

**WORKING TRANSLATION - This is not an official translation.**

**Any point that raises concerns should first and foremost be checked in the official translation of this document.**

**Checklist for dairy processing plants - to be prepared ahead of the Russian inspectors' visit ( During the preparation and organisation of the inspection)**

**I**

**1. General information on the enterprises's activities:**

1.1. Name of the enterprise:	
1.2. State registration number:	
1.3. Document of attestation (certified) delivered by the competent authorities (attached)	
1.4. Address of the factory (complete with indication of the administrative district, municipality, county etc)	
1.5. Types of activities the factory deals with (slaughter of cattle/pigs/poultry; processing (butchering) and packing of meat; cold stores; slicing)	
1.6. Date of construction and date of beginning of exploitation (initial)	
1.7. Date of the latest maintenance repairs; short description of the work carried out	
1.8. Overall number of staff working in the factory (as of 1.01.2009):	
a) Factory staff, including administrative staff	
• Overall number	
Including veterinary specialists	
b) Civil servants (from competent official bodies) working in the factory	
• Overall number	
Including veterinary officers	
1.9. Number of shifts. Duration of shifts (hours)	
1.10. Production capacity of the factory	
a) <u>planned</u>	
– intake of raw milk (tons per day)	
– processing of milk (tons per day)	
– storage of dairy products (at any given time) (tons)	

b) <u>factual</u> (currently)	
– intake of raw milk (tons per day)	
– processing of milk (overall tons per day)	
– including milk processed for the production of the main range of products (list ) processed by the factory:	
1.11. List of countries to which the factory is officially entitled to export by the competent authorities of the country	
1.12. Start date of exports to Russia (month and year)	
1.13. Date of the latest shipment to Russia of products from the factory (with veterinary certificate attached).	
1.14. Information about the suppliers and sources of raw materials:	
– Overall number and list of the administrative territories in which the suppliers of raw milk are located (in terms of raw milk collection points)	
– Overall number of suppliers	
– Including number of collection points of raw milk	
– Maximum distance between the suppliers (collection points) and the factory (km)	
– Maximum time that the delivery of raw milk to the factory may take (hours)	
– Overall number of heads of cattle in all the supplying farms	
– If raw milk from other countries is supplied to the dairy-processing factory, list the supplying countries, the volume of milk they supply and the respective percentage it amounts to in relation to the overall volume of milk supplied.	
<i>Please provide examples of the documents which are required for such supplies of milk; the regulatory framework within which it is authorised (forms and other documents).</i>	
1.15. Epizootic characteristics of the zone in which raw milk is first received, with notes made by the competent authorities regarding the animals' registered diseases. Anti-epizootic work carried out in the raw milk zone.	

1.16. Volume of production and sales of production (by main category of product) for 2006, 2007 and 2008 (tons)

Category of product	2006	2007	2008

1.17. Markets in which the products released by the factory are sold (tons)

	2006	2007	2008
• Domestic market			
• EU countries			
• Third countries			
– Including Russia			

**2. Documentation** (Please have it prepared and categorised prior to the Russian experts' inspection in order to facilitate their work from an operational point of view)

- 2.1. Plan of the layout of the factory
- 2.2. All the Acts/ Reports of the state veterinary service for 2006, 2007, and 2008 with relation to the factory
- 2.3. A selection of 7-10 copies of veterinary certificates or internal documents regarding the products exported to Russia (if there were exports to Russia in previous years)
- 2.4. Overall number of laboratory tests carried out in state (accredited by the state) laboratories in 2008 and 2009 (this does not include tests carried out in the factory's own laboratories), including tests on:
  - Raw milk (intake)
  - Products that have been processed at the factory
  - 'Objects' involved in dairy processing (equipment, packaging, staff, water, etc)

When preparing this information the following must be highlighted

- The object of the test
  - Safety indicators (organoleptic, microbiological, residual)
  - Overall number of tests for each indicator
  - Presence of laboratory data which indicate that the permitted norms and food safety standards had not been complied with / had been exceeded.
- 2.5. Results of tests and material confirming the product complies with food safety norms in 2008 (preliminary classified with the use of bookmarks/ different computer files etc)
    - In line with state programmes (with the type of test mentioned: detection of heavy metals, antibiotics, radionuclides, etc)
    - In line with the factory's own programme.

## Checklist for Russian inspectors to consider during the course of the inspection of the dairy-processing plant

### 1. General questions

<p>1.1. Presence on the grounds of the factory of Russian norms and requirements for exported products (list of documents), including the Federal Law of the Russian Federation no. 88-F3 of the 12<sup>th</sup> of June 2008 (Technical regulations for milk and dairy products) made available in the language of the country. The date on which this document was made available in the factory should be written and instances of training / meetings about it should be mentioned.</p>	
<p>1.2. Documental proof of a visit (audit) of the factory by a commission of a competent official body with the aim of fully enforcing Russian requirements; level (status) of the commission of the competent official body involved (Central state agency, autonomous regional body, state veterinary official etc)</p>	
<p>1.3. Presence of the legislative framework in force of the country being visited. Regulatory legal acts (title, number and date, competent authority which legalised the document) establishing the following:</p>	
<ul style="list-style-type: none"> <li>– Conditions of intake of raw milk</li> </ul>	
<ul style="list-style-type: none"> <li>– Technical procedures involved in the processing of milk to make dairy products</li> </ul>	
<ul style="list-style-type: none"> <li>– Procedures of use, storage, transport, packaging, and labelling of milk and milk-derived products.</li> </ul>	
<ul style="list-style-type: none"> <li>– Procedure of use, processing and dealing with potentially dangerous products in the process milk processing and the waste that derives from it.</li> </ul>	

### 2. Territory and general characteristics of the factory

<p>2.1. Adequacy of the plan of the layout of the factory provided; is it up-to-date, have modifications been inserted</p>	
<p>2.2. Adequacy of the production capacity and range of products in relation to the parameters of the factory</p>	
<p>2.3. Compliance with the accuracy of all technical procedures. Cross-contamination between raw material and finished products, clean and used packaging (etc) must not be allowed</p>	
<p>2.4. Presence of a buffer sanitary zone between the factory and residential houses/ other industrial developments; avoidance of veterinary breaches due to live cattle breeding plots on the way to the dairy-processing factory (indicate distance in m/km)</p>	
<p>2.5. Conditions in the territory of production and adjacent ways of transportation. Regularity of cleaning, hard roofs, good sewage / drainage system, creation of an environment which endeavours to minimise the chances of contamination of the factory / dairy products made for human consumption.</p>	
<p>2.6. Warning / prevention of dangerous situations</p> <ul style="list-style-type: none"> <li>– Effect of undesirable factors, such as sand, dust,, smoke and polluted air</li> </ul>	

– Organisation of prevention of undesirable animals including dogs, cats, insects, rodents and birds.	
2.7. Rat and insect control. Presence of a concrete programme (plan) to eradicate rodents, insects, which systematically eliminates rodents, insects etc. Plan enforced in line with the criteria in force. The number of mouse traps must be in accordance with the plan.	
2.8. Construction of the building. Solidity of the main construction works. Maintenance of the building in an appropriate condition.	
2.9. Separation (isolation) of the facilities in which activities which may entail contamination of the products or the raw material take place, from the other parts of the factory.	
2.10. Water supply in the factory. Separation of the water pipes for technical and drinking uses & differentiation by colour. Hot and cold drinking water should be provided.	
2.11. Control of the quality and safety of water used in technical processes.	
2.12. Presence and efficiency of cleaning installations, sewage system and control of their exploitation.	

### **3. Intake of raw dairy material in the factory**

3.1. Presence on the grounds of the factory (or nearby) of the necessary equipment to disinfect and clean the vehicles transporting milk (Milk transport tanks); procedure and methods of cleaning and disinfecting.	
3.2. Presence of a covered enclosure for the intake of milk. Sanitary condition of the enclosure during the inspection.	
3.3. Presence of the factory's own transport vehicles for the collection and delivery of raw milk.	
3.4. System and procedure of accompanying documentation upon receipt of a batch of raw milk in the factory.	
3.5. Actual forms of accompanying documentation upon intake of raw milk ( <i>dedicate 5-7 min to the examination of the documentation from various suppliers, describe all listed information / indicators shown in the documentation</i> )	
3.6. Attestation of the quality and safety of the raw milk received in the factory in line with Russian criteria:	
<ul style="list-style-type: none"> <li>• Animal welfare on the territory of the supplying farms and health of the lactating cows of the herd in relation to human and animal infections &amp; diseases.</li> </ul>	
<ul style="list-style-type: none"> <li>• Control on the ban on the use of milk obtained 5 days before calving and 7 days after calving, as well as milk, obtained from sick cows/ cows under quarantine/ cows that have undergone treatment and whose organisms still contain residues of medication (waiting period). Procedure of isolation of such animals from the rest of the herd, proof/document outlining the use of the milk obtained from such animals.</li> </ul>	
<ul style="list-style-type: none"> <li>• Absence in raw milk of residues of inhibitors, detergents, disinfectants and neutralizing substances, as well as animal-growth stimulants (including hormonal substances), medical</li> </ul>	

substances (including antibiotics), substances used in cattle breeding for fattening the animal, for curing or preventing diseases in the herd.	
<ul style="list-style-type: none"> <li>Raw milk must comply with the norms established by Russian standards. (<i>Attachment</i>)</li> </ul>	
<ul style="list-style-type: none"> <li>Raw milk must comply with permitted levels of potentially harmful substances, microorganisms and body cells. (<i>Attachment</i>)</li> </ul>	
<ul style="list-style-type: none"> <li>Procedure of preliminary heat treatment of raw milk (temperature, duration of the procedure) (<i>attachment</i>). How is this information made available in the accompanying documentation.</li> </ul>	
<ul style="list-style-type: none"> <li>Compliance of equipment and materials used for the production and transport of raw milk/ cream and equipment that comes into contact with dairy products.</li> </ul>	
<ul style="list-style-type: none"> <li>Transport equipment must be fitted with refrigerating systems, which enable the load to remain at the necessary temperature. The lid of the tanks of the vehicles used to transport milk must close properly. (<i>Attachment</i>)</li> </ul>	
<ul style="list-style-type: none"> <li>The conditions for storing milk must be respected until the start of its processing (<i>Attachment</i>)</li> </ul>	
<ul style="list-style-type: none"> <li>Procedure for raw milk / raw creams which do not comply with safety norms</li> </ul>	
<ul style="list-style-type: none"> <li>Organisation of the cleaning, disinfecting of the filters through which raw milk is taken into the factory. (Periodic intake – after each intake; intake from more than 1 supplier – after each supplier’s delivery; continuous intake- at least once during a shift).</li> </ul>	

#### **4. Condition of the processing area and auxiliary facilities.**

4.1. The size of the processing zone is sufficient to comply with the hygienic standards of dairy processing	
4.2. The planning and location of work stations allows for clear separation between clean and unclean sectors, prevents the contamination of dairy products and cross-contamination, counter-flows and crossing of technical operations.	
4.3. The work stations, equipment and raw material must be used exclusively for the purpose of dairy processing.	
4.4. The facilities for workers of the production part of the factory are of the ‘sanitary inspection room’ type.	
4.5. Lockers/cloakrooms for workers to leave their outdoors clothes are separate from the place where they keep their work uniforms.	
4.6. There is a sufficient amount of changing rooms/ cubicles for the staff.	
4.7. The changing rooms/ cubicles are kept clean (ventilation, cleanness, lighting, sanitary conditions)	
4.8. No direct contact (entrance) from the production facilities to the toilets, dung-yards, gutters or cesspool.	
4.9. The toilets are kept clean and are in working order.	

4.10. The toilets are fitted with taps that turn on without having to physically touch them. Soaps are odourless and disinfect. Disposable tissues are used to dry hands.	
4.11. Information is on display in the toilets indicating the need to wash hands after going to the toilet.	
4.12. Heating, lighting, ventilation:	
– These must allow for the technical equipment and the staff to perform their work in accordance with the regulations in force.	
– Lighting is sufficient; artificial lighting equipment is clean and kept in good condition.	
– Ventilation / air replacement is sufficient and provides for the efficient release of possible air contamination / fumes.	
4.13. Floors:	
– Made from waterproof material, easy to clean and to disinfect, not slippery and without fissures.	
– Kept in good and clean condition	
– Sloping floors ensuring that water gets out by flowing down towards a siphon/flushing valve, and if necessary equipped with a thoroughly clean and disinfected gutter.	
4.14. Walls:	
– Light, with a smooth surface, easy to clean, steady and waterproof	
– Clean and are kept in good condition	
– The walls are connected to the floor and to other constant features by skirting boards that are well sealed.	
4.15. Doors:	
– Made from solid, easy to clean material	
– Clean and are kept in good condition	
4.16. Ceilings:	
– Easy to maintain and made so that water condensation does not accumulate; it does not peel off, and does not get mouldy.	
– Clean and kept in good condition	
4.17. Windows and other apertures	
– Made so that dirt and does does not accumulate on them	
– Clean and kept in good condition	
4.18. Equipment, machinery and milk pipes	
– It is possible to clean and disinfect all parts that have come into contact with milk and dairy products	
– Milk, cleaning or disinfecting products flow fully into the pipes.	
– Connection to the sewage system with a break of the flow through a funnel equipped with a siphon.	

## **5. Production of fermented and probiotic cultures**

5.1. The facilities in which fermented and/or probiotic cultures are prepared must meet the following criteria:	
<ul style="list-style-type: none"> <li>• Placed in the same building as where the production facilities (which use fermented and/or probiotic organisms) are, but separated from them. At the entrance there must be a changing area for workers to change into sanitary uniforms and a disinfecting mat.</li> </ul>	
<ul style="list-style-type: none"> <li>• There must be a constant ventilation system and an efficient system of air replacement</li> </ul>	
<ul style="list-style-type: none"> <li>• In the sections dedicated to fermentation and in the changing area there must be bactericidal lamps to protect fermentations or other special appliances to prevent microorganisms from contamination.</li> </ul>	
5.2. Entrance to the fermentation section is only allowed for authorised staff.	
5.3. Containers and utensils of the fermentation section	
<ul style="list-style-type: none"> <li>– Labelled / marked</li> </ul>	
<ul style="list-style-type: none"> <li>– The autoclave is cleaned, disinfected and sterilised after use</li> </ul>	
<ul style="list-style-type: none"> <li>– Clean containers and utensils are stored on disinfected shelves or special stands, and are closed by clean film/polyethylene film.</li> </ul>	
<ul style="list-style-type: none"> <li>– After a storage period of over 24 hours, containers and utensils have to be disinfected again before use.</li> </ul>	
5.4. Each batch of fermented substance must be certified for quality and safety. Any ferment (be it dry, laboratory and produced/industrial) can not be used after its expiry date. Produced ferments with an excess of acidity should not be used either.	
5.5. Transplanted and produced/industrial fermentation is specifically prepared by specific responsible staff, who are also responsible for adding fermentation to milk during the process of preparation of produced/industrial fermentation and its products.	
5.6. Control of the safety of the fermentations and/or probiotic microorganisms, and of its compliance with the established norms (attachments) is carried out by staff that have been specifically trained and received certificates.	
<b><u>6. Laboratory testing</u></b>	
6.1. Presence on the grounds of the factory of laboratories legally certified to carry out tests for the indicators characteristic of dairy product safety. If not - accredited laboratories which perform these tests outside the factory; distance between the factory and the labs.	
6.2. Laboratory control of the quality of the raw milk and creams that are delivered to the factory is in place and checks the following	
<ul style="list-style-type: none"> <li>– organoleptic indicators (<i>daily for each delivery</i>)</li> </ul>	

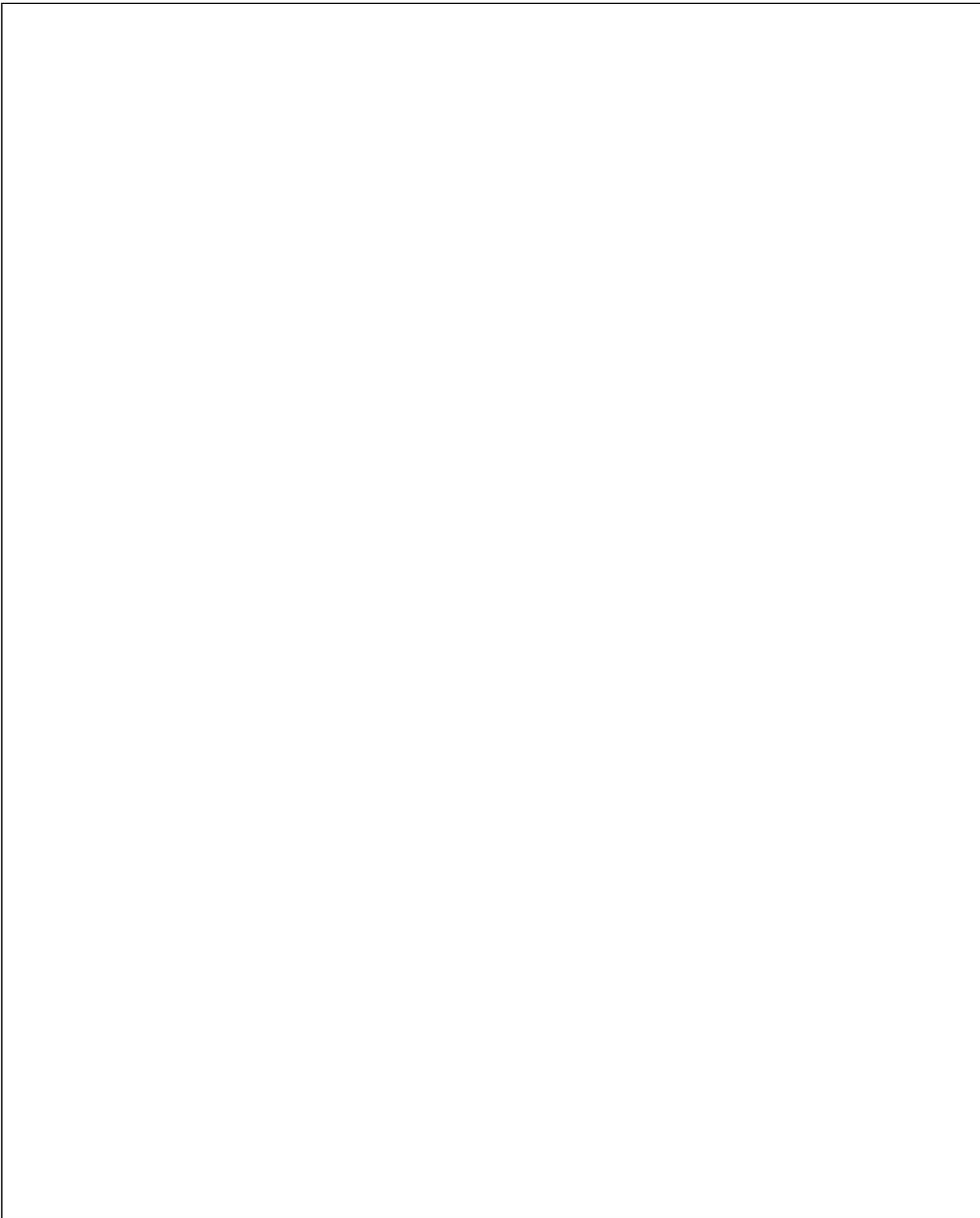
– temperature, °C ( <i>daily for each delivery</i> )	
– titrate acidity, °T ( <i>daily for each delivery</i> )	
– mass fat concentration, % ( <i>daily for each delivery</i> )	
– density, kg/m ( <i>daily for each delivery</i> )	
– degree of cleanliness ( <i>daily for each delivery</i> )	
– bacterial contamination, KOE/g ( <i>not less than once every 10 days</i> )	
– mass concentration of proteins, % ( <i>not less than twice a month</i> )	
– temperature of freezing, °C ( <i>daily for each delivery</i> )	
– detection of phosphotose ( <i>if there are doubts of heat treatment</i> )	
– degree of heat stability ( <i>daily for each delivery</i> )	
– body cell content, 1000/ cm <sup>3</sup> ( <i>not less than once every 10 days</i> )	
– presence of inhibiting agents ( <i>not less than once every 10 days</i> )	
6.3. Daily laboratory control are in place and they aim at controlling the quality	
• of secondary/ auxiliary material	
• of fermentation	
• of the finished products	
6.4. Frequency of laboratory controls	
– Of the finished products for microbiological safety indicators ( <i>milk, cream and cultured milk products- not less than once every three days</i> )	
– Of the quality of the sanitary treatment of the equipment ( <i>not less than once every ten days</i> )	
– Cleanliness of the workers' hands ( <i>not less than three times a month</i> )	
6.5. Presence in the factory's laboratory of a separate area to carry out microbiological testing, with a space to get changed into specific uniforms (surgical coats, caps, hairnet) . This area should be equipped with bactericidal lamps (approximately 2,5 Watt/metre), which should be left turned on 30-60 min after the end of work and the area has been cleaned.	
6.6. The area for microbiological testing should be cleaned daily with a solution of soap and alkaline. It should be disinfected daily: all the surfaces should be wiped with disinfecting substances.	
6.7. Sterilisers should be available for the sterilisation of the containers and petri dishes in a specifically isolated area.	
6.8. Control of the length of storage	
– Of sterilised containers – in hermetically closed cupboards or boxes with lids ( <i>no longer than 30 days</i> )	
– Of sterilised petri dishes – in a fridge with a temperature of between 4 and 6 °C ( <i>no longer than 14 days</i> )	

<b>7. <u>Organisation of the control of produced products</u></b>	
7.1. Presence in the factory of programmes (systems) of control of the safety of the finished production, including the following criteria. Documental proof of all of these will be required.	
<ul style="list-style-type: none"> <li>• Frequency of controls and extent of the controls carried out</li> </ul>	
<ul style="list-style-type: none"> <li>• Control of the indicators of quality and safety of raw material, components, finished dairy products, indicators of their identification</li> </ul>	
<ul style="list-style-type: none"> <li>• Stages of control (Critical Control Points) of the processes of production.</li> </ul>	
<ul style="list-style-type: none"> <li>• Control of storage conditions and transport of raw material, components, finished products, expiry dates</li> </ul>	
<ul style="list-style-type: none"> <li>• Control of the compliance of technical, veterinary, sanitary and hygienic conditions of production</li> </ul>	
<ul style="list-style-type: none"> <li>• Schedule and conditions of sanitary treatment, cleaning, disinfecting work, rat and insect eradication in the production facilities, the equipment and the work utensils.</li> </ul>	
<ul style="list-style-type: none"> <li>• Schedule and conditions of technical maintenance of the equipment and utensils</li> </ul>	
<ul style="list-style-type: none"> <li>• Measures to control the enforcement of hygienic requirements</li> </ul>	
<ul style="list-style-type: none"> <li>• Ways of recalling unprocessed and processed material and finished products.</li> </ul>	
<ul style="list-style-type: none"> <li>• Measures for the prevention and detection of breaches in the organisation and implementation of the process of production</li> </ul>	
<ul style="list-style-type: none"> <li>• Ways of dealing with processed dairy products which do not meet the criteria of the Russian Federal Law.</li> </ul>	
<ul style="list-style-type: none"> <li>• List of the managers/directors, who bear personal responsibility for the enforcement of the programme of production control.</li> </ul>	
7.2. Organisation of the medical examination of staff, including employees who carry out lab tests.	
7.3. Organisation and controls enforced by official/competent authorities to ensure that the requirements and rules of personal hygiene (for staff) are complied with.	
<b>8. <u>Requirements for the cleaning and disinfection of equipment and production areas.</u></b>	
8.1. Short description of the plan (programme) of production control in relation to the list of objects treated (production areas, equipment, utensils, containers and means of transport) and frequency of their cleaning and disinfecting.	
8.2. Practical implementation of the programme (plan) for the maintenance of cleanliness (cleaning) and disinfection in the factory.	
8.3. Presence of an authorisation (certification) from a competent	

authority guaranteeing the safety of the substances used for cleaning and disinfecting the factory. Cleaning and disinfecting products are used in such a way that chemical reactions that could damage equipment, devices or products can not occur.	
8.4. Presence of disinfecting basins at the entrance (exit) leading to the production area.	
8.5. Organisation of cleaning and disinfecting processes of:	
– Tanks for the processing and storage of milk and dairy products	<i>(no later than 2 hours after each emptying)</i>
– The equipment that has not been used for over 6 hours after being cleaned and disinfected.	<i>(repeat disinfection before starting work again)</i>
– In case of a break of over 2 hours in the treatment of pasteurised milk or mixes of products originating from its processing.	<i>(repeat pasteurisation and cleaning/ disinfecting of the pipes and equipment)</i>
8.6. Short description of the volumes and frequency of laboratory tests in line with the plan / programme for the production control of the efficiency of cleaning and disinfecting. Presence of results confirming the insufficiency of cleaning/ disinfecting and measures taken to improve the situation.	
8.7. Presence of a cupboard/ enclosure (locked) where cleaning products/ machinery, disinfecting products, insecticides etc are kept out of contact with food products	
8.8. Cleaning and disinfecting products are marked with information about the volumes in which they need to be used, their properties and concentration. Cleaning utensils need to be marked and fixed in accordance with their use /the area in which they are used.	

## **9. Apparent shortcomings in the factory**

<b><u>10. Apart from that, the inspection has also established the following:</u></b>	
<b><u>11. Suggestions</u></b>	



**Russian requirements for raw milk (No. 88-F3 of the 12.06.08)**

Attachment 1

**Permitted levels of content of potentially dangerous substances in raw milk and raw cream**

Product	Potentially dangerous substance	Permitted level, mg/kg (L), not over
Raw milk raw cream	Toxic elements :	
	Lead	0,1
	Arsenic	0,05
	Cadmium	0,03
	Mercury	0,005
	Mycotoxins:	
	Aphlatoxin M1	0,0005
	Antibiotics:	
	Chloramphenicol	not allowed
	Tetrocyclines	not allowed
	Streptomycin	not allowed
	Penicilline	not allowed
	Inhibiting substances	not allowed
	Pesticides (in fat terms):	
Hexachlorocyclohexanes (alfa-, beta-, gamma-isomers)	0,05 (1,25 for cream)	
DDT and its metabolites	0,05 (1,0 for cream)	
Radionuclides:		
Caesium-137	100 Bq/l	
Stronium-90	25 Bq/L	

Attachment 2

**Permitted levels of content of microorganisms and body cell count in raw milk and raw cream**

Products	QMAFANM <1>, CFU <2>/cm <sup>3</sup> (g), not over	mass of the product (g, cm <sup>3</sup> ) for which it is not permitted		Body Cell content, in 1 cm <sup>3</sup> (g), not over
		BIG <3> (coliforms)	pathogenic, including salmonella	
Raw milk				
высший сорт*	5 1 x 10	-	25	5 2 x 10
первый сорт±	5 5 x 10	-	25	6 1 x 10
второй сорт~	6 4 x 10	-	25	6 1 x 10
Raw cream				
высший сорт*	5 5 x 10	-	-	-
первый сорт±	6 4 x 10	-	-	-

\* superior quality; ± first rate; ~ second rate

## 1. Indicators of identification of raw cow milk

Indicator	Parameter
Mass concentration of fat, %	2,8 - 6,0
Mass concentration of protein, %	not less than 2,8
Mass concentration of dry non-fat matter in milk, %	not less than 8,2
Consistency	Homogeneous liquid without residues or lumps Not allowed to be frozen.
Taste and smell	Clean taste and smell, without after tastes/smells not similar to that of fresh natural milk Weak smell and taste of feed are allowed
Colour	From white to light cream
Acidity (Terner degrees)	16,0 - 21,0
Consistency, kg/m <sup>3</sup> , not over	1027,0 (at a temperature of 20 degree Celsius & mass concentration of fat - 3,5%)
Temperature of freezing (degree Celsius) (to be used if you suspect falsification)	not over 0,520

## 2. Indicators of identification of raw milk of farmed animals in a load

Type of animal	Components of milk, %					Density at a temperature of 20 degree Celsius	Acidity Terner degrees
	fat	proteins	lactose	dry substance on average	mineral substances		
Cow	2,8 - 6,0	2,8 - 3,6	4,7 - 5,6	13,0	0,7	1027 - 1030	16,0 - 21,0
Goat	4,1 - 4,3	3,6 - 3,8	4,4 - 4,6	13,4	0,8	1030	17,0
Ewe	6,2 - 7,2	5,1 - 5,7	4,2 - 6,6	18,5	0,9	1034	25,0
Mare	1,8 - 1,9	2,1 - 2,2	5,8 - 6,4	10,7	0,3	1032	6,5
Camel	3,0 - 5,4	3,8 - 4,0	5,0 - 5,7	15,0	0,7	1032	17,5
Buffalo	7,5 - 7,7	4,2 - 4,6	4,2 - 4,7	17,5	0,8	1029	17,0
Donkey	1,2 - 1,4	1,7 - 1,9	6,0 - 6,2	9,9	0,5	1011	6,0

**Article 6. Requirements for the specific technical processes during the production, storage, transport, and handling of raw milk and raw cream.**

...

2. After farm animals have been milked, raw milk must be cleaned and cooled until it reaches a temperature of 4 degree Celsius (+/- 2 deg.) within 2 hours.

3. The storage of raw milk at a temperature of 4 degree Celsius (+/- 2 deg.) is allowed for a period of 24 hours, and that includes the duration of transport; raw cream should be kept at a temperature below 8 degree Celsius no longer than 36 hours, including delivery time.

4. Preliminary heat treatment of raw milk (including pasteurisation) by the producer is allowed if:

- 1) Acidity of raw milk varies between 19 and 21 Terner degrees
- 2) Raw milk has been stored for over 6 hours;
- 3) The duration of the transport of raw milk exceeds the recommended storage period for cooled raw milk by over 25%.

...

7. The temperature of raw milk and raw cream right up to the beginning of their processing should never exceed 10 degree Celsius. Raw milk and raw cream which do not comply with the established requirement must be dealt with quickly.

8. Raw milk and raw cream are transported in hermetically closed and sealed tanks, made from materials which have been judged safe for the contact with milk by federal authorities of the relevant enforcement agency which regulates the sanitary and veterinary welfare of the population and protects consumers' rights. The transportation vehicles must be fitted with refrigerating systems which allow for the temperature to be maintain in compliance with this Federal Law.

...

10. Raw milk, heat-treated milk, raw cream must be kept in separately labelled containers until the beginning of the processing at a temperature of 4 deg. Celsius (+/- 2 deg) within its expiry limit.

**PERMITTED LEVELS OF CONTENT OF MICROORGANISMS  
IN PROCESSED DAIRY PRODUCTS  
WHEN BEING RELEASED FOR FURTHER CONSUMPTION / USE**

PRODUCT/CATEGORY OF PRODUCT	QMAFAnM(1), CFU (2) / cm <sup>3</sup> , not over	Mass of product (g/cm <sup>3</sup> ) in which is not allowed				Yeast (Y), Mould (M), CFU/cm <sup>3</sup> , not over
		BIG (4) (coliforms)	Pathogenous, Incl. salmonella	Staphylococci, incl. S. Aureus	Listers L. Mono-cytogenes	
1	2	3	4	5	6	7
1. Drinking milk, drinking cream, milk and cream drinks, buttermilk, their derived products, heat treated, incl. drinking milk in packaging for consumer use, incl. pasteurised	1 × 10 <sup>5</sup>	0.01	25	1	25	-
Sterilised, ultrapasteurised (UHT) with aseptic packaging	Requirements of industrial sterilisation: - After having been kept in a thermostat at a temperature of 37 deg. Celsius during 3-5 days, absence of visible defects and signs of spoiling (inflated packaging, change of external appearance), and taste and consistence have not changed - After being kept in a thermostat the following are permitted: - Change of titrate acidity not over 2 deg. Terner - QMAFAnM not over 10 CFU/cm <sup>3</sup>					
Ultrapasteurised (without aseptic packaging)	100	10.0	100	10.0	25	-
Baked	2.5 × 10 <sup>3</sup>	1.0	25	-	25	-
Aromatized, enriched with vitamins / macro or microelements/ lactulose/ prebiotics	In line with the requirements established for drinking milk under different heat-treatment processes					
In milk churns and tanks	2 × 10 <sup>5</sup>	0.01	25	0.1	25	-
Cream and cream-derived products, including:						
In packaging for consumption, incl. pasteurised	1 × 10 <sup>5</sup>	0.1	25	1	25	-
Sterilised	Requirements of industrial sterilisation: - After having been kept in a thermostat at a temperature of 37 deg. Celsius during 3-5 days, absence of visible defects and signs of spoiling (inflated packaging, change of external appearance), and taste and consistence have not changed - After being kept in a thermostat the following are permitted: - Change of titrate acidity not over 2 deg. Terner - QMAFAnM not over 10 CFU/cm <sup>3</sup>					
Enriched	1 × 10 <sup>5</sup>	0.01	25	1	25	-
Whipped	1 × 10 <sup>5</sup>	0.1	25	0.1	25	-
In churns and tanks	2 × 10 <sup>5</sup>	0.01	25	0.1	25	-
Drinks, dairy kissel cocktails, from buttermilk, jelly, sauces, creams, puddings, mousses, doughs, dairy soufflés, or from buttermilk, pasteurised	1 × 10 <sup>5</sup>	0.1	25	1	25	-
2. Cultured milk						

liquids, sour cream, sour cream-derived products, incl:						
With an expiry limit exceeding 72 hours						
Without ingredients	Lactic acid micro-organisms in excess of $10^7$	0.01	25	1	-	-
With ingredients	$1 \times 10^7$	0.01	25	1	-	-
With an expiry date of over 72 hours						
Without ingredients	Lactic acid micro-organisms in excess of $10^7$	0.1	25	1	-	Y-50 (4) M- 50
With ingredients		0.01	25	1	-	Y- 50 M- 50
Enriched with bifido bacteria, and other probiotic microorganisms, incl. yoghurt	Bifido bacteria and/or other probiotic organisms – in excess of $10^6$ In total	0.1	25	1	-	Y- 50 (4) M- 50
Sour cream, sour cream-derived products, incl. with ingredients	For sour cream lactic acid micro-organisms in excess of $10^7$	0.001 for sour cream, 0.1 for thermalised sour cream products	25	1	-	With an expiry limit of over 72 hours: Y – 100 M – 100
Thermically processed sour dairy products, incl.	–	1.0	25	1	25	Y- 50 M- 50
Without ingredients	–	1.0	25	1	25	Y-50 M-50
With ingredients	–	1.0	25	1	25	Y-50 M-50
3. Cottage cheese, curd, curd-derived products, incl. With an expiry limit of less than 72 hours, without ingredients	Lactic acid micro-organisms in excess of $10^6$	0.001	25	0.1	–	Y- 50 M-50
With ingredients	$1 \times 10^6$	0.001	25	0.1	–	Y-50 M-50
With an expiry limit of over 72 hours	–	0.01	25	0.1	–	Y-100 M- 50
Without ingredients	–	0.01	25	0.1	–	Y-100 M-50
With ingredients	–	0.01	25	0.1	–	Y-100 M-50
Frozen	–	0.01	25	–	–	Y-100 M-50
Heat-treated curd products, incl. with ingredients	–	0.1	25	1	–	50 in total
4. Albumine mass from dairy buttermilk , derived products, apart from products manufactured through a sour-making process	$2 \times 10^5$	0.1	25	0.1	–	Y-100 M-50
5. Milk, cream, buttermilk, dairy products, products derived from dairy, condensed milk products, tinned milk						

and dairy products, including:						
Condensed milk, condensed cream, sterilised, dairy products, products derived from dairy, condensed dairy products	Requirements of industrial sterilisation: - After having been kept in a thermostat at a temperature of 37 deg. Celsius during 3-5 days, absence of visible defects and signs of spoiling (inflated packaging, change of external appearance), and taste and consistence have not changed - After being kept in a thermostat the following are permitted: - Change of titrate acidity not over 2 deg. Turner - QMAFAnM not over 10 CFU/cm <sup>3</sup> - Additional requirement for baby food products: absence of fungi, yeast, lactic acid microorganism tested by inoculation					
Milk and cream, condensed with sugar in packaging for consumption, incl. : Without ingredients	2x 10 <sup>4</sup>	1.0	25	-	-	-
With ingredients	2x 10 <sup>4</sup>	1.0	25	-	-	-
Milk and cream, condensed with sugar, in packaging for transport	4x 10 <sup>4</sup>	1.0	25	-	-	-
Buttermilk, condensed without and with sugar	5x 10 <sup>4</sup>	1.0	25	-	-	-
Cocoa, natural coffee with condensed milk or cream with sugar	3.5x 10 <sup>4</sup>	1.0	25	-	-	-
Dairy products, products with dairy content, dry, vacuum-packed (milk, cream, cultured milk products, drinks, mixes for ice-cream, butter milk, low-fat milk), incl.	5x 10 <sup>4</sup>	0.1	25	1	-	-
Cow milk, dry, whole	5x 10 <sup>4</sup>	0.1	25	1	-	-
Low-fat dry milk, for direct consumption	5x 10 <sup>4</sup>	0.1	25	1	-	-
For industrial processing	1x 10 <sup>5</sup>	0.1	25	1	-	-
Dry dairy drinks	1x 10 <sup>5</sup>	0.01	25	1	-	M-50
Dry cream and dry cream with sugar	7x 10 <sup>4</sup>	0.1	25	1	-	-
Dry dairy buttermilk	1x 10 <sup>5</sup>	0.1	25	1	25	Y-50 M-100
Dry mix for ice-cream	5x 10 <sup>4</sup>	0.1	25	1	-	-
Cultured milk products, dry	1x 10 <sup>5</sup>	0.1	25	1	-	Y- 50 M-100
Buttermilk, whole milk substitute (dry)	5x 10 <sup>4</sup>	0.1	25	1	-	Y-50 M-100
7. Dairy proteins concentrates, casein, dairy sugar, caseinates, hydrolyzates of dairy proteins, dry, incl.						
Edible caseinates	5x 10 <sup>4</sup>	0.1	25	-	-	-
Concentratated serum protein	5x 10 <sup>4</sup>	1.0	25	1.0	-	-
Albumine and casein concentrates	2.5x 10 <sup>3</sup>	1.0	25	1	-	-
Dairy protein, casein	1x 10 <sup>4</sup> Sulfite-reducing	1.0	50	1	-	Y-10 M-50

	clostridia not allowed in 0.01 g.					
Dairy refined sugar	$1 \times 10^3$	1.0	25	1	–	Y-50 M-100
Edible dairy sugar (lactose)	$1 \times 10^4$	1.0	25	1	–	Y-50 M-100
Concentrate of lactulose	$1 \times 10^3$	1.0	50	1	–	Y-50 M-100
8. Cheese, cheese products (hard-pressed, with a hard surface, half-hard, soft) soft processed, serum-albumine, dry, cheese pasta/dough/sauces, incl.						
Without ingredients	-	0.001	25	0.001	25	-
With ingredients	-	0.001	25	0.001	25	-
Soft processed cheeses:						
Without ingredients	$5 \times 10^3$	0.1	25	–	–	Y-50 M-50
With ingredients	$1 \times 10^4$	0.1	25	–	–	Y-100 M-100
Products derived from processed cheese	$1 \times 10^4$	0.1	25	–	–	Y-100 M-100
Cheese sauces and dough/pasta	$1 \times 10^4$	0.1	25	–	–	–
Cheese, cheese products, dry	$5 \times 10^4$	1.0	25	–	–	–
Cheese, cheese products, serum-albumine cheese, smoked cheese	$1 \times 10^4$	0.1	25	–	–	
9. Butter, fat spread made from cow milk, dairy fat, incl.	Not the norm in sour butter					
Butter made from cow milk (salted, unsalted, sour, sweet)						
Without ingredients	$1 \times 10^5$	0.01	25	0.1	25	100 in total
With ingredients	$1 \times 10^5$	0.01	25	0.1	25	Y-100 M-100
Branded, incl. Vologda butter (brand name of a full-cream butter)	$1 \times 10^4$	0.1	25	–	25	M-50
Sterilised	<b>Requirements of industrial sterilisation:</b> - After having been kept in a thermostat at a temperature of 37 deg. Celsius during 3-5 days, absence of visible defects and signs of spoiling (inflated packaging, change of external appearance), and taste and consistence have not changed - After being kept in a thermostat the following are permitted: a. acidity of the fat matter should not exceed 0.5 Kettstofer degree. b. titreable acidity should not exceed 2 Turner degree. c. QMAFANM should not exceed 100 CFU/cm <sup>3</sup> (g)					
Baked butter	$1 \times 10^3$	1.0	25			M-200
Dry butter	$1 \times 10^5$	0.01	25	0.1	25	100 in total
Dairy fat	$1 \times 10^3$	1.0	25			M-200

Fat dairy spread, incl. Without ingredients	$2 \times 10^5$	0.01	25	0.1	25	Y-100 M-100
With ingredients	$2 \times 10^5$	0.001	25	0.1	25	Y-100 M-100
10. Spreads, baked mixes	$1 \times 10^5$	0.01	25	0.1	25	Y-100 M-100
11. Dairy ice-creams, made from cream, full ice-cream, with vegetable fat, cakes, biscuits, desserts made from ice-cream, mixes, ice cream icing:						
Hard, incl. with ingredients	$1 \times 10^5$	0.01	25	1	25	–
Soft, incl. with ingredients	$1 \times 10^5$	0.1	25	1	25	–
Liquid mixes for soft ice-creams	$3 \times 10^4$	0.1	25	1	25	–
12. Ferments (fermented and probiotic microorganisms for the preparation of cultured milk products, sour butter and cheeses), incl.						
Ferments for kefir, symbiotic (liquid)	$1 \times 10^8$	3.0	100	10	-	M-5
Ferments from clean cultures (incl. liquid)	$1 \times 10^8$ For condensed ferments not less than $10^{10}$ $1 \times 10^{10}$	10.0	100	10	-	5 in total
Frozen, dry	$1 \times 10^9$ For condensed ferments not less than $10^{10}$ $1 \times 10^{10}$	1.0	10	1	–	5 in total
13. Fermented preparates, incl.						
Dairy coagulants of animal origin	$1 \times 10^4$	1.0 E.Coli in 25	25 Sulfite-reducing clostridia in 0.01 g.	–	–	–
Of vegetable origin	$5 \times 10^4$	1.0	25	–	–	–
Of bacterial origin	$5 \times 10^4$ Should not contain living forms of ferment producers	1.0	25	–	–	–
14. Breeding cultures for their breeding of ferment and microbiological microflora, dry on a dairy basis	$5 \times 10^4$	0.01	25 Sulfite-reducing clostridia in 0.01 g.	–	–	–

15. Products containing dairy	Requirements established taking into account the content and relation to other dairy and non-dairy products
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(1) – QMAFAnM = Quantity of Mesophilic Aerobic and Facultative Anaerobic Microorganisms

(2) – CFU= Colony Forming Units

(3) – BIG= Bacteria of the intestinal group

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(4) – Presence of yeast towards the end of the expiry limit should be over  $1 \times 10^4$  for ayran and kefir, over  $1 \times 10^5$  for kumiss (fermented mare's milk); the presence of yeast is tolerated in fermented product that are derived from these.

**Remarks:**

1. Hygienic norms for microbiological indicators of safety and food quality of products include the following microorganisms:

a. Sanitary indicators, including QMAFAnM (= Quantity of Mesophilic Aerobic and Facultative Anaerobic Microorganisms), bacteria of the intestinal group (coliforms), bacteria of the Enterobacteriaceae, enterococci

b. Conditionally pathogenic microorganisms, including E. coli, Staphylococcus aureus, Proteus bacteria, B. cereus, sulphite-reducing clostridia, Vibrio parahaemolyticus

c. Pathogenic microorganisms, including salmonella and Listeria monocytogenes, Yersinia bacteria

d. Microorganisms linked with degradation – yeast, mould & fungi, lactic acid microorganism

e. Microorganisms of fermented microflora and probiotic microorganisms (lactic acid microorganisms, propionic microorganisms, yeast, bifidobacteria, acidophile bacteria and others) in products with a regulated level of biotechnical microflora and in probiotic products.

2. Microbiological indicators of food safety are generally regulated by an alternative principle: the mass of the product in which bacteria of the intestinal group, the majority of conditionally pathogenic microorganisms, and pathogenic microorganisms (incl. salmonella and Listeria monocytogenes) are not permitted, is normalised. In other cases the norm is a reflection of the quantity of colony-forming units in 1g (ml) of products (CFU/g, ml)

3. Upon production of cheeses with a short maturation period, the absence of enterotoxins of Staphylococcus aureus should be checked.