Max)	N.S.	N.S.	600

DB :- Dry Basis

* N.S. Not Specified

HOD (QA) **MGR (PROC)** **GM (WORKS)** **CEO**

Prepared by **HOD**	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMMRP - 01]

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INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

DATE MILK RECEPTION AND UTILISATION STATEMENT (PRODUCT TRACIBILITY) SHIFT

SR. NO.	TANKER NO.	ARR-IVAL TIME	M.C.C NAME	TESTING TIME	UNLO-ADING TIME	QUAN--TITY OF MILK	GRADE	UNLO-ADING TANK	PASTE-URISED MILK TANK	SILO	QUAN--TITY OF MILK	DISPOSAL					PACKING MATERIAL USED
												LIQUID MILK	INDIGINOUS PRODUCTS	OTHER PRODUCTS	DETAILS OF BATCH NO.OF OF FINISHED PRODUCTS	QTY	

(To be filled in by Shift Incharge at the close of the shift)

Signature : _____

Name : _____

Prepared By **H O D**	Approved by **CEO**
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 01 Date 01.4.04

[QMPR-01]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

WEIGHMENT OF LIQUID MILK POUCHES

DATE :..... SHIFT :-

TIME	CALIBRATION OF SCALE	DROP TEST	DATE OF STAMPING ON POUCHES	TYPE OF MILK	WT. OF POUCHES

FREQUENCY - 1 HOUR

BY PRODUCTION OFFICER

Prepared By H O D	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-02]

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INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

PACKAGING MATERIAL FOR SFM SECTION

DATE :- SHIFT :

PARTICULARS	CROWN CORK	CURD CUPS 200ml	BUTTER PAPER 100 g.	BUTTER PAPER 500 g.	MONO CARTON 100 g.	MONO CARTON 500 g.	MILK CAKE CARTON	PANEER POLY 200 g.	PANEER POLY 1 Kg	DAMAGED	CROWN CORK	BOTTLE
OPENING BALANCE										FILLING		
										STERI.		
RECEIVED										TOTAL		
TOTAL										R/C		
PRODUCTION										O.LEAKING		
DAMAGED										TOTAL LEAK		
DAMAGED RETURNED TO STORE										GE UNDER FILLED		
CLOSING BALANCE												

PARTICULARS	SFM C/B	BUTTER C/B 100 g.		BUTTER C/B 500 g.	SFM EMPTY BOTTLES 200 ml.	CURD CUPS	SFM LABELS	AL.FOIL CURD CUP	BOPP TAPE	SUGAR KG.			
OPENING BALANCE											SEDIMENT		
RECEIVED											MISC.		
TOTAL											TOTAL		
PRODUCTION											R/C		
DAMAGED													
DAMAGED RETURNED TO STORE											CLOSING BALANCE		
CLOSING BALANCE													

SUPERVISOR/ S.I SIGNATURE :_____

Prepared By H O D	Approved by CEO
Signature Date 01.04.04	Signature Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

{QMPR-03}

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INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

GHEE SECTION

GHEE POUCHES COUNTER READING LOG- SHEET S.NO :

DATE	O.B	START TIME	STOP TIME	TOTAL TIME TAKEN	INITIAL COUNTER READING	FINAL COUNTER READING	TOTAL FILLING (NOS.)	NO. OF PACKETS.		LAB. SAMPLE	NET FILLING	ISSUED TO STORE	CLOSING BALANCE
								LEAKAGE	UNDER WT.				

Signature :

Name :

Prepared By H O D	Approved by CEO
Signature Date 01.04.04	Signature Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-04]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

EVAPORATOR AND DRIER LOG BOOK

DATE : _____ SHIFT : _____ PRODUCT _____ BATCH NO. _____ SR.NO._____

	EVAOPRATOR											SPRAY - DRYER											
TIME	Ist JACKET TEMP.	Ist EFFECT VAPOUR TEMP.	2nd EFFECT VAPOUR TEMP.	3rd EFFECT VAPOUR TEMP.	4th EFFECT VAPOUR TEMP.	FLASH VESSEL COOLING TEMP.	NTP	DSI TEMP	MAIN STEAM (TVR) KG/CM2	COND-ENSOR VACUUM mm Hg	SILO RUN	T.S %	AIR INLET TEMP. DEG.C	AIR OUTLET TEMP. DEG.C	FEED PUMP RPM	ATOM--ISER MOTOR AMP.	SUP--PLY FAN AMP.	EXH--AUST FAN AMP.	CHAMBER VACUUM mm Hg	CONC. VAT RUNN--NING	BAG NO.	PROD--UCT TEMP.	MOIS-TURE %	BD

BREAK DOWN	FROM	TO	TIME TAKEN	C.I.P.STATUS	FROM	TO	TIME TAKEN	TIMINGS
i) Mechanical ii) Electrical iii) Boiler iv) Others				C.I.P. C.A.C.				Evap. Started : - Evap Stoped : - Drier Started : - Drier Stoped : -

PLANT STATUS

1) Atomizer line position
2) Atomizer position
3) Atomizer oil level
4) Conc.vat position
5) Chamber position
6) Cyclone and valve position
7) SMP recovered from stack loss tack room on
8) Misc.

FREQUENCY SCHEDULE

CIP	DAILY	
CAC	After 48 hours running of plant	
Wet cleaning of powder plant	Monthly	
Fumigation of Sifter Room (10% Formalin sol.)	Alternate Day	

Signature_____
Name of Operator_____

Prepared by H O D
Signature Date 01.04.04

Approved by CEO
Signature Date 01.04.04

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INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.	PAGE NO. 5 - A
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INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

EVAPORATOR AND OPERATOR LOG BOOK

A	B	C	D	E	F	G	H I	J	K	L	
SILO NO.	QTY LTR.	START TIME	COMPLETED TIME	CLOSING BALANCE (Lts.)	FEED RATE/ HR.	BAGS/ HR.	QTY PROCESSED B-E	BAG NO. FROM : TO	TOTAL BAGS	BATCH NO	NO.OF CHAMBER SWEEPING BAGS

PARTICULARS	A EVAPORAT READING	B DRIER READING
Initial Reading		
Final Reading		
Unit Consumed		
Total Unit (A + B)		
Production MT		
Unit/Kg		

WORKERS ON DUTY		
Name	In	Out

Signature_____

Name of Operator_____ SI/Ex/MG(P)

Prepared By H O D	Approved by President
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-05 - B]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.			PAGE NO. 6	
TITLE:-DEPARTMENTAL PROCEDURES PRODUCTION			DATE : 01.04.04	
DAILY EMPTY PLASTIC CRATE STOCK POSITION			DATED : _____	
SECTION NAME	GREEN	RED	BROKEN	TOTAL
WASHING DOCK				
MILK BAR				
CRATE ENTRY DOCK				
LOADING DOCK				
MILK RECEPTION DOCK				
BESIDE PLANT				
BESIDE STORE				
COLD STORE				
POUCH FILLING				
PROCESS HALL				
SFM HALL				
GALLARY				
LABORATORY				
POWDER PLANT				
CIP ROOM				
GHEE FILLING				
GHEE STORE				
ICE CREAM				
TOTAL				
SUMMARY	GREEN	RED	BROKEN	TOTAL
OPENING BALANCE				
RECEIPT (PARTIES)				
OTHER RECEIPT (STORE)				
TOTAL				
ISSUED				
CLOSING BALANCE				
DESPATCH SUPERVISOR _____			MGR(P)	
Prepared By **H O D** Signature _____ Date 01.04.04			Approved by CEO Signature _____ Date 01.04.04	
Issue No. 01 Date 01.04.04			Revision No. 0 Date 01/04.04	

{QMPR-06}

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

MILK SILO RELEASE REPORT

DATE	SILO NO.	QUANITY Kgs	SAMPLING TIME (HRS)	QUALITY PARAMETERS						ADULTRANTS SUGAR/ GLUCOSE/ M.D/UREA ETC.	SODIUM PPM (10% SNF)	STATUS GRADE	TIME (HRS) CLEARED	SIGN. (Q.A)	PRODUCT				SIGN. (P. O.)
				TASTE/ FLAVOUR	SEDI-MENTS	FAT %	SNF %	RA TEST	ALCOHOL TEST (65%)						SILO		BATCH NO	NO OF BAGS	

Prepared By H O D

Signature _____ Date 01.04.04

Issue No. 01 Date 01.04.04

Approved by CEO

Signature _____ Date 01.04.04

Revision No. 01 Date 01.04.04

[QMPR-07]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

WEIGHTMENT REGISTER

GHEE SECTION/POWDER PLANT

DATE:______ PRODUCT :

SHIFT :........... TYPE OF PACKING:________

TIME	TYPE OF PACKING	AVG.TARE WT.	BATCH No./ BAG NO.	GROSS WT	NET WT.	DESIRED WT.	SIGN OF SUPR. / P.O

Prepared By **H O D**	Approved by CEO
Signature __________ Date 01.04.04	Signature _________ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-08]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

SHIFT PROFORMA OF COLD STORE STOCK

DATE : _____ SHIFT : _____

PARTICULARS	OPENING STOCK	PRODUCTION	TOTAL	DESPATCH	ISSUED TO LAB	SALE RETURN P_NAME	SALE RETURN NOS.	LEAKY POUCHES	CLOSING BALANCE	REMARKS
SM 1/2 LTR. CRATE										
SM 1 LTR. CRATE										
DTM 1/2 LTR. CRATE										
TM 1/2 LTR. CRATE										
SKM 1/2 LTR. CRATE										
FCM 1/2 LTR. CRATE										
FCM 1 LTR. CRATE										

SIGNATURE : _____ SIGNATURE : _____

NAME : _____ NAME : _____

DESPATCHER/ACCOUNTANT SHIFT INCHARGE / ASST. .MANAGER

Prepared By **H O D**	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-09]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.	PAGE NO. 10
TITLE:- DEPARTMENTAL PROCEDURES PRODUCTION	DATE : 01.04.04

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

PRODUCT TRANSFER VOUCHER SR.NO.

From _____ To _____

SECTION : _____ DATE : _____

SR.NO.	PARTICULARS	BATCH NO	QUANTITY	REMARKS

ISSUED BY RECEIVED BY AUTHORISED BY

NAME : ___ _____ NAME : _____ NAME : _____

SIGN. :___ _____ SIGN. :_____ SIGN. :_____

DESIG.:___ _____ DESIG.:_____ DESIG.:_____

Prepared By **H O D**	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 01 Date 01.04.04

[QMMPR-10]

INNOVATIVE BUSINESS IMPROVEMENTS PVT.LTD.	PAGE NO. 11
TITLE:- DEPARTMENTAL PROCEDURES PRODUCTION	DATE : 01.04.04

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LIMITED

CONSUMABLE PACKING MATERIAL RETURN VOUCHER
FROM PRODUCTION TO STORE

SECTION : _____ S.No.

DATE : _____

SR. NO.	PARTICULARS	DETAILS	QUANTITY	CONDITION

ISSUED BY	RECEIVED BY	AUTHORISED BY
NAME : _____	NAME : _____	NAME : _____
SIGN : _____	SIGN : _____	SIGN : _____
DESIGNATION. : _____	DESIGNATION. : _____	DESIGNATION. : _____

Prepared By **H O D**	Approved by **CEO**
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-11]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

SHIFT PROFORMA INDIGENOUS PRODUCT

SHIFT : DATE :

PARTICULARS	STERILISED FLAVOURED MILK (BOTTLES)												MILK CAKE			PANEER		CURD CUPS	LASSI POUCHES	PINNI
	CARDAMOM		STRAWBERRY		COFFEE		CHOCOLATE		BUTTERSCOTCH		BADAM MILK		BULK	200 g.	1 Kg.	1.0KG	200 g.	200 g.	250 gm.	1/2 KG
	BOTTLE	CART.	BOT	CART.	BOT	CART.	BOT	CART.	BOT	CART.	BOT	CART.								
OPENING BALANCE																				
RECEIPT																				
TOTAL																				
ISSUED																				
R/C																				
CLOSING BALANCE																				

PARTICULARS	TABLE BUTTER			WHITE BUTTER		SUGAR kg	PINNI 1 KG	RECOVERY OF PANEER						
	20 Kg	100 g.	500 g.	20 Kg	500 gms			MILK ltr.	MILK kg.	R/C USED	GROSS YEILDkg	R/C BAL.	NET YEILD kg	RECOVERY (%)
OPENING BALANCE														
RECEIPT														
TOTAL														
ISSUED														
R/C														
CLOSING														
BALANCE														

SUGAR DETAILS : UTILIZATION

1. MILK CAKE (Kg) X 25 %
2. SFM (In Ltr) X 6.5 %
3. LASSI (In Ltr) X10 %
4. PINNI (kg.) x 33%

SUPERVISOR / S.I/EX./DY.MANAGER

TOTAL :

Prepared By **H O D**

Signature Date 01.04.04

Issue No. 01 Date 01.04.04

Approved by **CEO**

Signature Date 01.04.04

Revision No. 0 Date 01.04.04

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

BUTTER MANUFACTURING PROFORMA

DATE_____ SHIFT_____

SR. NO.	P. WHITE /T. BUTTER	BUTTER CHURN -				BUTTER CHURN - I			
		LOT 1	LOT 2	LOT 3	LOT 4	LOT 1	LOT 2	LOT 3	LOT 4
1	Quantity of Cream .....(KGS)								
2	Cream Tank No.								
3	Temperature of cream degree C.								
4	Fat %								
5	Total fat in butter (kgs)								
6	Approximate yield of butter (kgs)								
7	Cream loading started at								
8	Cream loading completed at								
9	Breaking stage arrived at								
10	Butter Milk unloaded in Tank No.								
11	Temp. of butter milk								
12	Acidity/ Alcohol test								
13	Time of Ist washing with pasteurised water								
14	- do - Second - do -								
15	Qty. of Salt added								
16	Butter Unloading Time								
17	Quantity of butter (kg)								
18	Total time per lot of butter (mfg)								
19	Total time for lot.								

OPERATOR'S NAME_____

SIGNATURE_____ Exe.Tech.(Prodution)/Dy. Manager

Prepared By **H O D**	Approved by **CEO**
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-13 A]

SHIFT PROFORMA

DATE :---------

PROCESSING				CREAM/BUTTER /GHEE			BUTTER & GHEE PACKING						
TANK	QUANTITY	FAT/SNF	TEMP.C	TANK NO	QUAN-TITY	STATUS	PRODUCT PARTICULARS	PROD-CTION	OTHER RECEIPT	TOTAL	R/C	ISSUE TO STORE	CLOSING BALANCE
RMT1				CT 1			W.B. LOOSE						
RMT2				CT 2			W.B.PKD						
PT1				CT 3			LOOSE GHEE						
PT2				BC 1			1/2 L TINS						
PT3				BC 2			1 L TINS						
PT4				BMV 1			2 L TINS						
ST1				BMV 2			5 L TINS						
ST2				PAST 1			15 KG TINS						
ST3				PAST 2			1/2 L P.JAR						
ST4				GB 1			1 L P.JAR						
SILO 1				GB 2			2 L P.JAR						
SILO 2				ST1			5 L P.JAR						
SILO 3				ST 2			1/2 L PP						
PLANT POSITION				FT 1			1 LTR PP						
MILK PAST NO.1				FT 2			1/2 Ltr BB						
MILK PAST NO.2				FT 3			1 Ltr. BB						
CREAM PAST.NO.3													
SEPRATOR NO.1				TROLLY									
SEPRATOR NO.2				BT/CAN									
SEPRATOR NO.3													

Signature:-_____ PRODUCTION ACCOUNTANT

Name :-_____

Prepared By H O D	Approved by CEO
Signature _____ Date 01.04.04	Signature ___ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-14]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.	PAGE NO. 15
TITLE:- DEPARTMENTAL PROCEDURES PRODUCTION	DATE : 01.04.04

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD. SR.NO.

SFM MANUFACTURING LOG BOOK

DATE_____ SHIFT_____

SR. NO.	PARTICULARS	BATCH I	BATCH II	BATCH III	BATCH IV
1	STERILIZER NO.				
2	STEAM VALVE OPENING TIME				
3	STERILISATION TEMP. ATTAINED TIME				
4	STERILIZATION TEMP.				
5	HOLDING STARTING TIME				
6	HOLDING COMPLETE TIME				
7	HOLDING TIME				
8	BOTTLES BREKAGE (NOs)				
9	HOMOGENIZATION				
10	BOTTLE CLEANING & STERILIZATION				

REMARKS IF ANY

A) Time

B) Milk QTY. in Lot =

C) Sugar added =

D) Flavour addition =

E) Alcohol Test (70 %) =

OPERATOR_____ SHIFT INCHARGE / SUPERVISOR _____

Prepared By H O D	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-15]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.				PAGE NO. 16	
TITLE:- DEPARTMENTAL PROCEDURES PRODUCTION				DATE 01.04.04	
DAILY BALANCE SHEET DATE_____					
PARTICULARS	QTY (KGS)	FAT %	SNF %	FAT (KGS)	SNF (KGS)
OPENING BALANCE					
MILK RECEIPT					
RECONST.1)SMP 2)GHEE 3)WMP					
SUB TOTAL -(I)					
CLOSING BALANCE					
TANKER AT DOCK					
RMT1					
RMT2					
PT1					
PT2					
PT3					
PT4					
ST1					
ST2					
ST3					
ST4					
SILO 1					
SILO 2					
SILO 3					
EVAPORATOR					
CONC.VAT					
CREAM					
BUTTER (LOOSE)					
BUTTER (WHITE)					
TABLE BUTTER					
GHEE					
COLD STORE	FCM1/2				
SM 1/2					
DTM 1/2					
SKM 1/2					
SM 1 LT					
TM 1/2					
TOTAL CLOSING BAL. (II)					
HANDLING (III)					
OUTPUT GHEE BULK					
POWDER (DRIED MILK)					
MKT MILK	FCM 1/2				
SM 1/2					
DTM 1/2					
SKM 1/2					
SM 1 LT					
TM 1/2					
INDIGENOUS	SFM				
MILK-CAKE					
PANEER 200 GM					
PANEER BULK					
LASSI					
TABLE BUTTER					
WHITE BUTTER					
PINNI 1/2 KG					
CURD					
% RECOVERY (IV)/(III)					
EXTRA LOSS/GAIN					
		MGR(P)			
Prepared By H O D Signature Date 01.04.04		Approved by CEO 4.04			
Issue No. 01 Date 01.04.04		Revision No. 0 Date 01.04.04			

{QMPR-16}

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

CLEANING IN PLACE LOG SHEET

Date	Time	Shift	Tank NO	Hot Water Rinsing			Caustic Circulation						Hotwater Flush-ing Time	Temper ature	Chlorine Circulation		Name of Operator	Signature of Operator	Signature of Shift Incharge	Remarks By Quality Assurance Deptt.
				Time Start	Time Stop	Time Taken	Temp-eratu-re	Str-ength %	Time Start	Time Stop	Time Taken	Temp-eratu-re			PPM	Time Taken				
Desired Norms						5-10 Mts.	75-80 o 'C'	1-15 %			25-30 Mts.	80-85 o 'C'	05 Mts	75-80 o 'C'	200 to 250 PPM	10-15 Mts.				

Prepared By H O D Signature _____ Date 01.04.04	Approved by CEO Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-17]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

Date : ----------

STATEMENT OF LIQUID MILK DESPATCHES

Shift Morn./Eve.

S.NO.	O.G.C No.	PARTY NAME	VEHICLE NO	EMPTY TRAYS RECEIVED	TOTAL TRAYS DESPATCHED	Particular of TRAYS						
						SM 1/2LT.	SM 1 LT.	DTM 1/2LT.	TM 1/2 LT	SKIM 1/2LT.	FCM 1/2LT	REMARKS IF ANY

SIGN.....

DESPATCHER'S NAME .....

PROD. ACCOUNTANT

Signature

Name _____

Prepared By H O D Signature _____ Date 01.04.04	Approved by CEO Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-18]

INNOVATIVE BUSINESS IMPROVEMENTS PVT.LTD.	PAGE NO. 19
TITLE:- DEPARTMENTAL PROCEDURES PRODUCTION	DATE :01.04.04

INNOVATIVE BUSINESS IMPROVEMENTS PVT.LTD.

Workers In/Out Register

SL.NO.	Date	Shift	Name	Time		Sign of S / I	Time		Section
				In	Out		In	Out	

Signature of Shift Incharge

Prepared By H O D	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

{ QMPR-19

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD. SR.NO.

Date CIP SCHEDULE FOR PROCESSING AND BUTTER SECTION SHIFT

SRNO	DESCRIPTION SHIFT	FREQUENCY	A	B	C
01	CIP Cleaning of RMT1, RMT2,Silo 1, 2 & 3	After emptied out / min. one in day			
02	Manual cleaning of RMT1, RMT2, Silo 1, 2 & 3	Once in a fortnight			
03	CIP of of Milk Pasteurizers, Cream Pasteurizer & milk chiller along with all connected lines	Once in a day			
04	Manual cleaning & sterilization of tanks P1, P2, P3, P2, ST1 , ST2 & ST3	After emptied out / min. once in day			
05	CIP cleaning of piplines connecting from cream pasteurizer to Cream Tanks.	Once in a shift			
06	CIP Acid cleaning of Milk pasteurizer/Cream pasteurizer/ Cream chiller and connected lines.	Alternate day			
07	Dismantling & mannual cleaning of heat exchanger plates of milk pasteurizer /cream pasteurizer/ chiller.	Quarterly			
08	CIP Cleaning of unloading lines connected to RMT tank & Hose pipes.	Once in a day			
09	Mannual cleaning of cream balance tank & flushing tank.	Alternate Shift			
10	Cleaning of balance tank and dump tank & connected lines.	Once in a shift			
11	Cleaning of skim milk pipe lines from processing section to silos.	Alternate Shift			
12	CIP cleaning of pipe lines from cream tank to butter churn.	Once in a shift			
13	CIP cleaning of pipe lines from butter churn to dump tank.	Once in a shift			
14	Mannual cleaning of CT1,CT2 & CT3	After emptied out			
15	Mannual cleaning of cream lines from cream seperator to cream balance tank. tank & all connected valves.	Once in a day			
16	Mannual cleaning of T- pieces connected to P tanks.	Once in a day			
17	Cleaning of pasteurizer duplex filter.	Once in a shift			
18	Cleaning of line filter connected to Dump Tank and connected lines.	Once in a day			
19	Cleaning of dips of RMT tanks.	Once in a Day			
20	Mannual cleaning of roof of the RMT & silo.	Once in a Shift			
21	CIP cleaning of pipelines from ST tanks to pouch filling machines and sterilization.	Once in a day			
22	Alkalnity strength of CIP Sol. Temp 80 - 85 ° C (1 to 1.5%)/ Chlorine Sol.(20	Once in a shift			
	Name of Operator.				
	Signature of S.I/Ex. Prod./Mg(P).				

Prepared By H O D Signature _____ Date 01.04.04	Approved by CEO Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-20]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD

DAILY MILK RECEIPT AT PLANT (DOCK)

TIME : DATE : ---------- PERIOD _____ PAGE NO :

CODE	SUPPLIER NAME	VEHICLE NO.	MILK QTY	FAT %	CLR	SNF %	FAT (KG)	SNF (KG)	CATEGORY GRADE
TOTAL ---------->									

PREPARED BY VERIFIED BY

Prepared By H O D	Approved byCEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-21]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.	PAGE NO. 22
TITLE:- DEPARTMENTAL PROCEDURES PRODUCTION	DATE : 01.04.04

PACKING MATERIAL (GHEE SECTION)

S.No.

DATE : _____ SHIFT: _____

	15 KG GHEE		1/2 L GHEE		1 L GHEE		2 L GHEE		5 L GHEE		1/2 L POLY		1 L POLY		2 L POLY		5 L POLY		1/2 LT		1 LT	
	TIN	CB	TIN	CB	TIN	CB	TIN	CB	TIN	CB	JAR	CB	JAR	CB	JAR	CB	JAR	CB	FILM	MONO Carton	FILM	MONO Carton
OPENING BALANCE																						
RECEIVED																						
TOTAL																						
PROD.																						
FILM USED																						
DAMAGED																						
RETURNED TO STORE																						
CLOSING BALANCE																						

SUPERVISOR/S.I. SIGNATURE: _____

Prepared By H O D	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.08.2003

[QMPR-22]

100

101

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

PACKING MATERIAL (POWDER PLANT)

DATE : SHIFT:

	1 KG Liners					LINERS.		LINERS. FOR 10 KG JARS	KP BAGS							DW JARS		POLY FILM	
	Chhana	Premium	Milk King	Baker	SUN MILK	200 Micron	300 Micron		Chhana (1 Kg.)	Baker	Milk King	Premium	Sun Milk	WMP Bags	G.Grade For Bulk	500 g	200 g	DW 100g	SMP 100g
OPENING BALANCE																			
RECEIVED																			
TOTAL																			
PROD.																			
DAMAGED RETURN TO STORE																			
CLOSING BALANCE																			

SIGN OF SI/SUPERVISOR

Prepared By H O D Signature Date 01.04.04	Approved by CEO Signature Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

EMPTY CRATES RECEIPT

1. NAME OF THE PARTY:
2. VEHICLE NO. :

3. TIME :_____

DATE :_____

SL.NO		PARTICULARS	REMARKS
1	PLASTIC CRATES		
2	BOTTLES (CURD) 200 ML		
3	BOTTLES (BOTTLES) 200 ML		
4	CANS		
5			

SIGNATURE OF THE PARTY

SIGNATURE OF DESPATCHER

SIGNATURE SECURITY I/C

Prepared By H O D	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-24]

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

OUTWARD GATE CHALLAN
(LIQUID MILK DESPATCHES)

Challan No._____

Vendor's Name M/s ..... Date : _____

Address : .....

Vehicle No._____

S.No.	DESCRIPTION	NO OF TRAYS	DATE OF PROD.	Remarks
1	S.M 1/2LTR(1*24P)			
2	S.M. 1 LTR(1*12P)			
3	D.T.M. 1/2 LTR(1*24P)			
4	T.M. 1/2 LTR(1*24P)			
5	S.K.M 1/2 LTR(1*24P)			
6	F.C.M/ 1/2 LTR(1*24P)			

NO LEAKY POUCHES LOADED
IN MY VEHICLE

Receiver's Signature Despatch Supervisor

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.																			PAGE NO. 26
TITLE:- DEPARTMENTAL PROCEDURES PRODUCTION																			DATE : 01.04.04
PRODUCTION STOCK POSITION AS ON.....																			
SL. No.	DESCRIPTION	OPENING BALANCE	PRODUCTION	OTHER RECEIPT	TOTAL	ISSUE TO STORE	CONVERSION	R/C	CLOSING BALANCE	S. No.	DESCRIPTION	OPENING BALANCE	PRODUCTION	OTHER RECEIPT	TOTAL	ISSUE TO STORE	CONVERSION	R/C	CLOSING BALANCE
1	1/2 L PP									27	Baker 25 Kg(Bulk)								
2	1 LTR PP									28	Baker Sweeping								
3	1 L BB									29	Baker 1 Kg								
4	1/2 LT BB									30	SMP M. King 1 kg								
5	1/2 L TIN									31	White Butter 20 Kg								
6	1 L TIN									32	White Butter 500 g								
7	2 L TIN									33	Table Butter 20 Kg								
8	5 L TIN									34	Table Butter 500 g								
9	15 KG TIN									35	Table Butter 100 g								
10	1/2 L P.JAR									36	Paneer 200 gm.								
11	1 L P.JAR									37	Paneer 1 Kg								
12	2 L P.JAR									38	Milk Cake 200 gm.								
13	5 L P.JAR									39	Curd Cups (200 gm)								
14	SMP 25 KG (REGULAR)									40	SFM Cardamom								
15	SMP 25 KG (PREMIUM)									41	Strawberry								
16	SMP 1 KG (REGULAR)									42	Butter Scotch								
17	SMP 1 KG (PREMIUM)									43	Coffee								
18	SMP SWEEPING									44	Badam Milk								
19	WMP 25 KG. BULK									45	Lassi								
20	WMP SWEEPING									46	Pinni 1/2 Kg								
21	DW 25 KG. Bulk									47	Pinni 1 Kg								
22	DW 10 KG									48	Chocolate								
23	DW 200 g.									49	CURD 400 gm								
24	DW 500 g									50	Mango								
25	WHEY POWDER									51	Apple								
26	DW Sweeping																		

Signature Production Supervisor — Signature Production Manager

Prepared By H O D

Signature Date 01.04.04

Approved by CEO

Signature Date 01.04.04

Issue No. 01 Date 01.04.04

Revision No. 0 Date 01.04.04

(QMPR-26)

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.	PAGE NO. 27
TITLE:- DEPARTMENTAL PROCEDURES PRODUCTION	DATE 01.04.04

DAILY PERFORMANCE REPORT

(PRODUCTION)

DATE :..... Shift

		SHIFTS			TOTAL
		A	B	C	
I)	RECOVERY				
II)	MANPOWER UTILISATION %				

III)

PRODUCT	QUANTITY DEMANDED	QUANTITY SUPPLIED	VARIATION
PAST. LIQUID MILK			
SM			
TM MK MT			
DTM			
SKM MK MT			
SFM			
PANEER			
CURD			
BUTTER			
LASSI			
MILK CAKE			
ICE CREAM			

IV) SUB STANDARD PRODUCTION

S.NO.	PRODUCT	QTY(Sub Standard Quality)	REMARKS

(V) DESPATCH DEVIATIONS :-

S.no.	Handling Area	VEHICLE NO.	SCHEDULED DESPATCH TIME	ACTUAL DESPATCH TIME	REMARKS (REASONS FOR DELAY)

(VI) DEVIATIONS (OTHER DEPARTMENT)

DEPARTMENT	DEVIATIONS	REMARKS

MGR. (P) / G.M. (W)

Prepared By H O D	Approved by CEO
Signature Date 01.04.04	Signature Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

(QMPR-27)

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TITLE:- DEPARTMENTAL PROCEDURES PRODUCTION				DATE : 01.04.04	
INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD. VERIFICATION OF CLEANING STATUS					
DATE	TIME	STORAGE TANK	CLEANING STATUS	SIG. OF S.I	SIG. OF CHEMIST
Prepared By H O D Signature _____ Date 01.04.04			Approved by CEO Signature _____ Date 01.04.04		
Issue No. 01 Date 01.04.04			Revision No. 0 Date 01.04.04		

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TITLE:- DEPARTMENTAL PROCEDURES PRODUCTION	DATE 01.04.04

BLENDER LOG BOOK SR. NO.

PRODUCT :_____ DATE :_____

LOT NO.	TIME IN	TIME OUT	INGREDIENTS						TOTAL QTY	SUMMARY
										1._____ =
										2._____ =
										3._____ =
										4._____ =
										TOTAL =

PACKING DETAILS :- GRAND TOTAL = _____

PACKING DATE	BATCH NO.	BAG NOs.		TOTAL BAGS
		FROM	TO	

HANDED OVER :_____ HANDED OVER :_____

SIG._____ SIG._____

Prepared By H O D	Approved by CEO
Signature _____ Date 01.04.04	Signature _____ Date 01.04.04
Issue No. 01 Date 01.04.04	Revision No. 0 Date 01.04.04

[QMPR-29]

INNOVATIVE BUSINESS IMPROVEMENTS PVT.LTD.

Production Department (Implementation Tasks)

Annexure – 'II'

Objectives: Optimisation of FAT / SNF Recovery.

Sr No	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
1.	Accurate weighment of milk tankers and calibration of weighbridge periodically.	Supervisor	Manager (E&S)	Immediate	Being done
2.	Rinsing of milk tankers after unloading of milk to wash residual milk	Unloading workers	SI/Ex/AM	Regularly	Being done
3.	Avoid spillage of milk during unloading of milk tankers	Unloading workers	SI/Ex/AM	31.07.02	Being Done
4.	Flushing of pipelines thoroughly after processing of milk.	Operator	SI/Ex/AM	31.07.02	Being done
5.	Avoid spillage of milk from pipelines during processing.	Operator	SI/Ex/AM	25.07.02	Being done
6.	Ensure proper lapping of valves.	Operator	SI/Ex/AM	Being done	Being done
7.	Ensure proper rinsing of cream tanks and storage tanks after emptying out.	Operator	SI/Ex/AM	Being done	Being done
8.	Ensure accurate weightment of finished products and random checking by Q.A. staff.	Supervisor	SI/Ex/AM	Being done	Being done
9.	Avoid spillage during packing/filling.	Supervisor	SI/Ex/AM	Being done	Being done
10.	Accurate FAT/SNF testing by Q.A. Lab. for incoming tankers/out going liquid milk.	Chemist	Dy.(Q.A)	Being done	Being done
11.	Milk and product samples drawn by lab. Must be sent to production on time for reprocessing.	Chemist	Dy.(Q.A)	Daily	Being done
12.	Ensure that milk must not over flow from pasteurizer's balance tanks during power trippings.	Operator	SI/Ex/AM	Being done	Being done

INNOVATIVE BUSINESS IMPROVEMENTS PVT.LTD.

Production Department

Annexure – 'II'

Objectives: Optimisation of FAT / SNF Recovery.

Sr No.	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
13.	Regular collection of powder sweepings from stack loss room on daily basis and maintaining records thereof.	Operator	SI/Ex/AM	Being done	Being done
14.	Regular cleaning of stack- loss-room.	Operator	SI/Ex/AM	Being done	Being done
15.	Proper flushing of evaporator plant after completion of every run.	Operator	SI/Ex/AM	Being done	Being done
16	Avoid stickiness in powder plant for DW by keeping optimum processing parameters.	Operator	SI/Ex/AM	Being done	Being done
17.	Collect flushings of Con.Vat. while changing over Concentrate Vat.	Operator	SI/Ex/AM	Being done	Being done
18.	Avoid spillage of powder during small packaging.	Supervisor	SI/Ex/AM	Being done	Being done
19.	Avoid leakage of ghee by proper operation and maintenance of machines.	Supervisor	Mgr(P)	Being done	Being done
20	Avoid short runs of powder plant and processing of milk.	SI/Ex/AM	Mgr(P)	Being done	Being done
21.	Control pilferage, wastage and free consumption of milk and milk products.	SI/Ex/AM	Mgr(P)	Being done	Being done
22.	Avoid reprocessing of milk and milk products.	Operator	SI/Ex/AM	Being done	Being done
23.	Minimize unscheduled production breakdowns of plant and machinery.	Sr.Exec. (Engg.)	G.M.(W)	Being done	Being done
24.	Hold reconstituted milk before use for 12-18 hrs. for proper mixing.	Operator	SI/Ex/AM	Being done	Being done

Annexure – 'II'

Objectives: Optimisation of FAT / SNF Recovery.

Sr No	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
25.	Maintain specified level of moisture in spray dried milk products.	Chemist	Dy.(Q.A)	Being done	Being done
26.	Monitor Fat/SNF recovery on daily basis.	Mgr(P)	G.M.(W)	Being done	Being done
27	Physical verification of raw milk, milk solids in process and finished products on 1st of every month.	SI/Ex/AM	Mgr(P)	Being done	Being done
28	Ensure proper treatment of ghee residue. Fat% in ghee residue water must not be more than 0.2%.	SI/Ex/AM	Mgr(P)	Being done	Being done
29	Moisture % of ghee must be between 0.20 to 0.25%.	SI/Ex/AM	Mgr(P)	Being done	Being done
30	Filling lines are to be flushed properly after processing/filling of liquid milk.	Operator	SI/Ex/AM	Being done	Being done
31	Milk is to be collected from crates having leaky pouches.	SI/Ex/AM	Mgr(P)	Being done	Being done
32	Ensure that ghee pouch machine is in good running condition and properly maintained to avoid leakage of ghee.	Supervisor	Mgr(P)	Being done	Being done
33	Ensure that Fat must not go in skimmed milk.	SI/Ex/AM	Mgr(P)	Being done	Being done
34	Re-utilization of milk samples and milk products.	Chemist	Exec.(Q.A)	Being done	Being done
35.	Optimum utilization of milk handling capacity of plant.	Mgr(P)	G.M.(T)	As per milk procured	Being done
36.	Maintain specified level of concentration of Milk solids in Evaporator.	SI/Ex/AM	Mgr(P)	Immediate	Being done

INNOVATIVE BUSINESS IMPROVEMENTS PVT.LTD.

Production Department

Annexure – 'II'

Objectives: Optimisation of FAT / SNF Recovery.

Sr No	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
37.	Use only specified quality of packing materials/containers.	SI/Ex/AM	Mgr(P)	Regularly	Being done
38.	Calibration/dip for tanks to assess accurate quantity for proper standardization and verification.	Ex.(Engg)	Mgr(P)	Regularly	Being done
39.	Ensure random checking of weigh/ vol. of finished products.	SI/Ex/AM	Mgr(P)	Daily basis	Being done
40.	Random checking of weighing machines for accuracy.	SI/Ex/AM	Mgr(P)	Daily basis	Being done

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

Production Department

Annexure – 'II '

Objectives: Reduction in Wastage of Packing Materials.

Sr No.	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
	Ghee Section				
41.	Proper maintenance of accounts of each packing material to monitor wastage on daily basis.	Supervisor /SI	Mgr(P)	Daily basis	Being done
42.	Proper maintenance of machines for flawless running.	Sr.Exec. (Engg.)	Mgr(P)	Regularly	Being done
43.	To check that ghee seamer is functioning perfectly after changing over dye for different category of ghee packaging.	Supervisor	Mgr(P)	Being done	Being done
44.	To keep the height of ghee pouch as per specified height during packing.	Operator	SI/Ex/AM	Statutory	Being done
45.	Accurate testing of packing materials for thickness of ghee film for optimum output.	Chemist	Exec.(Q.A)	Statutory	Being done
46.	Maintain accuracy of all weighing/-measuring devices.	Ex(Engg.)	Mgr(P)	Weekly basis	Being done
47.	Only good quality packing-materials are to be used.	Chemist	Mgr(P)	Regularly	Being done
48.	Avoid damage to packing materials during handling/transit.	SI/Ex/AM	Mgr(P) Basis	Daily	Being done
49	Ensure regular return of damaged packing materials to store.	SI/Ex/AM	Mgr(P)	Weekly basis	Being done

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

Production Department

Annexure – 'II '

Objectives: Reduction in Wastage of Packing Materials.

Sr No.	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
	Powder Plant				
50.	Proper maintenance of pouch sealing machine to avoid leakage.	Sr.Ex. (Engg)	Mgr(P)	Daily basis	Being done
51.	To avoid damage to packing materials during handling/transit.	Supervisor	Mgr(P)	Daily basis	Being done
52.	Accurate testing of packing materials for thickness of polyliners for powder packing.	Chemist	Mgr(P)	Regularly	Being done
53.	Ensure calibration of electronic weigh scales on regular basis.	Exec. (Engg)	Mgr(P)	Regularly	Being done
54.	Stacking of bags to be done properly to avoid damage to ployliners and K.P.bags.	SI/Ex/AM	Mgr(P)	Regularly	Being done
55.	Tracibility and accountability of all input packing materials.	SI/Ex/AM	Mgr(P)	Regularly	Being done
	SFM Section				
56.	Proper filling and corking of bottles to avoid breakage of bottles.	SI/Ex/AM	Mgr(P)	Regularly	Being done
57.	Accurate testing of packing materials like bottles, liners and cartons for specified parameters.	Chemist	Mgr(P)	Regularly	Being done
58.	Ensure proper operation of sterilizer to avoid breakage of bottles.	Operator	SI/Ex/AM	Regularly	Being done

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

Production Department

Annexure – 'II'

Objectives: Reduction in Wastage of Packing Materials.

Sr No.	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
	Liquid Milk Section				
59.	Proper maintenance of accounts for each kind of pouch film.	Supervisor /SI	Mgr(P)	Regularly	Being done
60.	Proper maintenance of pouch filling machines to avoid leakage in the liquid milk pouches.	Sr.Ex. (Engg)	Mgr(P)	Regularly	Being done
61.	To keep height of milk pouch as per specified limits during filling.	SI/Ex/AM	Mgr(P)	Daily basis	Being done
62.	Accurate testing of packing materials for strength and pinholes.	Chemist	Mgr(P)	Regularly	Being done
63.	Weighing devices to be maintained accurately and properly.	Ex.(Engg)	Mgr(P)	Regularly	Being done

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

Production Department

Annexure – ' II '

Objectives: Optimizing Utilization of Fuel, Electricity and Water.

Sr No.	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
64.	Monitor manpower utilisation on daily basis.	SI/Ex/AM	Mgr(P)	Being done	Being done
65.	Workout manpower requirements as per production schedule on weekly basis.	SI/Ex/AM	Mgr(P)	Being done	Being done
66.	Deploy staff strictly as per work load requirement.	SI/Ex/AM	Mgr(P)/ GM(T)	Being done	Being done
67.	Deploy core group workers for key operations for better efficiency.	SI/Ex/AM	Mgr(P)	Being done	Being done
68.	Clear work instructions for all operations.	SI/Ex/AM	Mgr(P)	Being done	Being done
69.	Ensure availability of required resources near work place to avoid loss of time.	SI/Ex/AM	Mgr(P)	01.04.02	Being done
70.	To provide drinking water facility near the work place.	SI/Ex/AM	Mgr(P)	Being done	Being done
71.	Control movement of workers during tea break, lunch hours and outgoing times.	SI/Ex/AM	Mgr(P)	Being done	Being done
72.	Recruit healthy and efficient workers for better efficiency.	Mgr(PNL & HRD)	G.M.(T)	Being done	Being done
73.	Impart proper training to workers for getting maximum output.	SI/Ex/AM	Mgr(P)	Being done	Being done
74	Inculcate spirit among workers to follow good manufacturing practices.	SI/Ex/AM	Mgr(P)	Being done	Being done
75	Specify clearly all functional duties and responsibilities to all workers.	SI/Ex/AM	Mgr(P)	Being done	Being done

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

Production Department

Annexure – ' II '

Objectives: Optimizing Utilization of Fuel, Electricity and Water.

Sr No.	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
76.	Ensure proper working conditions to stimulate efficiency.	SI/Ex/AM	Mgr(P)	Being done	Being done
77.	Provide proper lockers/storage facility to workers for their personal belongings at convenient place.	Mgr(P)	G.M.(T)	Being done	Being done
78.	Ensure proper attendance during specified working hours.	SI/Ex/AM	Mgr(P)	Being done	Being done
79.	Accountability for every function at every stage.	SI/Exec.	Mgr(P)	Being done	Being done
80.	Good house keeping and safe work habits.	SI/Exec.	Mgr(P)	Being done	Being done
81.	Identify and control mischevious elements among workers.	Mgr(P)	G.M(W)	Being done	Being done

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

Production Department

Annexure – ' II '

Objectives: Optimizing utilisation of Fuel, Electricity and Water.

Sr No.	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
82	Avoid reprocessing of milk.	SI/Ex/AM	Mgr (P)	Being done	Being done
83.	Ensure that leakage of steam from pipelines is immediately got repaired.	Foreman (Engg.)	Exec. (Engg)	Being done	Being done
84.	Use only condensate water in processing and other sections in place of tap water for cleaning purposes.	SI/Ex/AM	Mgr(P)	Being done	Being done
85.	Avoid idle running of motors (chilled water pumps and unloading tanker pumps).	SI/Ex/AM	Mgr(P)	Being done	Being done
86.	Ensure that live steam is not wasted/ misused.	SI/Ex/AM	Mgr(P)	Being done	Being done
87.	Ensure switching off the lights of plant in the morning.	SI/Ex/AM	Mgr(P)	Being done	Being done
88.	Run exhaust fans only when required.	SI/Ex/AM	Mgr(P)	Being done	Being done
89.	Switch off pesto-flash during night hours.	SI/Ex/AM	Mgr(P)	Being done	Being done
90.	Run exhaust fan for sweeping powder from the chamber only for 10-15 minutes after stoppage of powder plant.	Operator	SI/Ex/AM	Being done	Being done
91.	Use only one spray pond pump for running of powder plant.	Operator	SI/Ex/AM	Being done	Being done
92.	Use only one air compressor for whole factory operation. Isolate main air valve of powder plant when powder plant is not running.	SI/Ex/AM	Mgr(P)	Being done	Being done

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

Production Department

Annexure – ' II '

Objectives: Optimizing utilisation of Fuel, Electricity and Water.

Sr No.	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
93.	Use Min. water for washing/cleaning of floors in different sections.	SI/Ex/AM	Mgr(P)	Being done	Being done
94.	Clean periodically light fixtures for better illumination.	Foreman (Elect.)	Exe. (Elect.)	Being done	Being done
95.	Plan production schedules in such a way that running of D.G. sets is avoided.	SI/Ex/AM	Mgr(P)	Being done	Being done
96.	Whenever powder plant is to be run, convey in writing to boiler section regarding running of double bed. Avoid idle running of double bed.	SI/Ex/AM	Mgr(P)	Being done	Being done
97.	Avoid down time of machinery.	Ex(Engg.)	G.M.(W)	01.04.02	Being done
98.	Whenever any abnormality is observed in machinery, Engineering section must be informed immediately for rectification.	SI/Ex/AM	Mgr(P)	Being done	Being done
99.	Only authorised operators will run the machines to avoid breakdowns.	SI/Ex/AM	Mgr(P)	Being done	Being done
100	Only operators are authorized to fit/ assemble cream separators.	SI/Ex/AM	Mgr(P)	Being done	Being done
101	Ensure that pasteurizers are run on full capacity.	SI/Ex/AM	Mgr(P)	Being doane	Being done
102	Ensure that CIP of storage tanks and pipelines are carried out only for specified time.	SI/Ex/AM	Mgr(P)	Being done	Being done
103	Flushings of evaporators must be taken through chiller only to save refrigeration energy.	SI/Ex/AM	Mgr(P)	Being done	Being done

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

Production Department

Annexure – ' II '

O bjectives: Optimizing utilisation of Fuel, Electricity and Water.

Sr No.	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
104	Reduce cleaning time of plant with good quality detergents and efficient operation.	SI/Ex/AM	Mgr(P)	Being done	Being done
105	Monitor consumption of electricity per kg of milk handled on daily basis.	SI/Exec.	Mgr(P)	Being done	Being done
106	Monitor consumption of electricity per kg of SMP/WMP manufactured on daily basis.	SI/Exec.	Mgr(P)	Being done	Being done

INNOVATIVE BUSINESS IMPROVEMENTS PVT. LTD.

Production Department

Annexure – ' II '

Objectives: Optimization in utilization of detergents.

Sr No.	Parameters	Implementation by	Monitoring By	Target Date	Completion Date
107	Follow specified procedures for cleaning operations.	SI/Ex/AM	Mgr(P)	Always	Being done
108	Use desired strength of chemicals/ detergents in different cleaning operations.	SI/Ex/AM	Mgr(P)	Always	Being done
109	Avoid wastage/pilferage of detergents.	SI/Ex/AM	Mgr(P)	Always	Being done
110	Ensure proper storage of detergents.	SI/Ex/AM	Mgr(P)	Always	Being done
111	Reutilization of used detergents wherever possible.	SI/Ex/AM	Mgr(P)	Always	Being done
112	Ensure that during CAC of evaporator. Caustic used before circulation of acid is stored and caustic is reutilized for circulation after acid circulation in evaporator is over.	SI/Ex/AM	Mgr(P)	Always	Being done
113	Follow specified cleaning schedules to avoid wastage of detergents.	SI/Ex/AM	Mgr(P)	Always	Being done