EXPLANATORY NOTE

(This Note is not part of the Regulations, but is intended to indicate their general purport.)

These regulations re-enact with amendments the Milk and Dairies Regulations 1926 to 1943. The principal changes are consequent upon the provisions of the Food and Drugs (Milk and Dairies) Act, 1944, and of the Agriculture (Miscellaneous Provisions) Act, 1949. The Minister of Agriculture and Fisheries thus becomes responsible for the registration of dairy farms and of persons carrying on or proposing to carry on the trade of dairy farmer. If that Minister proposes to refuse or cancel a registration, there is provision for the reference of objections to a tribunal, and for the making of representations to that Minister. The constitution and procedure of the tribunal are laid down and the Minister of Agriculture and Fisheries is required to consider their report before he refuses or cancels the registration.

The execution and enforcement of the regulations on dairy farms (except in so far as they relate to diseases communicable to man) becomes the responsibility of the Minister of Agriculture and Fisheries, while the local authorities retain responsibility for those provisions which apply outside dairy farms, for the provisions relating to diseases communicable to man and for the registration of dairies which are not dairy farms and of dairymen who are not dairy farmers.

A Central Committee, and County Committees are set up for the purpose of reviewing and making recommendations with respect to the operation and administration of these regulations and of Milk (Special Designation) Regulations.

The regulations also include new provisions for the inspection of cattle on dairy farms by veterinary inspectors of the Ministry of Agriculture and Fisheries.

There are a number of minor changes in the regulations relating to buildings, the cleansing of vessels and utensils, and the distribution of milk and its protection against contamination and infection with disease and, in particular, provision is made for modern practices in dairying including the use of mechanical refrigeration for cooling and the use of approved chemical agents for the cleansing of appliances.

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(3) PASTEURISED AND STERILISED MILK

The Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949

1949 No. 1589

Made - - - -	*25th August*, 1949
Laid before Parliament	*25th August*, 1949
Coming into Operation	*1st October*, 1949

The Minister of Health and the Minister of Food acting jointly in exercise of the powers conferred on them by sections 21 and 92 of the Food and Drugs Act, 1938(a), as amended by the Food and Drugs (Milk and Dairies)

(a) 1 & 2 Geo. 6. c. 56.

Act, 1944(a), by the Transfer of Functions (Food and Drugs) Order, 1948(b), and by the Milk (Special Designations) Act, 1949(c), and of all other powers enabling them in that behalf hereby make the following regulations:—

PART I

Short Title, Commencement, Interpretation and Revocation of Regulations

1. These regulations may be cited as the Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949, and shall come into operation on the first day of October, 1949.

2.—(1) In these regulations, unless the context otherwise requires—

" the Minister " means the Minister of Food ;

" consumer " means any person to whom milk is supplied and who neither sells it nor uses it in the manufacture of milk products for sale ;

" licence " means a licence under these regulations ;

" licence held by a retailer for a specified area " means a licence authorising the use of a special designation held by a person carrying on a business which includes any sales which are sales for the purpose of which the use of a special designation is obligatory by virtue of the Milk (Special Designations) Act, 1949, and are of milk in relation to which that licence authorises the use of a special designation ;

" licensed dealer " means any person who sells, either by wholesale or by retail, milk in relation to which he is authorised by a licence granted under these regulations to use a special designation ; and " dealer's licence " shall be construed accordingly ;

" licensing authority " means in relation to any application for the grant of a licence, the authority which has power under these regulations to grant the licence, and in relation to any licence which has already been granted means the authority which would for the time being have power by virtue of these regulations to grant a licence by way of renewal thereof if it had expired ; and " licensing area " means the area of such licensing authority ;

" milk " means cow's milk, but does not include cream, or separated, skimmed, dried, condensed or evaporated milk, or buttermilk ;

" raw milk " means milk which has not been treated by heat ;

" sample " means a sample taken by a person duly authorised in that behalf by the licensing authority or the Minister ;

" sell " includes offer or agree to sell or expose for sale, and " sale " shall be construed accordingly ;

" selling " means selling in the course of a business, and includes in relation to milk, supplying it under arrangements for free supply or in the course of any business otherwise than under such arrangements, and references to sales and contracts for sale shall be construed accordingly ;

(a) 7 & 8 Geo. 6. c. 29. (b) S.I. 1948 (No. 107) I, p. 1966.
(c) 12, 13 & 14 Geo. 6. c. 34.

" selling milk be retail " means selling it—

(*a*) to any person other than a milk dealer (that is to say, a person who carries on a business which consists in or comprises the selling of milk) or a manufacturer of milk products (that is to say, a person who carries on a business which consists in or comprises the making of things made from milk or of which milk is an ingredient); or

(*b*) to such a dealer or manufacturer otherwise than for the purposes of his business as such;

" selling milk by wholesale " means selling milk otherwise than by retail;

" specified area " means an area in which sub-section (1) of section 1 of the Milk (Special Designations) Act, 1949, is in operation;

" supplementary licence " means a licence authorising the use of a special designation in relation to milk sold by retail in a licensing area other than that in which the premises from which it is sold are situated.

(2) The Interpretation Act, 1889(a), applies to the interpretation of these regulations as it applies to the interpretation of an Act of Parliament.

(3) The Milk (Special Designations) Regulations, 1936 to 1948(b), save in so far as they relate to raw milk, are hereby revoked.

PART II

Use of special designations and granting of licences

3.—(1) The special designations which may be used in accordance with these regulations in relation to milk are " Pasteurised " and " Sterilised ".

(2) Where milk in relation to which the special designation " Pasteurised " or " Sterilised " may be used was, immediately before pasteurisation or sterilisation, as the case may be, milk in relation to which the use of the special designation " Tuberculin Tested " was authorised under the Milk (Special Designation) (Raw Milk) Regulations, 1949, any person holding licences under the last mentioned regulations and under these regulations authorising him to use the special designations (*a*) " Tuberculin Tested " and " Pasteurised ", or (*b*) " Tuberculin Tested " and " Sterilised ", may use in relation to the said milk in case (*a*) above the special designation " Pasteurised " enclosed in brackets and immediately preceded by the words " Tuberculin Tested Milk ", and in case (*b*) above the special designation " Sterilised " enclosed in brackets and immediately preceded by the words " Tuberculin Tested Milk ". In each case the said wording shall be printed in block letters of an even size.

4.—(1) All licences authorising the use of a special designation in accordance with these regulations in relation to milk pasteurised or sterilised on the premises of the applicant shall be granted by Food and Drugs authorities

(a) 52 & 53 Vict. c. 63.
(b) S.R. & O. 1936 (No. 356) I, p. 1819; 1938 (No. 218) II, p. 2163; P.R. & O. dated 9th July, 1941; S.R. & O. 1942 (No. 771) I, p. 568; 1943 (No. 1645) I, p. 287; 1946 (No. 10) I, p. 1001; and S.I. 1948 (No. 1117) I, p. 1224.

within the meaning of section 64 of the Food and Drugs Act, 1938, and all other licences under these regulations shall be granted by local authorities within the meaning of that section:

Provided that any licence granted to a county council or to a local authority shall be granted by the Minister.

(2) A licence (other than a licence granted by the Minister) shall authorise the use of a special designation only in relation to milk sold at or from the premises mentioned in the licence and (except in the case of milk sold by wholesale) only within the licensing area of the licensing authority.

(3) Where the holder of a licence authorising him to use a special designation in relation to milk sold by him at or from premises in one licensing area proposes to sell the milk by retail in another licensing area the licensing authority of the second licensing area may grant him a supplementary licence authorising him during the period of operation of the first mentioned licence to use the special designation in relation to milk so sold in their licensing area, but in that event nothing in these regulations shall authorise that authority either before the grant or during the period of operation of the supplementary licence to exercise any powers under these regulations outside their licensing area.

5.—(1) Every licence granted under these regulations shall be in the appropriate form contained in the Fifth Schedule hereto with such modifications, if any, as the circumstances may require.

(2) Subject to the provisions of these regulations, every licence shall continue in force until the 31st day of December in the year in respect of which it is granted.

6.—(1) Application for a licence shall be made in writing to the licensing authority.

(2) Every person who applies for a licence (otherwise than in renewal of an existing licence) to use a special designation in relation to milk pasteurised or sterilised at premises other than those at or from which the milk is to be sold by him shall state the name and address of the licensed dealer from whom he proposes to obtain the milk.

7. The licensing authority may refuse to grant a licence if they are not satisfied that the applicant's arrangements and processes for the handling, treatment, storage and distribution of milk, as the case may be, are such as to comply with all relevant provisions contained in any Milk and Dairies Regulations and Milk (Special Designation) Regulations, including these regulations.

8.—(1) Every licence granted under these regulations shall be subject to the general conditions set out in the First Schedule to these regulations.

(2) In addition to the general conditions every licence authorising the use of the special designation "Pasteurised" shall be subject to the conditions set out in Part I of the Second Schedule to these regulations and every licence authorising the use of the special designation "Sterilised" shall be subject to the conditions set out in Part II of the said Schedule.

PART III

Refusal, suspension and revocation of licences, and appeals arising therefrom

9.—(1) The licensing authority shall not revoke a licence being a licence to which section 8 of the Milk (Special Designations) Act, 1949, applies (that is to say a licence held by a retailer for a specified area) or refuse a grant of a licence by way of renewal of any such licence on the ground of breach of a condition thereof unless—

(*a*) the breach in question is of a condition to which section 8 as aforesaid applies;

(*b*) the holder of the licence has been convicted of an offence under that section by virtue of the breach in question, or has been convicted within twelve months before the time of the breach in question or after the time of it, of an offence under section 1, 2 or 4 of the aforesaid Act, of an offence under section 21 of the Food and Drugs Act, 1938, or of an offence under Milk and Dairies Regulations for which a penalty is thereby imposed; and

(*c*) the decision of the licensing authority to revoke or to refuse renewal, as the case may be, is made within twelve months from the date of the breach in question.

(2) The licensing authority shall not suspend a licence being a licence held by a retailer for a specified area on the ground of breach of a condition thereof, by virtue of any one decision by the licensing authority, for a period of more than 3 months, but the period of suspension awarded by any such decision may be extended by a subsequent such decision made in accordance with the provisions of the next succeeding regulation.

10.—(1) Subject, as respects suspension or revocation of a licence which is a licence held by a retailer for a specified area, to the provisions of the preceding regulation, the licensing authority may suspend or revoke a licence on the ground of any breach of condition thereof being a breach by virtue of which the holder has been convicted of an offence under section 8 of the Milk (Special Designations) Act, 1949, or which, not being such a breach as aforesaid, is proved (in a case referred to a tribunal by virtue of the subsequent provisions of these regulations) by the finding of the tribunal, or (in any other case) to the satisfaction of the licensing authority.

(2) The following provisions shall apply where a licensing authority, other than the Minister, propose to suspend or revoke a licence or to refuse to grant a licence:—

(*a*) The authority shall serve on the person affected a notice informing him of their proposal and the reasons therefor, and of his right under the next succeeding sub-paragraph.

(*b*) The person affected may within 14 days after the receipt of such a notice require the authority to afford him an opportunity of being heard by the appropriate committee of the authority and the authority shall comply with any such requirement before making their decision.

(*c*) Any such hearing by a committee shall be in public and the person affected shall be entitled to be heard by himself or by counsel or a solicitor or other representative as he may elect, and he or his representative shall be entitled to call witnesses and to cross-examine witnesses called by another.

(*d*) Where the decision of the authority is adverse to the person affected that person may within 14 days after being notified of that decision appeal to the Minister and the authority shall give notice of such right together with notice of their decision.

(*e*) A decision of the licensing authority to suspend or revoke a licence shall not have effect until 14 days after the receipt by the person affected of notice thereof and in the event of an appeal against the decision until the end of the year in respect of which the licence was granted or until the determination of the appeal whichever is the earlier.

(*f*) The Minister on any such appeal, before making his decision, shall, by notice, afford to the person affected an opportunity of making representations within a period of 14 days, and where the issue is as to revocation or suspension of a licence held by a retailer for a specified area or refusal of a grant of a licence by way of renewal of such a licence and the person affected so requests, the Minister shall refer the matter to a tribunal in accordance with the provisions of the Fourth Schedule to these regulations and shall consider the report of that tribunal before making his decision.

(*g*) In any such appeal any reference in these regulations to anything being done to the satisfaction of the licensing authority shall be treated as if the reference were to the satisfaction of the Minister who in determining any such appeal may, if he thinks fit, take into consideration any change of circumstances brought about since the date of the licensing authority's decision.

(*h*) The decision of the Minister on any such appeal shall be final and the licensing authority shall comply therewith.

(3) Where the Minister acting as a licensing authority proposes to revoke or suspend a licence or to refuse to grant a licence he shall serve on the council affected a notice informing them of his proposal and the reasons therefor and shall by notice afford such council an opportunity of making representations within a period of 14 days, and where the issue is as to revocation or suspension of a licence held by a retailer for a specified area or refusal of a grant of a licence by way of renewal of such a licence and the council affected so requests, the Minister shall refer the matter to a tribunal in accordance with the provisions of the Fourth Schedule to these regulations and shall consider the report of that tribunal before making his decision.

(4) Where before the end of the period for which a licence was granted the holder of the licence applies for a grant of a licence in renewal thereof and his application is not finally determined before the end of the said period, the existing licence shall, subject to any suspension under these regulations, remain in force until his application is so determined, and where the application is refused by the licensing authority—

(*a*) during the currency of a period when representations may be made against the licensing authority's proposed decision to suspend or revoke the existing licence ;

(*b*) during the currency of an appeal to the Minister against a decision by a licensing authority, other than the Minister, to suspend or revoke the existing licence ;

(*c*) in the case of a retailer for a specified area, after he has requested a reference to a tribunal and before the consideration of that reference by the tribunal ;

such representations, appeal or reference, as the case may be, shall be deemed to include representations, an appeal or reference in respect of such refusal.

11. Where under these regulations any issue is referred to a tribunal the constitution and procedure of the tribunal shall conform with the provisions of the Fourth Schedule to these regulations.

PART IV

Miscellaneous Provisions

12. Where milk is brought from Scotland into England or Wales a licence granted in pursuance of an Order made by the Secretary of State for Scotland and authorising the use of a special designation corresponding to a special designation prescribed by these regulations in relation to that milk shall have effect as if it had been granted under these regulations, and so far as any conditions prescribed in these regulations for a licence authorising the use of that designation would relate to anything to be done before the milk enters England and Wales, they shall be deemed to be satisfied if the corresponding conditions of the Scottish Order are complied with.

13. Notwithstanding anything in these regulations and without prejudice to section 38 of the Interpretation Act, 1889, any licence authorising the use of the special designation "Pasteurised" granted under the Milk (Special Designations) Regulations, 1936 to 1948, and in force immediately before the commencement of these regulations, shall continue in force and have effect as if it were a licence granted by the appropriate licensing authority under and subject to the provisions of these regulations for the period ending on the 31st December, 1949.

14. Any decisions, proceedings in connection with appeals, and other things made, taken or done in relation to a licence before the date of coming into operation of these regulations, or pending at that date, shall continue and have effect as if they had been made, taken or done for the purposes of these regulations.

15. The provisions of section 8 of the Milk (Special Designations) Act, 1949, (which relate to breaches of certain conditions* of licences held by retailers for specified areas) shall, so far as they relate to licences under these regulations, other than licences authorising the use of a special designation by a local authority, be enforced by the licensing authority.

16. Every licensing authority shall give such assistance and information to any other licensing authority as that other licensing authority may reasonably require for the purpose of carrying out their duties under these regulations.

FIRST SCHEDULE

General conditions subject to which licences are granted

1. The holder of the licence shall so maintain and operate his arrangements and processes for the handling, treatment, storage and distribution of milk as to comply with all relevant provisions contained in any Milk and Dairies Regulations and Milk (Special Designation) Regulations, including these regulations.

2. The holder of the licence shall take such measures as are adequate to ensure that the milk to which the licence applies is kept apart from all other milk at all times except when it is in separate sealed containers. In particular,

* *Note.*—The conditions to which section 8 applies are conditions as to any such matters as are specified in the Schedule to the Milk (Special Designations) Act, 1949.

he shall ensure that any vessel or apparatus which has been used for any other milk whether raw milk or not shall be cleansed in accordance with the provisions of the Milk and Dairies Regulations, 1949, on each occasion before it is used for the milk to which the licence applies: provided that such cleansing may be dispensed with in any case where, having regard to the special designation next to be used, the licensing authority so permits.

3. Subject to the provisions of these regulations the holder of the licence shall not for the purpose of the sale or advertisement of the milk to which the licence applies refer to it by any such description (other than the special designation authorised by the licence) as is likely to suggest that it is tested, approved or graded by any competent person.

4. The holder of the licence shall—

(*a*) keep accurate records of the quantities of the milk purchased and sold and of the names and addresses of the persons from whom the milk was purchased and to whom it was sold otherwise than by retail;

(*b*) retain such records for a period of twelve months from the date of the transaction to which the record relates;

(*c*) permit any person duly authorised by the licensing authority—

(i) to inspect his arrangements and processes for the handling, treatment, storage and distribution of the milk at any place at which the milk is under the control of the holder of the licence;

(ii) to take samples of the milk free of charge at any such place, and

(iii) to inspect any records which the holder is required to keep by the conditions subject to which the licence was granted.

SECOND SCHEDULE

PART I.—PASTEURISED

The following conditions apply to milk in relation to which the special designation "Pasteurised" is used:—

1. The milk shall be pasteurised, that is to say,

(*a*) retained at a temperature of not less than 145° F. and not more than 150° F. for at least thirty minutes and be immediately cooled to a temperature of not more than 50° F.; or

(*b*) retained at a temperature of not less than 161° F. for at least fifteen seconds and be immediately cooled to a temperature of not more than 50° F.; or

(*c*) retained at such temperature for such period as may be specified by the licensing authority with the approval of the Minister.

2. The whole of the apparatus in which the milk is pasteurised, including the cooler, shall be so constructed as to secure the protection of the milk from risk of atmospheric contamination by dust or otherwise.

3. As from such date as the Minister shall appoint, the temperature of the milk or of the medium by which the milk is to be maintained at any temperature shall be automatically controlled.

4. Any apparatus in which the milk is to be heated to and maintained at a temperature of more than 150° F. shall be provided with a device which shall automatically divert the flow of any milk which is not raised to the authorised temperature.

5.—(1) Such indicating and recording thermometers as the licensing authority shall consider necessary shall be installed in suitable places in the apparatus in which the milk is pasteurised so as to indicate the temperatures at which the milk is retained and to which the milk is cooled.

(2) The records of recording thermometers shall be dated and shall be preserved for a period of not less than one month.

6.—(1) A sample of the milk taken in accordance with Part I of the Third Schedule after pasteurisation and before delivery to the consumer shall satisfy the phosphatase test prescribed in Part II of that Schedule.

(2) A sample of the milk taken in accordance with Part I of the Third Schedule after pasteurisation and on the day of but before delivery to the consumer shall, if it is kept in an insulated container without artificial cooling until it reaches the laboratory, satisfy the methylene blue test prescribed in Part III of that Schedule.

7.—(1) As from the 1st October, 1950, until 1st October, 1954, milk which is pasteurised in bottles shall be delivered to the consumer in those bottles, and milk which is pasteurised in containers other than bottles shall be put into the containers in which it is to be delivered to the consumer only (i) by a person holding a licence under these regulations to use the special designation "Pasteurised" in relation to that milk and (ii) on the premises named in that person's licence.

(2) As from 1st October, 1954, milk which is pasteurised in bottles shall be delivered to the consumer in those bottles, and milk which is pasteurised in containers other than bottles shall be put into the containers in which it is to be delivered to the consumer at the premises at which it is pasteurised, and as soon as possible after pasteurisation.

(3) As from such date as the Minister shall appoint every container in which the milk is transported, exposed or offered for sale shall be tightly closed and securely fastened with a cap or cover overlapping the lip of the container or in some other suitable manner approved by the licensing authority. Where churns are used they shall also be suitably sealed.

(4) Every container in which the milk is transported, exposed or offered for sale shall be conspicuously and legibly labelled or marked with the words "Pasteurised Milk" or "Tuberculin Tested Milk (Pasteurised)" as the case may be.

PART II.—STERILISED

The following conditions apply to milk in relation to which the special designation "Sterilised" is used:—

1. The milk shall be filtered or clarified, homogenised and heated to and maintained at such a temperature, not less than 212° F., for such a period as to ensure that it will comply with the turbidity test prescribed in Part IV of the Third Schedule.

2. The milk shall be treated as aforesaid in bottles in such a manner that on completion of the treatment the bottles shall be sealed with an airtight seal.

3. Such thermometers and pressure gauges as the licensing authority shall consider necessary shall be installed in suitable places in the apparatus so as to indicate the temperature or pressure to which the milk is raised or subjected, as the case may be.

4. A sample of the milk taken in accordance with Part I of the Third Schedule after treatment and before delivery to the consumer shall satisfy the turbidity test prescribed in Part IV of that Schedule.

5. Every bottle in which the milk is transported, exposed or offered for sale shall be conspicuously and legibly labelled or marked with the words "Sterilised Milk" or "Tuberculin Tested Milk (Sterilised)" as the case may be.

THIRD SCHEDULE

PART I.—PROVISIONS AS TO SAMPLING

Taking of samples

1. Samples shall be taken at any time—

(*a*) when the milk (whether the special designation is used in relation to that milk or not) is in the possession of the pasteuriser or steriliser, as the case may be;

(*b*) when the milk is in the possession of the licensed dealer and the special designation is being used in relation to that milk by him.

2. When the milk is in containers not exceeding one quart in capacity the sample shall consist of one such container which shall be delivered intact to the testing laboratory.

3. When the milk is in containers exceeding one quart in capacity it shall be thoroughly stirred before sampling. The sample shall be taken from well below the surface of the milk. The instruments used for stirring and sampling shall be sterile.

4. The sample shall be poured into a sterile bottle which shall thereupon be immediately stoppered. The part of the stopper which may come into contact with the milk shall be sterile.

Transport of samples

5. Save where the testing laboratory is situated on the premises where the sample is taken, the bottle or other container containing the sample shall be transferred forthwith to an insulated container, which shall not be artificially cooled, for transport to the testing laboratory.

6. Samples shall be transported to the testing laboratory with the least possible delay and shall be delivered there on the day on which they are taken. If the sample does not arrive on the same day it shall be discarded.

Identification of samples

7. For the purpose of the identification of the sample in the laboratory the person taking the sample shall mark it with a number or other suitable identification mark and shall at the time of sampling enter in a book or on a paper, which shall accompany the sample, the following particulars:—

(*a*) the identification number or mark;

(*b*) the name and address of the holder of the licence by whom the milk was consigned, or by whom it was being delivered, or on whose premises the sample was taken.

PART II.—THE PHOSPHATASE TEST FOR PASTEURISED MILK

1. Samples of the milk shall be examined as soon as possible after arrival at the laboratory. If they are not examined immediately on arrival at the laboratory they shall be kept at a temperature of between 32° F. and 40° F. until examined. All samples shall be raised to room temperature immediately before being tested.

Precautions

2. The following precautions shall be taken:—

(*a*) Samples which show a taint or clot on boiling shall not be tested.

(*b*) Phenols, disinfectants and detergents containing phenols and soap containing carbolic acid shall be kept apart from the test reagents and apparatus.

(*c*) Bottle caps made from phenolic resins shall not be used.

(*d*) Rubber stoppers shall not be used until they have been shown by test not to contain phenolic impurities.

(*e*) All glassware shall be clean before use.

(*f*) A fresh pipette shall be used for each sample of milk. Pipettes shall not be contaminated with saliva.

(*g*) All reagents shall be kept in a cool dark place and shall be well protected from dust.

(*h*) Tests shall not be carried out in direct sunlight.

(*i*) Freshly boiled distilled water shall be used throughout.

Reagents

3.—(1) Whenever possible reagents of analytical quality should be used.

(2) *Buffer-substrate.*—Solutions shall be prepared either—

(*a*) by dissolving 1.09g. of disodium phenyl phosphate and 11.54g. of sodium veronal (sodium diethyl barbiturate) in distilled water saturated with chloroform, and by making up to one litre ; or

(*b*) by adding one buffer-substrate tablet to about 45 ml. of boiling distilled water, boiling for exactly one minute, cooling rapidly, making up to 50 ml. with boiled distilled water and adding a few drops of chloroform.

The buffer-substrate solution shall be kept in a refrigerator. It may be used for a period not exceeding three days from the date of preparation.

(3) *Folin and Ciocalteu's phenol reagent* (*stock*).—The reagent to be used shall be manufactured under arrangements made by the Minister or shall be prepared in the following manner:—

Dissolve 100g. of sodium tungstate Na_2WO_4. $2H_2O$ and 25g. of sodium molybdate, Na_2MoO_4. $2H_2O$, in 700 ml. of distilled water in a 1500 ml flask connected to a reflux condenser by a ground glass joint, or, if that is not available, by a rubber stopper or cork wrapped in tin foil provided that the solution shall not come into contact with the tin foil. Add 50 ml. of syrupy (85%) phosphoric acid and 100 ml. of concentrated hydrochloric acid. Reflux the mixture gently for 10 hours, then cool, add 150g. of pure lithium sulphate, 50 ml. of distilled water and from 4-6 drops of liquid bromine and leave for two hours. Then remove the excess bromine by boiling the mixture under the hood without the condenser for 15 minutes. Cool, dilute to 1 litre with distilled water, and filter. If the finished reagent has a greenish tint, it shall be rejected ; if it has a golden yellow colour with no greenish tint it shall be considered fit for use. The reagent shall be stored in a refrigerator and be protected from contact with dust, metal or any reducing substance. After four months from the date of preparation any remaining reagent shall be discarded and a fresh stock reagent prepared.

(4) *Sodium Hexametaphosphate.*—The salt shall be used in the form of flakes. It shall be kept in a tightly stoppered bottle. If any white powder has formed during storage, the salt shall not be used until that powder has been removed by sifting. A 5 per cent. solution (weight per volume) shall be prepared by dissolving in warm water and making up to volume after cooling.

(5) *Test reagent.*—The test reagent shall be prepared by adding one volume of the stock solution of Folin and Ciocalteu's reagent to two volumes of the hexametaphosphate solution. If any precipitate appears in it, or in any case after four months from the date of preparation, any remaining test reagent shall be discarded and a fresh test reagent prepared.

(6) *Sodium Carbonate.*—A 14 per cent. solution (weight per volume) shall be made up of anhydrous sodium carbonate of analytical reagent quality.

Apparatus

4. The following apparatus shall be used:—

(*a*) A water bath or incubator capable of being maintained at 37 $\pm$ 1° C.

(*b*) A pipette or an automatic burette to deliver 4.5 ml. The latter shall be made from dark glass or be painted a dark colour.

(*c*) A supply of 1.0 ml. straight sided pipettes of an accuracy equal to that of N.P.L. grade B marked at 0.5 and 1.0 ml. plugged with cotton wool.

(*d*) A supply of test tubes conforming to British Standard Specification No. 625 (1935) 152/16, accurately marked at 10 ml., with rubber stoppers to fit.

(*e*) A supply of filter funnels, 5 cm. diameter.

(*f*) A supply of Whatman filter papers, 9 cm. No. 40.

(*g*) Either a Lovibond "all purposes" comparator with cell of 25 mm. depth and disc containing standard coloured glasses corresponding to 0.5, 1.5, 2.3 and 6.0 Lovibond blue units; or a Lovibond tintometer with 13 mm. cell.

Care of Apparatus

5.—(1) After use each test tube shall be well washed in hot water containing soda, rinsed in hot clean water and then washed with 50 per cent. commercial hydrochloric acid. The acid wash shall be carried out by filling one tube with the acid and passing it from tube to tube, the acid being replenished when necessary. The tubes shall then be well rinsed again in hot clean water and dried.

(2) New glassware shall be cleaned in chromic acid prepared in the following manner:—Dissolve 90g. of powdered potassium bichromate in 200 ml. of hot water contained in a four litre conical flask. Cool, add two litres of commercial sulphuric acid (not less than 90 per cent.). Stir until the precipitate has dissolved. Keep the solution covered and discard when it becomes green. After cleaning in chromic acid, new glassware shall be well rinsed in hot water and dried by evaporation.

(3) Funnels shall be washed in hot clean water.

(4) Pipettes shall be well rinsed in cold, clean water and shall be cleaned by soaking for 24 hours in chromic acid solution in a 250 ml. glass cylinder or other suitable container.

(5) Glassware used for the test shall not be used for any other purpose, and shall be kept apart from all other apparatus in the laboratory.

Method of carrying out the Test

6. The test shall be carried out in duplicate in the following manner:—

To 10 ml. of the buffer-substrate solution contained in a test tube, add 0.5 ml. of well mixed milk. Add 3 drops of chloroform, stopper the tube, mix the contents and incubate at 37 ± 1° C. for 24 ± 2 hours. At the end of this time, cool, add 4.5 ml. of the test reagent, mix, allow to stand for 3 minutes, and filter into a test tube marked at 10 ml. If an automatic burette is used for delivery of the test reagent and has stood full of the reagent for more than 24 hours, the first two emptyings of the burette shall be discarded. To 10 ml. of the filtrate, add 2 ml. of sodium carbonate solution, mix, and place the test tube for exactly 2 minutes in a bath of boiling water which must be kept boiling. Where a number of tubes are being examined, the period of two minutes shall be timed from the moment when the water has recommenced boiling. Cool and proceed to read the colour thus developed, using either the comparator or the tintometer.

Control Tests

7.—(1) All milk samples shall be kept in a refrigerator for 24 hours after the duplicate experimental tubes have been put into an incubator. When the test has been completed, control tests shall be carried out on all samples which have given a positive phosphatase reaction, in the following manner:—

Mix thoroughly 10 ml. of the buffer-substrate solution with 4.5 ml. of the test reagent, add 0.5 ml. of milk, and mix. Allow to stand for 3 minutes and filter into a test tube marked at 10 ml. To 10 ml. of the filtrate, add 2 ml. of the sodium carbonate solution, mix and place the tube for exactly 2 minutes in a bath of boiling water which must be kept boiling. Where a number of tubes are being examined, the period of two minutes shall be timed from the moment when the water has recommenced boiling. Cool and proceed to read the colour developed.

(2) If the colour reading exceeds 1.5 Lovibond blue units, the test shall be void.

(3) The colour reading obtained from the control test shall not be subtracted from the reading obtained from the incubated sample.

8. The purity of the reagents shall be tested by incubating with each batch of samples a tube containing buffer-substrate and chloroform but no milk. Proceed after incubation exactly as directed above under "Method of Carrying out the Test." If the colour reading thus obtained exceeds 0.5 Lovibond blue units, the test for the particular batch of samples concerned shall be void.

Interpretation

9. The test shall be deemed to be satisfied by milk which gives a reading of 2.3 Lovibond blue units or less.

PART III.—THE METHYLENE BLUE TEST FOR PASTEURISED MILK

1. On arrival at the laboratory, the samples of milk shall be removed from the insulated container and kept at atmospheric shade temperature until the test is begun. If at any time the atmospheric shade temperature in the immediate vicinity of the samples, as indicated by a maximum thermometer adjusted to below 65° F. at 9 a.m. on each day of sampling, has exceeded 65° F., the tests shall be void. Samples shall not be kept in a refrigerator or cold store or water bath or in an incubator. Tests shall be begun between 9 and 10 a.m. on the day after the samples are taken.

Reagent—Methylene Blue

2.—(1) Tablets manufactured under arrangements made by the Minister shall be used for the test. A solution shall be prepared by adding one tablet to 200 ml. of cold, sterile glass-distilled water in a sterile flask, shaking until the tablet is completely dissolved, and making up the solution to 800 ml. with cold, glass-distilled water. The resultant solution shall be stored in a stoppered flask in a cool, dark place, and shall not be used if—

(*a*) it has been exposed to sunlight, or

(*b*) a period of two months has elapsed since the date of preparation.

(2) The amount of methylene blue required for a day's work shall be poured off from the stock bottle into a suitable glass container. The pipette used for transferring the methylene blue solution to the tubes of milk shall not be introduced into the stock bottle.

Apparatus

3.—(1) Test tubes shall conform to the British Standard Specification No. 625 (1935) 152/16, nominal 6″ × ⅝″, having an internal diameter of 13.5 ± 0.5 mm. and being accurately marked at 10 ml. They shall be plugged with cotton wool, covered with closely fitting aluminium caps or stored in such other way as may prevent contamination.

(2) Pipettes shall be 1.0 ml. straight-sided blow out delivery pipettes, and shall be plugged with cotton wool at the upper end.

(3) Glassware and rubber stoppers shall be sterile.

Method of Carrying out the Test

4.—(1) The test shall be carried out in the following manner:—

Thoroughly mix the sample of milk by inverting and shaking the sample bottle and pour the milk into a test tube up to the 10 ml. mark, leaving one side of the interior unwetted with milk. Add 1 ml. of methylene blue solution without letting the pipette come into contact with the milk in the tube or with the wetted side of the interior of the tube. After a lapse of 3 seconds, blow out the solution remaining in the tip of the pipette. Close the tube with a rubber stopper with aseptic precautions. Invert the tube slowly twice, so that the whole column of contained air rises above the level of the milk, and place within 5 minutes in a water bath. The water in the bath shall be kept above the level of the milk in the test tubes; and its temperature, which shall be

between 37° C. and 38° C., shall be maintained as nearly uniform as possible by means of a reliable automatic thermo-regulator. The interior of the bath shall be kept completely dark.

(2) To indicate when decolourisation is complete a control tube shall be used for comparison with each batch of experimental tubes. The control tube shall be prepared by immersing in boiling water for three minutes, a stoppered test tube containing 1 ml. of tap water and 10 ml. of mixed milk having a fat content and colour similar to that of the milk being tested.

(3) The milk shall be regarded as decolourised when the whole column of milk is completely decolourised or is decolourised up to within 5 mm. of the surface. A trace of colour at the bottom of the tube may be ignored provided that it does not extend upwards for more than 5 mm.

Interpretation

5. The test shall be deemed to be satisfied by milk which fails to decolourise methylene blue in thirty minutes.

PART IV.—THE TURBIDITY TEST FOR STERILISED MILK

1. Samples may be examined at any time after delivery to the laboratory but shall be at room temperature when the test is begun.

Reagent

2. Ammonium sulphate A.R. shall be used.

Apparatus

3. The following apparatus shall be provided:—

(*a*) A supply of conical flasks, 50 ml. capacity.

(*b*) A supply of graduated cylinders, 25 ml. capacity.

(*c*) A supply of test tubes conforming to British Standard Specification No. 625 (1935) 127/12.

(*d*) A supply of filter funnels, 6 cm. diameter.

(*e*) Two beakers, 400 ml. capacity.

(*f*) A supply of Whatman folded filter papers, 12.5 cm. No. 12.

Method of Carrying out the Test

4. The test shall be carried out in the following manner:—

Weigh 5 ± 0.1g. of ammonium sulphate into a 50 ml. conical flask. Measure out 20 ± 0.5 ml. of the milk sample, and pour into the conical flask. Ensure that the ammonium sulphate dissolves by shaking for one minute. Leave for not less than five minutes and then filter through a folded paper into a test tube. When not less than 5 ml. of a clear filtrate have collected, place the tube in a beaker of water, which is kept boiling, and keep it therein for five minutes. Transfer the tube to a beaker of cold water, and when the tube is cool, examine the contents for turbidity by moving the tube in front of an electric light shaded from the eyes of the observer.

Interpretation

5. The test shall be deemed to be satisfied by milk which shows no sign of turbidity.

FOURTH SCHEDULE

PART I

Constitution of tribunals, under the provisions of section 11 of the Milk (Special Designations) Act, 1949

1. A tribunal shall consist of a chairman and two other members.

2.—(1) Where the issue referred to the tribunal is in respect of a licence under these regulations or is in respect of such a licence and there is outstanding a reference to a tribunal under the Milk (Special Designation) (Raw Milk) Regulations, 1949, of an issue in respect of a dealer's licence thereunder and the person or council affected is the same—

(*a*) the chairman shall be an independent person appointed by the Minister;

(*b*) one member shall be a person appointed by the Minister as representative of the milk distributive trade;

(*c*) one member shall be a person appointed by the Minister, after consultation with the Minister of Health, as being representative of the consumers' interest.

(2) Where the issue referred to the tribunal is in respect of a licence under these regulations and there is outstanding a reference to a tribunal under the Milk (Special Designation) (Raw Milk) Regulations, 1949, of an issue in respect of—

(*a*) a producer's licence thereunder, or

(*b*) a producer's and a dealer's licence thereunder,

which relates to the same premises and the person or council affected is the same—

(i) the chairman shall be an independent person appointed jointly by the Minister and the Minister of Agriculture and Fisheries;

(ii) one member shall be a person appointed jointly by the Minister and the Minister of Agriculture and Fisheries as being representative of producers and distributors of milk;

(iii) one member shall be a person appointed jointly by the Minister and the Minister of Agriculture and Fisheries, after consultation with the Minister of Health, as being representative of the consumers' interest.

3.—(1) A chairman shall hold office for three years, and a chairman whose term of office expires shall be eligible to be reappointed as chairman.

(2) A chairman may resign his office by notice in writing served on the Minister or Ministers appointing him.

(3) If the Minister or Ministers appointing him are satisfied that the chairman is incapacitated by infirmity of mind or body from discharging the duties of his office, or is adjudged bankrupt or makes a composition or arrangement with his creditors, he or they, as the case may be, may revoke the appointment of chairman.

(4) If the Minister or Ministers appointing him are satisfied that the chairman is prevented by sickness or any other reason from acting on any reference to the tribunal, he or they, as the case may be, may appoint an independent person to act in place of the chairman on that reference.

PART II

Procedure

1. Where in accordance with these regulations any issue as to the revocation or suspension of a licence or refusal of a grant of a licence by way of renewal of such a licence is required to be referred to a tribunal by the Minister he shall forthwith inform the chairman of the tribunal of the reference to the tribunal, and of the name and address of the person or council affected. He shall send to the chairman and to the members of the tribunal copies of his notice of proposed decision to refuse, suspend, or revoke the licence, as the case may be, and of any representations made by the person or council affected.

2. The chairman on being informed of the reference to the tribunal shall fix a convenient date and place for the hearing of the reference.

3.—(1) The person or council affected shall have the right to be heard by the tribunal by himself or by counsel or a solicitor or other representative as he or the council may elect.

(2) The licensing authority or the Minister may be represented by any person instructed in that behalf.

4.—(1) At the hearing of the reference the tribunal shall give an opportunity to the person or council affected, or to the representative thereof, to address the tribunal and to call witnesses. The representative of the licensing authority or the Minister may cross-examine the person affected if he elects to give evidence, and any witness called by him or by the council affected.

(2) The tribunal shall give the representative of the licensing authority and the Minister an opportunity to address the tribunal and to call witnesses. The person or council affected or the representative thereof may cross-examine any witness called by another person.

5. The tribunal may, if they wish, visit and inspect any premises to which the reference relates.

6. The tribunal shall in respect of any reference, report to the Minister, their findings on any questions of fact appearing to them to be relevant, and in particular where the issue is as to revocation or suspension on the ground of a breach of condition not being one by virtue of which the holder of the licence has been convicted of an offence under section 8 of the Milk (Special Designations) Act, 1949, shall find and report whether the breach was in fact committed.

7. The tribunal may take notice of the circumstances existing at the date of the hearing, where there has been any change of circumstances since the date of the notice issued by the licensing authority.

8. The tribunal may adjourn the hearing from time to time if for any reason it appears to them necessary or desirable so to do.

9. In the event of a difference of opinion amongst the members of the tribunal the determination of the majority of them shall be the determination of the tribunal.

10. The chairman shall report in writing the findings of the tribunal to the Minister or Ministers appointing him.

11. The hearing shall be open to the public.

12. Save as in this Schedule expressly provided, the tribunal shall have power to regulate their own procedure.

FIFTH SCHEDULE

FORM A

Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949

Dealer's (Pasteuriser's) Licence authorising the use of the special designation "Pasteurised"

The
hereby authorise of
to use the special designation "Pasteurised" in relation to milk which has been pasteurised at
in accordance with the conditions prescribed in the Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949.

This licence is not transferable and is subject to the conditions prescribed in the above-named Regulations, and unless suspended or revoked will operate until the day of , 19 .

This licence does not authorise the holder to use the above-named designation in relation to milk sold outside the area of the licensing authority except in relation to milk sold by wholesale.

Dated this . day of , 19 .

Clerk to the Council.

FORM B

Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949

Dealer's (Steriliser's) Licence authorising the use of the special designation "Sterilised"

The
hereby authorise of
to use the special designation "Sterilised" in relation to milk treated by the sterilising process at
in accordance with the conditions prescribed in the Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949.

This licence is not transferable and is subject to the conditions prescribed in the above-named Regulations, and unless suspended or revoked will operate until the day of , 19 .

This licence does not authorise the holder to use the above-named designation in relation to milk sold outside the area of the licensing authority except in relation to milk sold by wholesale.

Dated this day of , 19 .

Clerk to the Council.

FORM C

Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949

*Dealer's Licence authorising the use of the special designation "Pasteurised"**

The
hereby authorise of
(referred to herein as the dealer) to use the special designation "Pasteurised" in relation to milk which is obtained by the dealer as "Pasteurised" from premises in respect of which a licence authorising the use of that designation in relation to it is in force and is sold or intended for sale at or from .

This licence is not transferable and is subject to the conditions prescribed in the Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949, and unless suspended or revoked will operate until the day of , 19 .

This licence does not authorise the holder to use the above-named designation in relation to milk sold outside the area of the licensing authority except in relation to milk sold by wholesale.

Dated this day of , 19 .

Clerk to the Council.

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* A similar form with appropriate modifications is to be used for licences for the use of the special designation "Sterilised" in relation to milk sold by a dealer at or from premises not covered by a licence in Form B.

FORM D

Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949

*Supplementary Licence authorising the use of the special designation "Pasteurised"**

The
hereby authorise of
being the holder of the licence (referred to herein as the principal licence) dated and granted by
to which this supplementary licence is appended,† to use the special designation "Pasteurised" in the ‡ in relation to milk to which the principal licence applies and which is sold by retail from the premises specified in that licence.

This supplementary licence is subject to the conditions prescribed in the Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949, and unless suspended or revoked will operate during the period of operation of the principal licence.

Dated this day of , 19 .

Clerk to the Council.

* A similar form with appropriate modifications is to be used for supplementary licences for the use of the special designation "Sterilised".
† If preferred the licence may be endorsed on the principal licence.
‡ Insert name of the district.

Given under the respective Official Seals of the Minister of Health and the Minister of Food this twenty-fifth day of August, nineteen hundred and forty-nine.

(L.S.) *Arthur Blenkinsop,*
Parliamentary Secretary,
Ministry of Health.

(L.S.) *John Strachey,*
Minister of Food.

EXPLANATORY NOTE

(This Note is not part of the Regulations, but is intended to indicate their general purport.)

These regulations re-enact with amendments the Milk (Special Designations) Regulations, 1936 to 1948, so far as they relate to pasteurised milk, and provide for a new special designation "sterilised milk". The principal changes are consequent upon the provisions of the Food and Drugs (Milk and Dairies) Act, 1944, and the Milk (Special Designations) Act, 1949. In accordance with the first mentioned Act, as modified by the Transfer of Functions (Food and Drugs) Order, 1948, regulations dealing with the special designations of raw milk are made jointly by the Minister of Health, the Minister of Agriculture and Fisheries and the Minister of Food, and are contained in separate regulations, the Milk (Special Designation) (Raw

Milk) Regulations, 1949. The Milk (Special Designation) (Pasteurised and Sterilised Milk) Regulations, 1949, made jointly by the Minister of Health and the Minister of Food, are, therefore, concerned only with the special designations of heat-treated milk.

Pasteurised milk may be heated to a temperature between 145° F. and 150° F. for a period of 30 minutes, or to a temperature of 161° F. or above for a period of at least 15 seconds, before it is cooled to a temperature not exceeding 50° F., or it may be heated to such other temperature for such a period as may be approved by the Minister of Food. Sterilised milk is required to be filtered or clarified, homogenised and heated in bottles to a temperature not below 212° F. for such a period as to ensure that it will comply with a prescribed test. The regulations provide for the use of the special designations "Tuberculin Tested Milk (Pasteurised)" and "Tuberculin Tested Milk (Sterilised)".

From a future date to be appointed by the Minister of Food, a flow diversion device must be fitted to pasteurising plant in which the milk is heated to a temperature higher than 150° F. and bottles or other containers must be securely fastened with an overlapping cap. From 1st October, 1950, pasteurised milk may only be sold in bottles or other containers which must be filled on the premises of a person holding a licence under these regulations. From 1st October, 1954, the bottles or other containers must be filled at the pasteurising premises.

Licences in respect of pasteurising and sterilising establishments will be issued by Food and Drugs authorities but local authorities will continue to be responsible for all other licences. Fees for licences have been dispensed with.

The procedure for the suspension and revocation of licences is governed by the Milk (Special Designations) Act, 1949, and the regulations, therefore, differentiate between specified areas under that Act and other areas. The constitution of tribunals under section 11 of that Act is set out in the schedules to the regulations.

The method of taking samples and carrying out the prescribed tests are included in the schedules.

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(4) RAW MILK

The Milk (Special Designation) (Raw Milk) Regulations, 1949

1949 No. 1590

Made - - - -	*25th August*, 1949
Laid before Parliament	*25th August*, 1949
Coming into Operation	*1st October*, 1949

The Minister of Health, the Minister of Agriculture and Fisheries and the Minister of Food acting jointly in exercise of the powers conferred on them by sections 21 and 92 of the Food and Drugs Act, 1938(a), as amended by

(a) 1 & 2 Geo. 6. c. 56.