Quality Assurance Plan

For

Incoming Materials
(Raw Milk)

Quality Assurance Plan For Incoming Materials

(RAW MILK)

S. N.	Parameters	Responsibility	Specification	Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument
1.	Organoleptic Test	CC Operator	Acceptable	LM	Each MPC supply /daily	Rejection	As per specification	
2.	Foreign Matter	CC Operator	Should not	LM	Each MPC supply/daily	Filtration		Visual
3.	MBRT	CC Operator	Good	LM	Once a month for each supplier	Making supplier aware and if found repeatedly then suspension from suppler list		Resorcinol/ test tubes/ water bath
4.	Neutraliser Soda	CC Operator	Negative		Daily	Analysis next day and if not found of specification again then suspension from supplier list	As per specification	
5.	Adulteration Sugar Urea Salt H_2O_2 Antibiotics	CC Operator	Negative	LM	Daily	Test for 65%	As per specification	
6.	COB	CC Operator	Negative	LM	Daily	Rejection	As per specification	
7.	Alcohol test 70%	CC Operator	Negative	LM	Daily		As per specification	
8.	Alcohol test 65%	CC Operator	Negative	LM	Daily	Rejection	As per specification	
9.	Fat test	CC Operator	Cow 3.5% Buffalo 5%	LM	Daily	Reduction in price	As per specification	
10.	SNF	CC Operator	8%	LM	Daily	Rejection	As per specification	
11.	Time	CC Operator	9.30 am	LM	Daily	Rejection	As per specification	

Quality Assurance Plan for Storing Milk in Chilling Center and Dispatching Milk to Processing Plan

S. N.	Parameters	Responsibility	Specification	Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument
1.	Temperature	CC Operator	2-4 ^{0}C	thermo meter	4 hrs and at the time of electricity breaking	Cooling	As per specification	Thermometer
2.	Time	CC Operator	Max 24 hrs	LM		Adjustment in schedule	As per specification	Watch
3.	Sealing of tanker	CC Operator	Should not break	LM	At the time of dispatch	Resealing	As per specification	
4.								

Quality Assurance Plan for Incoming Materials

Material: Incoming Raw Milk
Sampling Type: Composite
Sampling Frequency: Once Per Batch
Site: Processing Plant

S. N.	Parameters	Responsibility	Specification	Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument
1.	Organoleptic test Odour	Operator	Acceptable / unaccepatable	LM	Once per batch	Rejection / other products	As per specification	
2.	Foreign matter	Operator	Should not	Visual	Each batch	Filtration		Visual
3.	MBRT	QC			Once a month	Rejection		Chemical
4.	COB	Operator	+ve / -ve		Each batch	Rejection		
5.	Alcohol test 70%	Operator	+ve / -ve	LM	Each batch	Test for 65%		
6.	Lactometer reading	Operator	8	LM	Each batch	Process adjustment		Lactometer
7.	Fat test	QC	3%	LM	Each batch	Process adjustment		
8.	Temperature	Operator	< 10^{0}C	PM	Each batch	Chilling		Thermometer
9.	Soda test	QC	-ve	LM	Once in a week per chilling center	Rejection		
10.	Sugar test	QC	-ve	LM	Once in a week per chilling center	Rejection		
11.	Starch test	QC	-ve	LM	Once in a week per chilling center	Rejection		

Material: Skim Milk Powder (SKM)

S. N.	Parameters	Responsibility	Specification	Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument
1.	Solubility	QC		LM	Each batch	Rejection	As per specification	
2.	SNF	QC		LM	Each batch	Rejection	As per specification	Lactometer
3.	Sugar	QC		LM	Each batch	Rejection	As per specification	
4.	Salt	QC		LM	Each batch	Rejection	As per specification	
5.	Starch	QC		LM	Each batch	Rejection	As per specification	

Material: Water

S. N.	Parameters	Responsibility	Specification	Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument
1.	Total count	Lab	D/w Nepal standard	LM	Each day	Adjustment in treatment	As per specification	
2.	Coliform count	Lab	D/w Nepal standard	LM	Each day	Adjustment in treatment	As per specification	
3.	pH	Lab	D/w Nepal standard	LM	Each day	Adjustment in treatment	As per specification	
4.	TDS	Lab	D/w Nepal standard	LM	Three times a year	Adjustment in treatment	As per specification	
5.	Hardness	Lab	D/w Nepal standard	LM	Three times a year	Adjustment in treatment	As per specification	
6.	Alkalinity	Lab	D/w Nepal standard	LM	Three times a year	Adjustment in treatment	As per specification	
7.	Heavy metal	Lab	D/w Nepal standard	Testing from accredited lab	2 times a year	Adjustment in treatment	As per specification	

Packaging and Labeling Material

S. N.	Parameters	Responsibility	Specification	Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument
1.	Migration test	Lab			Each batch	Rejection	Test certificate of compliance	
2.	Heavy metals	Lab			Each batch	Rejection	Test certificate of compliance	

In Process Material

S. N.	Parameters	Responsibility	Specification	Test Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument	Records
1.	Weighing of milk	Operator	As per claimed	Weighing	Each batch		Matching with weighing	Balance	Weight control register
2.	Foreign matter		Should not	Visual check	Each batch		As per specification		—

Process: Cooling /Storing

S. N.	Parameters	Responsibility	Specification	Test Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument	Records
1.	Temperature	Operator	<10	LM	Once a day/after interruption in supply	Lowering temperature	High cooling rate/ maintenance	Thermometer	Temperature control log sheet

Process: Standardization

S. N.	Parameters	Responsibility	Specification	Test Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument	Records
1.	Fat %	Lab	3%	LM	Each batch	Adjustment in fat	As per specification	Butyrometer	
2.	SNF	Lab	8%	LM	Each batch	Adjustment in SNF	As per specification	Lactometer	

Process: Homogenization and Pasteurization

S. N.	Parameters	Responsibility	Specification	Test Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument	Records
1.	Pressure	Operator	1500 psi	PM	Each batch	Adjustment in pressure	As per specification	Pressure gauge	Daily log book
2.	Time	Operator		PM	Each batch				Daily log book
3.	Temperature	Operator	85^0C	PM	Each batch	Adjustment in temp.	As per specification	Thermometer	Daily log book

Pasteurized Milk

S. N.	Parameters	Responsibility	Specification	Test Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument	Testing Point
1.	Organoleptic	Lab	Acceptable	LM	Once per each batch	Rejection			Before packing
2.	COB	Lab	Negative	LM	Once per each batch	Rejection			
3.	Alcohol	Lab	Negative	LM	Once per each batch	Rejection /use for other product			
4.	Phosphates test	Lab	Negative	LM	Once per each batch	Repasteurization		Tintometer	
5.	Fat	Lab	3%	LM	Once per each batch	Reprocess		Butyrometer	
6.	Acidity	Lab	< 0.2%	LM	Once per each batch	Neutralization			
7.	SNF	Lab	8%	LM	Once per each batch	Reprocess		Lactometer	

Final product

Pasteurized milk

S. N.	Parameters	Responsibility	Specification	Test Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument	Testing Point
1.	Organoleptic	Lab	Acceptable	LM	Once per each batch	Rejection	As per specification		
2.	Alcohol	Lab	Negative	LM	Once per each batch	Rejection	As per specification		
3.	Phosphates test	Lab	Negative	LM	Once per each batch	Rejection	As per specification	Tintometer	
4.	Fat	Lab	3%	LM	Once per each batch	Rejection	As per specification	Butyrometer	
5.	Acidity	Lab	2%	LM	Once per each batch	Reject	As per specification		
6.	SNF	Lab	8%	LM	Once per each batch	Reprocess	As per specification	Lactometer	
7.	Coliform count	Lab	Nil	LM	Once per each batch	CIP checking	As per specification	Incubator	

Returned Product: Pasteurized Milk

S. N.	Parameters	Responsibility	Specification	Test Method	Test Frequency	Control Plan	Acceptance Criteria	Instrument	Testing Point
1.	Breakage and leakage	PSV/PO			Each pouch				
2.	CPB	Lab		LM					
3.	Alcohol	Lab		LM					
4.	Fat	Lab		LM					
5.	SNF	Lab		LM					