SCHEDULE 6

REGULATIONS 3(3), 9(6) and 13(1)(b)(vi)

REQUIREMENTS FOR MILK-BASED PRODUCTS

PART I

MICROBIOLOGICAL CRITERIA

1. On removal from the processing establishment milk-based products shall not contain pathogenic micro-organisms and toxins from pathogenic micro-organisms in such quantity as to affect the health of the ultimate consumer.

2. Sterilised or ultra heat-treated milk-based products which are in liquid or gel form and are intended for conservation at room temperature shall meet the following standards after incubation at 30°C for 15 days—
   (a) have a plate count at 30°C ≤ 100 per ml; and
   (b) be organoleptically normal.

3. Subject to paragraph 5 below, milk-based products shall meet the standards referred to in the tables below upon removal from the processing establishment—

A.

<table>
<thead>
<tr>
<th>Product</th>
<th>Type of Microorganism</th>
<th>Standard (ml, g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Cheese, other than hard cheese</td>
<td>Listeria monocytogenes</td>
<td>Absence in 25g where n = 5, c = 0</td>
</tr>
<tr>
<td>(ii) Milk-based products, other than cheese covered by (i) above</td>
<td>Listeria monocytogenes</td>
<td>Absence in 1g</td>
</tr>
<tr>
<td>(iii) Milk powder</td>
<td>Salmonella spp</td>
<td>Absence in 25g where n = 10, c = 0</td>
</tr>
<tr>
<td>(iv) Milk-based products, other than milk powder</td>
<td>Salmonella spp</td>
<td>Absence in 25g where n = 5, c = 0</td>
</tr>
</tbody>
</table>

The sample of 25g referred to in paragraph (i) of table A above shall consist of 5 specimens of 5g taken from different parts of the same product.

B.

<table>
<thead>
<tr>
<th>Product</th>
<th>Type of Microorganism</th>
<th>Standard (ml, g)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(i) Cheese made from raw milk or from thermised milk</td>
<td>Staphylococcus aureus, Escherichia coli</td>
<td>n = 5, c = 2, m = 1,000, M = 10,000, n = 5, c = 2, m = 10,000, M = 100,000</td>
</tr>
</tbody>
</table>
### TABLE 1: MEASUREMENT OF HUMAN PATHOGENIC MICRO-ORGANISMS IN MILK-BASED PRODUCTS

<table>
<thead>
<tr>
<th>Product</th>
<th>Type of Micro-organism</th>
<th>Standard (ml, g)</th>
</tr>
</thead>
</table>
| (ii) Soft cheese made from heat-treated milk | *Staphylococcus aureus* | \( n = 5, c = 2, M = 100, M = 1,000 \)  
*Escherichia coli* | |
| (iii) Fresh cheese | *Staphylococcus aureus* | \( n = 5, c = 2, m = 10, M = 100 \)  
Powdered milk | " | |
| Frozen milk-based products including ice-cream | " | |

4. The definition of the symbols specified in paragraph 3 of Part II of Schedule 3 shall apply for the purposes of the tables in paragraph 3 above.

5. Testing of the milk-based products referred to in table A of paragraph 3 above shall not be compulsory for sterilised milk, preserved milk-based products and milk-based products where the heat-treatment was applied after wrapping or packaging.

6. Sampling programmes shall be drawn up by the occupier of the dairy establishment in the light of the nature of the dairy products and the principles of risk analysis.

7. In all cases where the standards in table A of paragraph 3 above are exceeded, the dairy products shall be excluded from human consumption and withdrawn from the market.

8. In all cases where the standards in table B of paragraph 3 above are exceeded, there shall be a review of the implementation of the methods for monitoring and checking critical points applied in the processing establishment. The occupier of the processing establishment shall inform the approving authority of the corrective procedures included in the production monitoring system to prevent any repetition of the occurrence.

9. Wherever the standard M in table B of paragraph 3 above is exceeded in the case of cheese made from raw milk, thermised milk or soft cheese, testing shall be carried out for—

   (a) the possible presence of strains of enterotoxigenic *Staphylococcus aureus* or *Escherichia coli* that are presumed to be pathogenic; and

   (b) if necessary the possible presence of staphylococcal toxins in such products,


10. If the strains referred to in paragraph 9 above are identified or staphylococccus enterotoxins are found, then all the batches of the cheese involved shall be withdrawn from the market. In this case the occupier shall inform the approving authority of such findings, of the action taken to withdraw the batches in question and the corrective procedures introduced into the production monitoring system to prevent any repetition of the occurrence.

### PART II

#### PASTEURISED CREAM

1. Pasteurised cream shall be heated—

   (a) to a temperature not less than 63°C and retained at that temperature for not less than 30 minutes;
(b) to a temperature not less than 72°C and retained at that temperature for not less than 15 seconds; or
(c) to such other temperature for such other period of time as has equivalent effect to sub-paragraph (a) or (b) above necessary for the elimination of vegetative pathogenic organisms in the cream.

2. The cream shall—
   (a) be cooled as soon as practicable after pasteurisation; and
   (b) show a negative reaction to the phosphatase test, using the method of analysis specified in paragraph 5 of Schedule 11.

PART III

STERILISED CREAM

1. Sterilised cream shall be heated—
   (a) to a temperature not less than 108°C and retained at that temperature for not less than 45 minutes; or
   (b) to such other temperature for such other period of time as has equivalent effect to sub-paragraph (a) above necessary for the elimination of vegetative pathogenic organisms.

2. The cream shall be cooled as soon as practicable after sterilisation.

3. Sterilised cream shall meet the standard referred to in paragraph 2(a) of Part I of this Schedule.

PART IV

ULTRA HEAT-TREATED CREAM

1. Ultra heat-treated cream shall be heated—
   (a) to a temperature not less than 140°C and retained at that temperature for at least 2 seconds; or
   (b) to such other temperature for such other period of time as has equivalent effect to sub-paragraph (a) above necessary for the elimination of vegetative pathogenic organisms.

2. The cream shall be cooled as soon as practicable after being ultra heat-treated.

3. Ultra heat-treated cream shall meet the standard referred to in paragraph 2(a) of Part I of this Schedule.

PART V

PASTEURISED ICE-CREAM

1. Pasteurised ice-cream shall be obtained by the mixture being heated—
   (a) to a temperature of not less than 65.6°C and retained at that temperature for not less than 30 minutes;
   (b) to a temperature of not less than 71.1°C and retained at that temperature for not less than 10 minutes; or
(c) to a temperature of not less than 79.4°C and retained at that temperature for not less than 15 seconds,
and then reduced to a temperature of not more than 7.2°C within 1 ½ hours and kept at such temperature until the freezing process is begun.

2. If the temperature of ice-cream has risen above minus 2.2°C at any time since it was frozen it shall not be sold or offered for sale unless—
   (a) it has again been subjected to the heat-treatment to which as a mixture it was required to be subjected under paragraph 1 above; and
   (b) after having again been frozen, it has been kept at a temperature not exceeding minus 2.2°C.

3. In the case of a complete cold mix which is reconstituted with the addition of water only, it shall not be necessary for it to be subjected to further heat-treatment by pasteurisation as specified in paragraph 1 above.

4. If a complete cold mix reconstituted with the addition of water only is frozen, it shall comply with paragraph 2 above.

**PART VI**

**STERILISED ICE-CREAM**

1. Sterilised ice-cream shall be obtained by the mixture being heated to a temperature of not less than 148°C for a least 2 seconds

2. After the mixture has been sterilised as specified in paragraph 1 above, it shall be reduced to a temperature of not more than 7.2°C within 1½ hours and shall be kept at such temperature until the freezing process is begun.

3. Paragraph 2 shall not apply to a mixture which has been sterilised in accordance with paragraph 1 above if immediately after the mixture has been sterilised it is placed in sterile airtight containers under sterile conditions and the container remains unopened.

4. If the temperature of ice-cream has risen above minus 2.2°C at any time since it was frozen it shall not be sold or offered for sale unless—
   (a) it has again been subjected to the heat-treatment to which as a mixture it was required to be subjected under paragraph 1 above; and
   (b) after having again been frozen, it has been kept at a temperature not exceeding minus 2.2°C.

5. In the case of a complete cold mix which is reconstituted with the addition of water only, it shall not be necessary for it to be subjected to further heat-treatment by sterilisation as specified in paragraph 1 above.

6. If a complete cold mix reconstituted with the addition of water only is frozen, it shall comply with paragraph 4 above.