## THE PUBLIC HEALTH (MILK) REGULATIONS [ARRANGEMENT OF REGULATIONS]

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SECTIONS 82 AND 114-THE PUBLIC HEALTH (MILK) REGULATIONS
Regulations by the Minister

**Government Notices** 79 of 1951 177 of 1954 291 of 1964 497 of 1964 Federal **Government Notices** 160 of 1961 Act No. 51 *of* 1963 Statutory **Instruments** 344 of 1965 215 of 1966 Act No. 13 of 1994

**1.** These Regulations may be cited as the Public Health (Milk) Regulations.

Title

2. The Minister may, by statutory notice, declare that on and after a date to be specified in such notice the whole of these Regulations or only such provisions thereof as are mentioned in such notice shall apply to the whole of or only to such part of the area of any Local Authority as shall be defined in such notice.

Application of Regulations

(As amended by No. 291 of 1964)

3. In these Regulations, unless the context otherwise requires-

Interpretation

"licence" means a licence granted under regulation 10;

"milk" means the normal fresh secretion of the cow's udder without addition or substraction of any kind whatever;

"milk shop" means any premises (other than premises registered under the provisions of the Dairies and Dairy Produce Regulations or exempted from registration by the provisions of these Regulations), from which milk is supplied otherwise than in receptacles which have been properly closed and sealed prior to delivery to the premises and which remain properly closed and sealed during the whole time from their delivery to the premises until their removal therefrom; Cap. 235

"pasteurised milk" means milk which has been subjected to a special treatment of pasteurisation prescribed in the Third Schedule;

"purveyor of milk" means any person in possession or occupation of or keeping any milk or shop or who sells milk for human consumption: Provided that no person shall be deemed to be a purveyor of milk-

(i) if he supplies milk solely to premises registered under the provisions of the Dairies and Dairy Produce Regulations or to premises registered under the provisions of these Regulations; or

Cap. 235

(ii) if his trade in milk is carried on in premises registered under the provisions of the Dairies and Dairy Produce Regulations and is solely in connection with the manufacture of butter, cheese or other dairy products approved by the Director of Medical Services.

(As amended by No. 177 of 1954, Acts No. 51 of 1963, No. 344 of 1965 and No. 215 of 1966)

**4.** Premises within the area of the Local Authority shall be used as a milk shop unless such premises have been first registered under these Regulations by such Local Authority.

Premises to be registered

**5.** Every certificate of registration of any premises as a milk shop issued under these Regulations shall be in Form 1 in the First Schedule and shall expire on the 31st December of the year for which it shall have been granted.

Certificate of registration

**6.** Every person desiring a certificate of registration of premises as a milk shop under these Regulations shall make application in writing to the appropriate Local Authority and shall supply the following information:

Application for certificate

- (a) the name and address of the applicant;
- (b) the situation of the premises in respect of which the certificate of registration is desired;
- (c) a full description and particulars of the premises;
- (d) the source of the applicant's milk supply; and
- (e) any other relevant information required by the Local Authority or Medical Officer of Health.
- 7. No certificate of registration of any premises as a milk shop shall be granted by the Local Authority unless the premises are in the opinion of the Local Authority, on the report of the Medical Officer of Health, suitable for registration in respect of drainage, lighting, ventilation, locality, construction and general sanitation and unless the requirements of these Regulations and all such other regulations, orders or rules as may be applicable to such premises are complied with.

Conditions to be complied with

**8.** No certificate of registration of any premises as a milk shop under these Regulations shall be granted by the Local Authority unless, within a period specified in the certificate after the issue thereof, there shall at all times during the currency thereof be provided and maintained-

Safeguards

- (a) a wholesome and conveniently accessible water supply in sufficient quantity for all purposes connected with the business including the cleaning of all utensils and appliances;
- (b) when so required by the Local Authority, an impervious floor to the whole of or to any part of such premises, constructed to the satisfaction of the Local Authority;
- (c) proper and sufficient arrangements for safeguardin the milk from contamination by flies, vermin, dust or any impurities;
- (d) suitable arrangements for the washing, and storage when not in use, of the receptacles used in the business;
- (e) suitable arrangements for the sterilising by steam or boiling water of all bottles, cans and other receptacles used in the business; and
- (f) for persons employed in the premises-

- (i) suitable and sufficient sanitary and ablution accommodation;
- (ii) a change room with soap and towels; and
- (iii) suitable white overalls.
- **9.** Milk intended for sale shall not be deposited, kept or stored upon registered premises-

Storage of milk

- (a) in any room or place where such milk would be liable to infection or contamination;
- (b) in any room used as a kitchen, living, sleeping, work or change room;
- (c) in any room or building communicating directly with any sanitary convenience or with any room used as a sleeping room;
- (d) in any milk vessel not properly covered so as effectually to prevent the contamination of the milk contained therein;
- (e) in any milk vessel which has not been thoroughly cleaned and sterilised since the last occasion of use and which is not in a thoroughly clean condition at the time of use.
- 10. No person shall within the area of the Local Authority be a purveyor of milk without being first licensed by such Local Authority. A person who is a purveyor of milk within the area of more than one Local Authority shall be required to be licensed by each and every Local Authority within whose area he purveys milk:

Licensing of purveyor of milk

Provided that, notwithstanding anything contained in these Regulations, a person may convey milk through the area of such Local Authority without being licensed as aforesaid where such person shall prove to the satisfaction of such Local Authority that the milk so conveyed is not for sale and is not intended for sale within the area of such Local Authority.

11. Every licensed purveyor of milk shall exhibit in his place of business or carry upon his person his licence as a purveyor of milk whilst in any manner engaged in his business as a purveyor of milk and shall, on request made to him by the Medical Officer of Health, Sanitary Inspector or any duly authorised officer of the Local Authority, produce his licence as a purveyor of milk.

Production of licence

- **12.** (1) Every licence granted to any person as a purveyor of milk under these Regulations shall be in Form 2 in the First Schedule and shall expire on the 31st December of the year for which it shall have been granted.
- (2) No licence as a purveyor of milk shall in any case be transferable from the licensee to any other person and such licence shall only be valid in the area of the Local Authority by whom it was granted.
- **13.** Every person desiring a licence under these Regulations shall make Application for personal or written application to the Local Authority within whose area licence he intends to purvey milk and shall supply the following information:
- (a) his name, address and occupation;
- (b) the name and address of the person (if any) by whom he is employed or to be employed as a purveyor of milk;
- (c) the source of the milk supply;
- (d) the name and address of the person (if any) from whom the applicant intends to purchase his milk supply; and
- (e) any other relevant information required by the Medical Officer of Health.
- **14.** (1) Every licensed purveyor of milk shall, if any of the following circumstances occur, at once report the same to the Local Authority or Authorities by whom his licence was issued:
- (a) any change of employer;
- (b) any change from the condition of a purveyor of milk as an employee to that of a purveyor of milk on his own account or *vice versa*;
- (c) any change in source of supply.
- (2) On such report the Local Authority shall cause the licence to be endorsed accordingly.
- **15.** No licence shall be issued by the Local Authority to any applicant where the Medical Officer of Health shall have certified in writing that of applicant

the applicant is not a fit and suitable person on medical grounds to be a purveyor of milk, or where such applicant shall have refused to submit himself for medical examination when so required by the Medical Officer of Health.

**16.** Every purveyor of milk shall ensure that when he himself or when Cleanliness on his behalf any other person handles, conveys, distributes, delivers, or sells milk he shall be clean as to his hands, person and clothing whilst so employed or engaged, and he shall further ensure that every vehicle or carrier used for the purposes of his trade or business as a purveyor of milk shall be kept in a thoroughly clean condition and in such a manner that it shall not lead to the contamination or infection of the milk carried or conveyed therein. Such vehicle or carrier shall be conspicuously inscribed with the name and address of the purveyor or of his employer.

**17.** Every purveyor of milk shall by inquiry keep himself informed of any sickness occurring amongst his employees or in any premises in which he or his employees reside and it shall not be lawful for any purveyor of milk-

Sickness

- knowingly to allow any person suffering from any contagious or infectious disease or who is living in any premises in which there is a case of contagious or infectious disease or who has recently been in contact with a person so suffering to take part in the trade or business of a purveyor of milk or to enter any milk shop; or
- if he himself is so suffering or has recently been in contact with an infected person or living in any infected premises as aforesaid to take part in the trade or business of a purveyor of milk or to enter any milk shop until in each case all danger there-from of the communication of infection to the milk or of its contamination has in the opinion of the Medical Officer of Health ceased.
- **18.** Every purveyor of milk shall immediately inform the Medical Officer of Health of each Local Authority by whom he is licensed of the occurrence of any infectious or contagious disease amongst any persons residing or engaged or employed upon his registered premises or amongst any of his employees, and shall comply with all requirements of the Medical Officer of Health for disinfecting the premises and preventing the spread of such diseases.

Occurrence of infectious or contagious disease

**19.** Whenever the Medical Officer of Health of the district of any Local Authority to which these Regulations have been applied shall be Suspected spread of

of the opinion that the outbreak or spread of any sickness or disease within his district may be attributable to milk sold or purveyed or distributed by any purveyor of milk, such purveyor shall, on being required in writing by the Medical Officer of Health, furnish forthwithdisease

- (a) a full and complete list of the names and addresses of the customers or persons supplied with such milk by such purveyor of milk; and
- (b) a full and complete list of the names and addresses of the persons from whom and of the situation of the places from which, during a period to be specified by the Medical Officer of Health, the milk or any part of the milk sold or distributed by such purveyor of milk was obtained.
- **20.** If it appears to the Local Authority, on the certificate of the Medical Officer of Health, that the consumption of any milk or milk products from any source within or outside the district of such Local Authority is likely to cause the outbreak of or to spread infectious or contagious disease, such Local Authority may forthwith prohibit the introduction or storage or sale or use within its district of such milk or milk products for a period to be specified by such Local Authority on the advice of the Medical Officer of Health.

Prohibition of dealings with milk and milk products

21. Any milk found in the possession of any purveyor of milk or in any milk shop or in any bottle or carrier or milk vessel in the possession of any purveyor of milk shall be deemed to be intended for sale for human consumption until the contrary shall have been proved to be the case by such purveyor.

Milk *prima facie* for human consumption

22. (1) No person shall sell, cause to be sold, or expose, deposit, convey, or cause to be exposed, deposited, or conveyed, for the purpose of sale or deliver or cause to be delivered for or in the process of sale any milk or fluid described as milk which is not genuine, clean, pure, wholesome and free from contamination and pollution or which is in such a state or condition as to be liable to be injurious or dangerous to the health of man or from which any ingredient or part thereof has been abstracted or to which any water or any preservative or other matter or ingredient has been added or which does not comply with the provisions of regulation 3 and the Second Schedule when sold as "cows' milk" or "pasteurised milk" respectively.

Adulterated milk

(2) On analysis by a Government analyst or by a Government

bacteriologist or other person approved by the Director of Medical Services, the fact that any milk is found to be not in accordance with the provisions of this regulation it shall be presumed until the contrary is proved that such milk is not genuine or is injurious to health.

(As amended by No. 177 of 1954, Act No. 51 of 1963, No. 344 of 1965 and No. 215 of 1966)

23. Any person who wilfully obstructs the Medical Officer of Health, Sanitary Inspector or any other duly authorised officer in the performance of his duties under these Regulations shall be guilty of an offence.

Obstruction of officers

**24.** (1) Any person who contravenes any of these Regulations shall be Penalties guilty of an offence and shall be liable to a fine not exceeding seven hundred and fifty penalty units.

(2) On the conviction of any licensed purveyor of milk for an offence under these Regulations the court may, on the application of the Local Authority, cancel his certificate of registration or licence, as the case may be, and order that no new certificate or licence shall be granted under these Regulations to such person for a period not exceeding two years from the date of such cancellation and thereupon such person shall become disqualified to hold a certificate or licence during such period of cancellation.

(As amended by Act No. 13 of 1994)

25. The foregoing Regulations shall *mutatis mutandis* apply to the sale, Milk other than production, collection, storing, keeping, preparation, delivery, conveying, transmission, or exposure for sale of milk intended for human consumption from any animal other than a cow.

cows' milk

**26.** Hotels and lodging-houses where milk is kept or prepared solely for the use of customers on the premises shall be exempted from the provisions of these Regulations which relate to the registration of premises, and persons so keeping and preparing milk shall not be required to be licensed as purveyors of milk.

Exemption

## FIRST SCHEDULE

## PRESCRIBED FORMS

# FORM 1 (Regulation 5)

REPUBLIC OF ZAMBIA		
THE PUBLIC HEALTH (MILK)	)	
REGULATIONS	Number	Municipality/Township of
CERTIFICATE OF REGISTRAT	ΓΙΟΝ OF PREMIS	ES AS A MILK SHOP
The premises numbered Municipality/Township of	on plot	t numberin the
are hereby registered as a milk she	op.	
This certificate of registration	n expires on 31st D	December, 19
Date	••••	
	Signed: Town (	Clerk/Secretary
	Medica	al Officer of Health

## FORM 2

(*Regulation* 12 (1))

	<b>\ 8</b>	′
REPUBLIC OF ZAMBIA		
THE PUBLIC HEALTH (MILK) REGULATIONS Municipality/Township of		
LICENCE AS A PURVEYOR OF MILK	is hereby	
licensed as a purveyor of milk		
within the Municipality/Township of	f	
This certificate of licence expires of	on 31st December, 19	
Delete whichever is not required		
Date		
Signed:	Town Clerk/Secretary	
	Medical Officer of Health	

## SECOND SCHEDULE

(Regulation 22 (1))

#### STANDARDS OF COMPOSITION AND QUALITY OF MILK

- 1. When milk is sold as cow's milk-
- (a) it shall not be subjected to any form of physical or chemical treatment except cooling:
- (b) it shall contain-
  - (i) not less than 3 per centum of milk fat;
  - (ii) not less than 8.5 per centum of milk solids not fat;
- (c) it shall not contain-
  - (i) any faecal coli in 0.01 ml.;
  - (ii) any pathogenic organisms.
- 2. When milk is sold as pasteurised milk-
- (a) it shall contain-
  - (i) not less than 3 per centum of milk fat;
  - (ii) not less than 8.5 per centum of milk solids not fat;
- (b) it shall not contain-
  - (i) any coliform organisms in 0.01 ml.;
  - (ii) any pathogenic organisms;
- (c) it shall have been subjected to the treatment prescribed in the Third Schedule and shall satisfy the requirements of the phosphatase test as prescribed in the Fourth Schedule.

(F.G.N. No. 160 of 1961 as amended by No. 344 of 1965 and No. 215 of 1966)

## THIRD SCHEDULE

(Regulation 3)

#### PASTEURISED MILK

**1.** Pasteurisation of milk shall mean that milk shall be raised to a temperature of between 75.4°C. and 78°C. and held at that temperature for a period of thirty minutes and shall be cooled immediately to a temperature of not more than 28.6°C. and held at or below that temperature until the milk is bottled or placed in approved containers or shall be raised to a

temperature of between 84.24°C. and 86.84°C. and retained at that temperature for at least fifteen seconds and shall be cooled immediately to a temperature of not more than 28.6°C. and held at or below that temperature until the milk is bottled or placed in approved containers.

- **2.** All reasonable precautions shall be taken to prevent contamination between the time of pasteurisation and bottle filling.
- 3. On a sample being taken after pasteurisation and before delivery to the consumer the milk shall satisfy the phosphatase test, as prescribed in the Fourth Schedule.
- **4.** The milk must not be heated more than once and must not otherwise be treated by heat.
- **5.** An indicating thermometer and a recording thermagraph must be inserted in a suitable place in the apparatus used for the pasteurising process. The type of apparatus and the methods employed must be such as are approved by the Director of Medical Services.
- **6.** All practicable steps shall be taken to clean and sterilise all piping, tanks and apparatus immediately after each completed pasteurisation operation, and to exclude air during the pasteurisation of the milk.
- 7. No person shall apply the designation "pasteurised milk" to any milk unless such milk has been subjected to the treatment of pasteurisation prescribed in this Schedule.
- **8.** No person shall apply any other special designation to milk unless details of the production and treatment of such milk have first been submitted in writing to the Director of Medical Services and his approval in writing to the use of such special designation has been obtained.

(As amended by No. 177 of 1954 and Act No. 51 of 1963)

### FOURTH SCHEDULE

(Second and Third Schedules)

#### PHOSPHATASE TEST

The phosphatase test shall be carried out in accordance with the instructions given below. Such tests shall be deemed to be satisfied by milk giving a reading of 2.3 Lovibond blue units or less.

#### METHOD OF PERFORMING THE TEST

#### Reagents

Buffer-substrate solution must be prepared at the strength of 1.09 gm. of disodium phenyl phosphate and 11.54 gm. of sodium diethyl barbiturate in 1 litre of distilled water saturated with chloroform. Alternatively, buffer-substrate tablets may be used to make up a solution of the same strength and a few drops of chloroform added. The solutions must be kept in a cool, dark place and must not be kept longer than three days.

Test reagent: Add 1 volume of Folin and Ciocalteau's Reagent to 2 volumes of a 5 per centum solution of sodium hexameta-phosphate.

#### METHOD OF CARRYING OUT THE TEST

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 degree 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 to 5 minutes, and filter into a test tube marked at 10 ml. of the filtrate, add 2 ml. of a 14 per centum solution of pure anhydrous sodium carbonate, mix and place the test tube for exactly 2 minutes in boiling water (kept boiling). Cool and read the colour, using comparator or tintometer.

#### Control tests

Keep the remainder of all milk samples in the refrigerator. *After completing the test* carry out the control tests on those samples which have given a positive phosphate reaction.

Mix thoroughly to 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 3 to 5 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 boiling water-bath (kept boiling). Cool and read the colour developed. The colour must not exceed 1.5 Lovibond blue units.

#### **Precautions**

- (a) Phenols, disinfectants containing phenols, and soap containing carbolic acid must be kept at a safe distance from the test reagents and apparatus;
- (b) the use of bottle caps made from phenolic resins must be avoided;
- (c) new rubber stoppers must be tested for phenolic impurities before use;
- (d) all glassware must be clean;
- (e) contamination of pipettes by saliva must be avoided;
- (f) a fresh pipette must be used for each sample of milk;
- (g) all reagents must be kept in a cool, dark place and well protected from dust;
- (h) tests must not be carried out in direct sunlight;
- (i) freshly boiled distilled water must be used throughout;
- (j) samples which show a taint or clot on boiling must not be tested.

#### TEST OF REAGENTS

The purity of the reagents must be tested by performing a blank test without milk, with each batch of samples tested. The colour must not exceed 0.5 Lovibond blue units.